

## ARTICLE 5. STORAGE AND SECONDARY CONTAINMENT OF PESTICIDES

### Rule 1. Definitions

#### 355 IAC 5-1-1 "Approved" defined

Authority: IC 15-16-4-52

Affected: IC 15-16-4-58; IC 15-16-4-67

Sec. 1. As used in this article, "approved" means approval by the state chemist, except where otherwise stated. (*State Chemist of the State of Indiana; 355 IAC 5-1-1; filed Mar 8, 1991, 2:45 p.m.: 14 IR 1400, eff sixty (60) days after filing with secretary of state; readopted filed Nov 21, 2001, 10:17 a.m.: 25 IR 1269; filed Feb 20, 2002, 9:38 a.m.: 25 IR 2212; readopted filed Sep 3, 2008, 1:46 p.m.: 20080924-IR-355080553RFA*)

#### 355 IAC 5-1-1.5 "Appurtenance" defined

Authority: IC 15-16-4-52

Affected: IC 15-16-4-58; IC 15-16-4-67

Sec. 1.5. As used in this article, "appurtenance" means any valve, pump, fitting, pipe, hose, metering device, or mechanical device that is connected to a storage container, or is used to transfer a material into or out of such container. (*State Chemist of the State of Indiana; 355 IAC 5-1-1.5; filed Feb 20, 2002, 9:38 a.m.: 25 IR 2212; readopted filed Sep 3, 2008, 1:46 p.m.: 20080924-IR-355080553RFA*)

#### 355 IAC 5-1-2 "Bulk pesticide" defined (Repealed)

Sec. 2. (*Repealed by State Chemist of the State of Indiana; filed Feb 20, 2002, 9:38 a.m.: 25 IR 2220*)

#### 355 IAC 5-1-3 "Discharge" defined

Authority: IC 15-16-4-52

Affected: IC 15-16-4-58; IC 15-16-4-67

Sec. 3. As used in this article, "discharge" means a release of a pesticide into either a secondary containment or operational containment area at a storage facility. (*State Chemist of the State of Indiana; 355 IAC 5-1-3; filed Mar 8, 1991, 2:45 p.m.: 14 IR 1401, eff sixty (60) days after filing with secretary of state; readopted filed Nov 21, 2001, 10:17 a.m.: 25 IR 1269; filed Feb 20, 2002, 9:38 a.m.: 25 IR 2213; readopted filed Sep 3, 2008, 1:46 p.m.: 20080924-IR-355080553RFA*)

#### 355 IAC 5-1-4 "Dry pesticide" defined

Authority: IC 15-16-4-52

Affected: IC 15-16-4-58; IC 15-16-4-67

Sec. 4. As used in this article, "dry pesticide" means pesticide in an undivided quantity exceeding one hundred (100) pounds that is in solid form prior to any application or mixing for application and includes formulations, such as dusts, wettable powders, dry flowable powders, and granules. (*State Chemist of the State of Indiana; 355 IAC 5-1-4; filed Mar 8, 1991, 2:45 p.m.: 14 IR 1401, eff sixty (60) days after filing with secretary of state; readopted filed Nov 21, 2001, 10:17 a.m.: 25 IR 1269; filed Feb 20, 2002, 9:38 a.m.: 25 IR 2213; readopted filed Sep 3, 2008, 1:46 p.m.: 20080924-IR-355080553RFA*)

#### 355 IAC 5-1-5 "Elephant ring" defined

Authority: IC 15-16-4-52

Affected: IC 15-16-4-58; IC 15-16-4-67

Sec. 5. As used in this article, "elephant ring" means a storage container with open top serving as a secondary containment vessel into which a smaller storage container is placed. (*State Chemist of the State of Indiana; 355 IAC 5-1-5; filed Mar 8, 1991, 2:45 p.m.: 14 IR 1401, eff sixty (60) days after filing with secretary of state; readopted filed Nov 21, 2001, 10:17 a.m.: 25 IR 1269; filed Feb 20, 2002, 9:38 a.m.: 25 IR 2213; readopted filed Sep 3, 2008, 1:46 p.m.: 20080924-IR-355080553RFA*)

**355 IAC 5-1-6 "Liquid pesticide" defined**

Authority: IC 15-16-4-52

Affected: IC 15-16-4-58; IC 15-16-4-67

Sec. 6. As used in this article, "liquid pesticide" means pesticide in liquid form, including solutions, emulsions, suspensions, and slurries contained in an undivided quantity exceeding fifty-five (55) U.S. gallons. (*State Chemist of the State of Indiana; 355 IAC 5-1-6; filed Mar 8, 1991, 2:45 p.m.: 14 IR 1401, eff sixty (60) days after filing with secretary of state; readopted filed Nov 21, 2001, 10:17 a.m.: 25 IR 1269; filed Feb 20, 2002, 9:38 a.m.: 25 IR 2213; readopted filed Sep 3, 2008, 1:46 p.m.: 20080924-IR-355080553RFA*)

**355 IAC 5-1-7 "Minibulk pesticide" defined**

Authority: IC 15-16-4-52

Affected: IC 15-16-4-58; IC 15-16-4-67

Sec. 7. As used in this article, "minibulk pesticide" means an amount of liquid pesticide greater than fifty-five (55) gallons (two hundred eight (208) liters) but not exceeding four hundred (400) gallons (one thousand five hundred fourteen (1,514) liters), which is held in a single container designed for ready handling and transport, has been filled by the original pesticide manufacturer, and to which no substance has been added by any person. (*State Chemist of the State of Indiana; 355 IAC 5-1-7; filed Mar 8, 1991, 2:45 p.m.: 14 IR 1401, eff sixty (60) days after filing with secretary of state; readopted filed Nov 21, 2001, 10:17 a.m.: 25 IR 1269; readopted filed Sep 20, 2007, 1:46 p.m.: 20071010-IR-355070484RFA*)

**355 IAC 5-1-7.5 "Mobile container" defined**

Authority: IC 15-16-4-52

Affected: IC 15-16-4-58; IC 15-16-4-67

Sec. 7.5. As used in this article, "mobile container" means a storage container that is designed and used as:

- (1) a delivery vehicle;
- (2) application equipment; or
- (3) a minibulk pesticide container.

(*State Chemist of the State of Indiana; 355 IAC 5-1-7.5; readopted filed Nov 21, 2001, 10:17 a.m.: 25 IR 1269; filed Feb 20, 2002, 9:38 a.m.: 25 IR 2213; readopted filed Sep 3, 2008, 1:46 p.m.: 20080924-IR-355080553RFA*)

**355 IAC 5-1-8 "Operational area" defined**

Authority: IC 15-16-4-52

Affected: IC 15-16-4-58; IC 15-16-4-67

Sec. 8. As used in this article, "operational area" means an area or areas at a liquid pesticide storage facility where pesticides are transferred, loaded, unloaded, mixed, repackaged, or where pesticides are cleaned or washed from containers, or application, storage, or transportation equipment. (*State Chemist of the State of Indiana; 355 IAC 5-1-8; filed Mar 8, 1991, 2:45 p.m.: 14 IR 1401, eff sixty (60) days after filing with secretary of state; readopted filed Nov 21, 2001, 10:17 a.m.: 25 IR 1269; readopted filed Sep 20, 2007, 1:46 p.m.: 20071010-IR-355070484RFA*)

**355 IAC 5-1-9 "Operational area containment" defined**

Authority: IC 15-16-4-52

Affected: IC 15-16-4-58; IC 15-16-4-67

Sec. 9. As used in this article, "operational area containment" means any structure or system designed and constructed to effectively intercept and contain discharges, including container or equipment wash water and rainwater, and to prevent run-off or leaching from a storage facility. (*State Chemist of the State of Indiana; 355 IAC 5-1-9; filed Mar 8, 1991, 2:45 p.m.: 14 IR 1401, eff sixty (60) days after filing with secretary of state; readopted filed Nov 21, 2001, 10:17 a.m.: 25 IR 1269; readopted filed Sep 20,*

2007, 1:46 p.m.: 20071010-IR-355070484RFA)

**355 IAC 5-1-10 "Primary containment" defined (Repealed)**

Sec. 10. *(Repealed by State Chemist of the State of Indiana; filed Feb 20, 2002, 9:38 a.m.: 25 IR 2220)*

**355 IAC 5-1-11 "Secondary containment" defined**

Authority: IC 15-16-4-52

Affected: IC 15-16-4-58; IC 15-16-4-67

Sec. 11. As used in this article, "secondary containment" means any structure, such as a dike, used to contain pesticide discharges from storage containers and prevent run-off or leaching. *(State Chemist of the State of Indiana; 355 IAC 5-1-11; filed Mar 8, 1991, 2:45 p.m.: 14 IR 1402, eff sixty (60) days after filing with secretary of state; readopted filed Nov 21, 2001, 10:17 a.m.: 25 IR 1269; filed Feb 20, 2002, 9:38 a.m.: 25 IR 2213; readopted filed Sep 3, 2008, 1:46 p.m.: 20080924-IR-355080553RFA)*

**355 IAC 5-1-12 "State chemist" defined**

Authority: IC 15-16-4-52

Affected: IC 15-16-4-58; IC 15-16-4-67

Sec. 12. As used in this article, "state chemist" means the Indiana state chemist or his appointed agent. *(State Chemist of the State of Indiana; 355 IAC 5-1-12; filed Mar 8, 1991, 2:45 p.m.: 14 IR 1402, eff sixty (60) days after filing with secretary of state; readopted filed Nov 21, 2001, 10:17 a.m.: 25 IR 1269; readopted filed Sep 20, 2007, 1:46 p.m.: 20071010-IR-355070484RFA)*

**355 IAC 5-1-13 "Storage container" defined**

Authority: IC 15-16-4-52

Affected: IC 15-16-4-58; IC 15-16-4-67

Sec. 13. (a) As used in this article, "storage container" means a container used for the storage of liquid or dry pesticide at a storage facility.

(b) The term does not include a mobile container storing liquid pesticide for less than thirty (30) days. In the case of minibulk pesticide containers, written and verifiable documentation as to the period of storage at the storage facility shall be required and made available to the state chemist upon request. *(State Chemist of the State of Indiana; 355 IAC 5-1-13; filed Mar 8, 1991, 2:45 p.m.: 14 IR 1402, eff sixty (60) days after filing with secretary of state; readopted filed Nov 21, 2001, 10:17 a.m.: 25 IR 1269; filed Feb 20, 2002, 9:38 a.m.: 25 IR 2213; readopted filed Sep 3, 2008, 1:46 p.m.: 20080924-IR-355080553RFA)*

**355 IAC 5-1-14 "Storage facility" defined**

Authority: IC 15-16-4-52

Affected: IC 15-16-4-58; IC 15-16-4-67

Sec. 14. As used in this article, "storage facility" means a location at which liquid or dry pesticide is held in storage. *(State Chemist of the State of Indiana; 355 IAC 5-1-14; filed Mar 8, 1991, 2:45 p.m.: 14 IR 1402, eff sixty (60) days after filing with secretary of state; readopted filed Nov 21, 2001, 10:17 a.m.: 25 IR 1269; filed Feb 20, 2002, 9:38 a.m.: 25 IR 2214; readopted filed Sep 3, 2008, 1:46 p.m.: 20080924-IR-355080553RFA)*

**355 IAC 5-1-15 "Storage facility registry" defined**

Authority: IC 15-16-4-52

Affected: IC 15-16-4-58; IC 15-16-4-67

Sec. 15. As used in this article, "storage facility registry" means the annual listing of all storage facilities in Indiana by the state chemist as derived from written notification from the storage facility. *(State Chemist of the State of Indiana; 355 IAC 5-1-15; filed Mar 8, 1991, 2:45 p.m.: 14 IR 1402, eff sixty (60) days after filing with secretary of state; readopted filed Nov 21, 2001, 10:17 a.m.: 25 IR 1269; readopted filed Sep 3, 2008, 1:46 p.m.: 20080924-IR-355080553RFA)*

25 IR 1269; filed Feb 20, 2002, 9:38 a.m.: 25 IR 2214; readopted filed Sep 3, 2008, 1:46 p.m.: 20080924-IR-355080553RFA)

## **Rule 2. Storage of Liquid Pesticide**

### **355 IAC 5-2-1 Storage containers and appurtenances; basic requirements**

Authority: IC 15-16-4-52

Affected: IC 15-16-4-58; IC 15-16-4-67

Sec. 1. (a) Storage containers and appurtenances shall be constructed, installed, and maintained so as to prevent the discharge of liquid pesticide.

(b) Storage containers and appurtenances shall be constructed of materials which are resistant to corrosion, puncture, or cracking.

(c) Materials used in the construction or repair of storage containers and appurtenances may not be of a type which react chemically or electrolytically with stored liquid pesticide in a way which may weaken the storage container or appurtenances, create a risk of discharge, or adulterate the pesticide.

(d) Metals used for valves, fittings, and repairs on metal containers shall be compatible with the metals used in the construction of the storage container so that the combination of metals does not cause or increase corrosion which may weaken the storage container or its appurtenances or create a risk of discharge.

(e) Storage containers and appurtenances shall be designed to handle all operating stresses, taking into account static head, pressure build-up from pumps and compressors, and any other mechanical stresses to which the storage containers and appurtenances may be subject in the foreseeable course of operations. (*State Chemist of the State of Indiana; 355 IAC 5-2-1; filed Mar 8, 1991, 2:45 p.m.: 14 IR 1402, eff sixty (60) days after filing with secretary of state; readopted filed Nov 21, 2001, 10:17 a.m.: 25 IR 1269; readopted filed Sep 20, 2007, 1:46 p.m.: 20071010-IR-355070484RFA; readopted filed Sep 3, 2008, 1:46 p.m.: 20080924-IR-355080553RFA*)

### **355 IAC 5-2-2 Prohibition against underground storage**

Authority: IC 15-16-4-52

Affected: IC 15-16-4-58; IC 15-16-4-67

Sec. 2. Liquid pesticide shall not be stored in an underground storage container. (*State Chemist of the State of Indiana; 355 IAC 5-2-2; filed Mar 8, 1991, 2:45 p.m.: 14 IR 1403, eff sixty (60) days after filing with secretary of state; readopted filed Nov 21, 2001, 10:17 a.m.: 25 IR 1269; filed Feb 20, 2002, 9:38 a.m.: 25 IR 2214; readopted filed Sep 3, 2008, 1:46 p.m.: 20080924-IR-355080553RFA*)

### **355 IAC 5-2-3 Abandoned containers**

Authority: IC 15-16-4-52

Affected: IC 15-16-4-58; IC 15-16-4-67

Sec. 3. (a) Storage containers and other containers used at a storage facility to hold pesticide or pesticide rinsate are considered abandoned if they have been out of service for more than six (6) months because of a weakness or leak or have been out of service for any reason for more than two (2) years.

(b) Abandoned underground containers, including abandoned underground catch basins, shall be thoroughly cleaned and removed from the ground or thoroughly cleaned and filled with an inert solid. All connections and vents shall be disconnected and sealed. A record of the catch basin size, location, and method of closing shall be maintained at the storage facility or as otherwise provided for in this article.

(c) Abandoned aboveground containers shall be thoroughly cleaned. All hatches on the containers shall be left open, and all valves or connections shall be severed and left open.

(d) Secondary containment is not considered abandoned merely because there have been no discharges into the secondary containment. (*State Chemist of the State of Indiana; 355 IAC 5-2-3; filed Mar 8, 1991, 2:45 p.m.: 14 IR 1403, eff sixty (60) days after filing with secretary of state; readopted filed Nov 21, 2001, 10:17 a.m.: 25 IR 1269; filed Feb 20, 2002, 9:38 a.m.: 25 IR 2214; readopted filed Sep 3, 2008, 1:46 p.m.: 20080924-IR-355080553RFA*)

**355 IAC 5-2-4 Prohibited materials**

Authority: IC 15-16-4-52

Affected: IC 15-16-4-58; IC 15-16-4-67

Sec. 4. (a) Storage containers and appurtenances shall not be made of polyvinyl chloride.

(b) A storage container shall not be made of ferrous metals, unless the container is made of stainless steel or other approved materials, or the container has a protective lining that inhibits corrosion and does not react chemically with the stored pesticide. *(State Chemist of the State of Indiana; 355 IAC 5-2-4; filed Mar 8, 1991, 2:45 p.m.: 14 IR 1403, eff sixty (60) days after filing with secretary of state; readopted filed Nov 21, 2001, 10:17 a.m.: 25 IR 1269; filed Feb 20, 2002, 9:38 a.m.: 25 IR 2214; readopted filed Sep 3, 2008, 1:46 p.m.: 20080924-IR-355080553RFA)*

**355 IAC 5-2-5 Anchoring storage containers**

Authority: IC 15-16-4-52

Affected: IC 15-16-4-58; IC 15-16-4-67

Sec. 5. (a) Storage containers shall be anchored, as necessary, to prevent flotation or instability which might occur as a result of liquid accumulations within secondary containment.

(b) Storage containers shall be considered anchored if, in addition to other approved means, the containers:

(1) are placed on a raised area or platform of such height as to prevent flotation or instability in the event of liquid accumulations; or

(2) store product with sufficient volume to rise to at least the height of the secondary containment walls.

*(State Chemist of the State of Indiana; 355 IAC 5-2-5; filed Mar 8, 1991, 2:45 p.m.: 14 IR 1403, eff sixty (60) days after filing with secretary of state; readopted filed Nov 21, 2001, 10:17 a.m.: 25 IR 1269; filed Feb 20, 2002, 9:38 a.m.: 25 IR 2215; readopted filed Sep 3, 2008, 1:46 p.m.: 20080924-IR-355080553RFA)*

**355 IAC 5-2-6 Vents**

Authority: IC 15-16-4-52

Affected: IC 15-16-4-58; IC 15-16-4-67

Sec. 6. (a) Each storage container shall be equipped with a vent with hood or inverted opening.

(b) Conservation vents shall be used on containers storing products where loss of vapor affects product quality or where the vapor is harmful to plants, animals, or humans.

(c) Conservation vents shall open and close within the designed pressure limits of the storage container. *(State Chemist of the State of Indiana; 355 IAC 5-2-6; filed Mar 8, 1991, 2:45 p.m.: 14 IR 1403, eff sixty (60) days after filing with secretary of state; readopted filed Nov 21, 2001, 10:17 a.m.: 25 IR 1269; filed Feb 20, 2002, 9:38 a.m.: 25 IR 2215; readopted filed Sep 3, 2008, 1:46 p.m.: 20080924-IR-355080553RFA)*

**355 IAC 5-2-7 Security**

Authority: IC 15-16-4-52

Affected: IC 15-16-4-58; IC 15-16-4-67

Sec. 7. (a) Storage containers and appurtenances shall be secured to provide reasonable protection from wildlife, vandalism, and unauthorized access. Such security shall be provided by fencing, lighting, or other approved means.

(b) Valves on storage containers shall be locked or otherwise secured, except when persons responsible for facility security are present at the facility.

(c) Valves on mobile containers parked overnight at a storage facility shall be locked or secured except when persons responsible for facility security are present at the facility.

(d) Valves on empty containers need not be secured. *(State Chemist of the State of Indiana; 355 IAC 5-2-7; filed Mar 8, 1991, 2:45 p.m.: 14 IR 1403, eff sixty (60) days after filing with secretary of state; readopted filed Nov 21, 2001, 10:17 a.m.: 25 IR 1269; filed Feb 20, 2002, 9:38 a.m.: 25 IR 2215; readopted filed Sep 3, 2008, 1:46 p.m.: 20080924-IR-355080553RFA)*

**355 IAC 5-2-8 Filling**

Authority: IC 15-16-4-52

Affected: IC 15-16-4-58; IC 15-16-4-67

Sec. 8. Storage containers shall not be filled to more than ninety-five percent (95%) of capacity unless the storage container construction or location provides constant temperature control, or is otherwise designed to be filled to a capacity of greater than ninety-five percent (95%). (*State Chemist of the State of Indiana; 355 IAC 5-2-8; filed Mar 8, 1991, 2:45 p.m.: 14 IR 1404, eff sixty (60) days after filing with secretary of state; readopted filed Nov 21, 2001, 10:17 a.m.: 25 IR 1269; filed Feb 20, 2002, 9:38 a.m.: 25 IR 2215; readopted filed Sep 3, 2008, 1:46 p.m.: 20080924-IR-355080553RFA*)

**355 IAC 5-2-9 Shutoff valves**

Authority: IC 15-16-4-52

Affected: IC 15-16-4-58; IC 15-16-4-67

Sec. 9. (a) Storage container connections, except for safety relief connections, shall be equipped with a shutoff valve located on the storage container or at a distance from the storage container dictated by standard engineering practice.

(b) Except for a storage container of minibulk pesticide, all wetted parts inside shutoff valves and connections from the storage container to the shutoff valve shall be made of stainless steel or other approved material. (*State Chemist of the State of Indiana; 355 IAC 5-2-9; filed Mar 8, 1991, 2:45 p.m.: 14 IR 1404, eff sixty (60) days after filing with secretary of state; readopted filed Nov 21, 2001, 10:17 a.m.: 25 IR 1269; filed Feb 20, 2002, 9:38 a.m.: 25 IR 2215; readopted filed Sep 3, 2008, 1:46 p.m.: 20080924-IR-355080553RFA*)

**355 IAC 5-2-10 Appurtenances**

Authority: IC 15-16-4-52

Affected: IC 15-16-4-58; IC 15-16-4-67

Sec. 10. Appurtenances shall be adequately supported to prevent sagging and possible breakage because of gravity and other forces which may be encountered in the ordinary course of operations. (*State Chemist of the State of Indiana; 355 IAC 5-2-10; filed Mar 8, 1991, 2:45 p.m.: 14 IR 1404, eff sixty (60) days after filing with secretary of state; readopted filed Nov 21, 2001, 10:17 a.m.: 25 IR 1269; filed Feb 20, 2002, 9:38 a.m.: 25 IR 2216; readopted filed Sep 3, 2008, 1:46 p.m.: 20080924-IR-355080553RFA*)

**355 IAC 5-2-11 Liquid level gauging device**

Authority: IC 15-16-4-52

Affected: IC 15-16-4-58; IC 15-16-4-67

Sec. 11. (a) Storage containers shall be equipped with a liquid level gauging device or other means by which the level of liquid in the storage container can be readily and safely determined.

(b) External sight gauges are prohibited. (*State Chemist of the State of Indiana; 355 IAC 5-2-11; filed Mar 8, 1991, 2:45 p.m.: 14 IR 1404, eff sixty (60) days after filing with secretary of state; readopted filed Nov 21, 2001, 10:17 a.m.: 25 IR 1269; filed Feb 20, 2002, 9:38 a.m.: 25 IR 2216; readopted filed Sep 3, 2008, 1:46 p.m.: 20080924-IR-355080553RFA*)

**355 IAC 5-2-12 Maintenance**

Authority: IC 15-16-4-52

Affected: IC 15-16-4-58; IC 15-16-4-67

Sec. 12. Storage containers and appurtenances shall be maintained to minimize the risk of a discharge. (*State Chemist of the State of Indiana; 355 IAC 5-2-12; filed Mar 8, 1991, 2:45 p.m.: 14 IR 1404, eff sixty (60) days after filing with secretary of state; readopted filed Nov 21, 2001, 10:17 a.m.: 25 IR 1269; filed Feb 20, 2002, 9:38 a.m.: 25 IR 2216; readopted filed Sep 3, 2008, 1:46 p.m.: 20080924-IR-355080553RFA*)

**355 IAC 5-2-13 Compliance with effective date of rule (Repealed)**

Sec. 13. *(Repealed by State Chemist of the State of Indiana; filed Feb 20, 2002, 9:38 a.m.: 25 IR 2220)*

**Rule 3. Operational Area Containment of Liquid Pesticide at Storage Facilities**

**355 IAC 5-3-1 Operational area containment**

Authority: IC 15-16-4-52

Affected: IC 15-16-4-58; IC 15-16-4-67

Sec. 1. (a) Operational areas at a storage facility shall have containment that is curbed and paved with reinforced concrete or other approved material that provides an impervious surface. Operational area activities shall be carried out within this containment.

(b) The operational area containment shall be constructed and reinforced to support the foreseeable maximum gross load of all product, equipment, and motor vehicles utilizing the area. The containment shall have a minimum width of ten (10) feet, a minimum length of twenty (20) feet, and a minimum capacity of seven hundred fifty (750) gallons. Points of loading and unloading shall be positioned over the containment.

(c) Wherever sufficient capacity required in 355 IAC 5-4-1(c) and provisions of this rule are complied with, the secondary containment described in 355 IAC 5-4 may be designed for and jointly used in lieu of a separate operational area containment.

(d) The operational area containment shall form or drain into a watertight catch basin. If the operational area containment drains to a sump, the catch basin may include the sump and an aboveground container, provided a pump is installed which automatically transfers the contents of the sump into an aboveground container. Such containers used for the temporary storage of liquids collected from the operational area containment shall be located within secondary containment.

(e) All liquids shall be promptly removed from the operational area containment for use in the blending process or for proper disposal in accordance with all applicable rules. The capacity required in subsection (b) shall be available at all times.

(f) Storage containers and appurtenances shall be protected against reasonably foreseeable risks of damage by vehicles operating in the area.

(g) This section does not apply to the unloading of mobile containers at the pesticide application site.

(h) Operational area containment shall be maintained as necessary to assure compliance with this rule.

(i) Alternative means, including portable operational area containment systems, shall be permitted to serve as operational area containment systems if approved. *(State Chemist of the State of Indiana; 355 IAC 5-3-1; filed Mar 8, 1991, 2:45 p.m.: 14 IR 1405, eff sixty (60) days after filing with secretary of state; readopted filed Nov 21, 2001, 10:17 a.m.: 25 IR 1269; filed Feb 20, 2002, 9:38 a.m.: 25 IR 2216; readopted filed Sep 3, 2008, 1:46 p.m.: 20080924-IR-355080553RFA)*

**355 IAC 5-3-2 Compliance with effective date of rule (Repealed)**

Sec. 2. *(Repealed by State Chemist of the State of Indiana; filed Feb 20, 2002, 9:38 a.m.: 25 IR 2220)*

**Rule 4. Secondary Containment of Liquid Pesticide**

**355 IAC 5-4-1 General requirements**

Authority: IC 15-16-4-52

Affected: IC 15-16-4-58; IC 15-16-4-67

Sec. 1. (a) Liquid pesticide storage containers shall be located within secondary containment constructed with a base, perimeter wall, and sloped floor. Exception for a sloped floor may be granted by the state chemist.

(b) The containment area shall be separate from a secondary containment area for other materials and used only for containment of liquid pesticide storage containers or other pesticide related equipment. Adjoining secondary containment areas may share common walls.

(c) Secondary containment not protected from rainfall shall at all times have a minimum capacity of one hundred percent (100%) of the volume of the largest storage container within the contained area plus the volume displaced by all the other tanks, equipment, and appurtenances in the area up to the safe design level of the containment structure plus a freeboard of six (6) inches.

(d) Secondary containment protected from rainfall is not required to have the freeboard noted in subsection (c), but shall comply with all other requirements therein.

(e) Secondary containment constructed prior to enactment of this rule and that has a capacity of a minimum of one hundred ten percent (110%) of the volume of the largest storage container within the contained area plus the volume displaced by all the other tanks in the area up to the safe design level of the containment structure shall be deemed to be in compliance with this rule. Any such storage facility upon alteration of the secondary containment area or increases in storage container volume shall be brought into full compliance within ninety (90) days of alteration or increase.

(f) Tile drainage shall not be permitted within or under secondary containment. (*State Chemist of the State of Indiana; 355 IAC 5-4-1; filed Mar 8, 1991, 2:45 p.m.: 14 IR 1405, eff sixty (60) days after filing with secretary of state; readopted filed Nov 21, 2001, 10:17 a.m.: 25 IR 1269; filed Feb 20, 2002, 9:38 a.m.: 25 IR 2217; readopted filed Sep 3, 2008, 1:46 p.m.: 20080924-IR-355080553RFA*)

### **355 IAC 5-4-2 Walls**

Authority: IC 15-16-4-52

Affected: IC 15-16-4-58; IC 15-16-4-67

Sec. 2. (a) The walls of secondary containment shall be constructed of steel, poured reinforced concrete, precast concrete modules, or solid masonry and be designed to withstand a full hydrostatic head of any discharged liquid and weight load of material used in construction.

(b) Cracks and seams shall be sealed to prevent leakage.

(c) Walls shall not exceed six (6) feet in height above interior grade unless provisions are made for normal access and necessary emergency access to storage containers, valves, and other equipment and for safe exit from the secondary containment.

(d) Walls constructed of concrete or solid masonry shall rest upon a floating base of concrete prepared as in section 3(b) of this rule or upon suitable concrete footings which extend below the average frost depth. Joints between walls and the base shall be watertight. (*State Chemist of the State of Indiana; 355 IAC 5-4-2; filed Mar 8, 1991, 2:45 p.m.: 14 IR 1406; errata filed May 10, 1991, 2:30 p.m.: 14 IR 1730, eff sixty (60) days after filing with secretary of state; readopted filed Nov 21, 2001, 10:17 a.m.: 25 IR 1269; filed Feb 20, 2002, 9:38 a.m.: 25 IR 2217; readopted filed Sep 3, 2008, 1:46 p.m.: 20080924-IR-355080553RFA*)

### **355 IAC 5-4-3 Base liners**

Authority: IC 15-16-4-52

Affected: IC 15-16-4-58; IC 15-16-4-67

Sec. 3. (a) The base of secondary containment shall be lined with concrete, steel, or other approved liners.

(b) Concrete liners shall be designed according to good engineering practices to withstand any foreseeable loading conditions, including a full hydrostatic head of discharged fluid and static loads of storage containers, including appurtenances, equipment, and contents. Cracks and seams shall be sealed to prevent leakage.

(c) Steel liners and installation plans shall be approved before use.

(d) Synthetic liners and installation plans shall be approved before use.

(e) Synthetic liners shall have a minimum thickness of thirty (30) mils (eight-tenths (0.8) millimeter) and be chemically compatible with the materials being stored within the containment.

(f) Synthetic liners shall be installed under the supervision of a qualified representative of the manufacturer, and all field constructed seams shall be tested and repaired, if necessary, in accordance with the manufacturer's recommendations. (*State Chemist of the State of Indiana; 355 IAC 5-4-3; filed Mar 8, 1991, 2:45 p.m.: 14 IR 1406, eff sixty (60) days after filing with secretary of state; readopted filed Nov 21, 2001, 10:17 a.m.: 25 IR 1269; filed Feb 20, 2002, 9:38 a.m.: 25 IR 2218; readopted filed Sep 3, 2008, 1:46 p.m.: 20080924-IR-355080553RFA*)

### **355 IAC 5-4-4 Drainage from secondary containment**

Authority: IC 15-16-4-52

Affected: IC 15-16-4-58; IC 15-16-4-67

Sec. 4. Secondary containment shall not have a relief outlet or valve. The base shall slope to a collecting spot where liquid shall be removed by a manually activated pump over the wall for use in the blending process or for proper disposal in accordance with all applicable regulations. (*State Chemist of the State of Indiana; 355 IAC 5-4-4; filed Mar 8, 1991, 2:45 p.m.: 14 IR 1407, eff sixty*



(60) days after filing with secretary of state; readopted filed Nov 21, 2001, 10:17 a.m.: 25 IR 1269; filed Feb 20, 2002, 9:38 a.m.: 25 IR 2218; readopted filed Sep 3, 2008, 1:46 p.m.: 20080924-IR-355080553RFA)

**355 IAC 5-4-5 Drainage from contained areas within dikes; concrete lined area (Repealed)**

Sec. 5. (Repealed by State Chemist of the State of Indiana; filed Feb 20, 2002, 9:38 a.m.: 25 IR 2220)

**355 IAC 5-4-6 Drainage from contained areas within dikes; alternative to a recessed catch drain in concrete lined containment areas (Repealed)**

Sec. 6. (Repealed by State Chemist of the State of Indiana; filed Feb 20, 2002, 9:38 a.m.: 25 IR 2220)

**355 IAC 5-4-7 Alternative to secondary containment for storage containers of 3,000 gallons or less**

Authority: IC 15-16-4-52

Affected: IC 15-16-4-58; IC 15-16-4-67

Sec. 7. (a) Individual storage containers not exceeding three thousand (3,000) gallons may be contained within an elephant ring in lieu of secondary containment.

(b) Both the storage container and the elephant ring shall be fabricated of materials compatible with each other and with the pesticide being stored. The storage container and the elephant ring shall be constructed of similar metals. Elephant rings shall not be constructed of plastic.

(c) The height of the elephant ring wall shall not exceed four (4) feet. The minimum capacity of the elephant ring shall be one hundred percent (100%) of the volume of the storage container plus the volume displaced by all equipment, and appurtenances in the secondary containment vessel up to the safe storage level of the elephant ring, plus a freeboard of six (6) inches. An elephant ring protected from rainfall is not required to have the freeboard of six (6) inches.

(d) The elephant ring shall be free of leaks and structural defects. The base shall be protected from corrosion, both from inside and outside, and shall be underlain by a concrete pad or by eight (8) inches of compacted gravel beneath four (4) inches of compacted sand or as recommended by the manufacturer of the elephant ring and approved by the state chemist.

(e) The elephant ring shall not have a relief outlet or valve. No appurtenances shall extend through the wall of the elephant ring. Pumps located within the elephant ring shall be placed on an elevated platform.

(f) Liquid shall be removed from the elephant ring by means of a manually activated pump for use in the blending process or disposal in accordance with all applicable regulations.

(g) Elephant rings shall be maintained as necessary to assure compliance with this rule. (State Chemist of the State of Indiana; 355 IAC 5-4-7; filed Mar 8, 1991, 2:45 p.m.: 14 IR 1407, eff sixty (60) days after filing with secretary of state; readopted filed Nov 21, 2001, 10:17 a.m.: 25 IR 1269; filed Feb 20, 2002, 9:38 a.m.: 25 IR 2218; readopted filed Sep 3, 2008, 1:46 p.m.: 20080924-IR-355080553RFA)

**355 IAC 5-4-8 Maintenance**

Authority: IC 15-16-4-52

Affected: IC 15-16-4-58; IC 15-16-4-67

Sec. 8. (a) Secondary containment shall be maintained as necessary to assure compliance with this rule.

(b) Secondary containment shall be maintained free of debris and foreign matter. (State Chemist of the State of Indiana; 355 IAC 5-4-8; filed Mar 8, 1991, 2:45 p.m.: 14 IR 1408, eff sixty (60) days after filing with secretary of state; readopted filed Nov 21, 2001, 10:17 a.m.: 25 IR 1269; filed Feb 20, 2002, 9:38 a.m.: 25 IR 2219; readopted filed Sep 3, 2008, 1:46 p.m.: 20080924-IR-355080553RFA)

**355 IAC 5-4-9 Compliance with effective date of rule (Repealed)**

Sec. 9. (Repealed by State Chemist of the State of Indiana; filed Feb 20, 2002, 9:38 a.m.: 25 IR 2220)

**Rule 5. Storage of Dry Bulk Pesticide**

**355 IAC 5-5-1 Storage requirements**

Authority: IC 15-16-4-52

Affected: IC 15-16-4-58; IC 15-16-4-67

Sec. 1. (a) Dry pesticide shall be kept in storage containers effectively designed and constructed to hold dry pesticide. Storage containers shall be constructed of materials that are compatible with the pesticide being stored resistant to corrosion, puncture, or cracking, and shall be maintained in a good state of repair. Storage containers shall be placed on pallets or on a raised concrete platform which is drained to prevent the accumulation of water in or under the pesticide.

(b) Except during loading or unloading, stored dry pesticide shall be covered by a roof or tarpaulin that will keep precipitation off the pesticide.

(c) Storage facilities shall be secured to provide reasonable protection from wildlife, vandalism, and unauthorized access. (*State Chemist of the State of Indiana; 355 IAC 5-5-1; filed Mar 8, 1991, 2:45 p.m.: 14 IR 1408, eff sixty (60) days after filing with secretary of state; readopted filed Nov 21, 2001, 10:17 a.m.: 25 IR 1269; filed Feb 20, 2002, 9:38 a.m.: 25 IR 2219; readopted filed Sep 3, 2008, 1:46 p.m.: 20080924-IR-355080553RFA*)

**355 IAC 5-5-2 Compliance with effective date of rule (Repealed)**

Sec. 2. (*Repealed by State Chemist of the State of Indiana; filed Feb 20, 2002, 9:38 a.m.: 25 IR 2220*)

**Rule 6. Preparations for Control and Recovery of Pesticide Discharges (Repealed)**

(*Repealed by State Chemist of the State of Indiana; filed Feb 20, 2002, 9:38 a.m.: 25 IR 2220*)

**Rule 7. Record Keeping (Repealed)**

(*Repealed by State Chemist of the State of Indiana; filed Feb 20, 2002, 9:38 a.m.: 25 IR 2220*)

**Rule 8. Storage Facility Registry**

**355 IAC 5-8-1 Facility registry**

Authority: IC 15-16-4-52

Affected: IC 15-16-4-58; IC 15-16-4-67

Sec. 1. Storage facilities shall notify the state chemist each year of the facilities' location and status. The notice shall include the facilities':

- (1) mailing address;
- (2) owner or manager name;
- (3) rated or calculated capacity off all storage containers; and
- (4) physical location of storage containers.

(*State Chemist of the State of Indiana; 355 IAC 5-8-1; filed Mar 8, 1991, 2:45 p.m.: 14 IR 1410, eff sixty (60) days after filing with secretary of state; readopted filed Nov 21, 2001, 10:17 a.m.: 25 IR 1269; filed Feb 20, 2002, 9:38 a.m.: 25 IR 2219; readopted filed Sep 3, 2008, 1:46 p.m.: 20080924-IR-355080553RFA*)

**355 IAC 5-8-2 Compliance with effective date of rule (Repealed)**

Sec. 2. (*Repealed by State Chemist of the State of Indiana; filed Feb 20, 2002, 9:38 a.m.: 25 IR 2220*)

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