



Pesticide Review

- News

- About

- Pesticides & Regulations

May/June 2022

Volume 35, No. 3

In This Issue

- Uncrewed Aircraft Systems 1**
- Lingering Pesticide Supply Issues with Covid 2**
- 2022 Agrichemical Container Recycling Program Schedule. 3**
- IDOA Schedules Clean Sweep Collection 4**
- New Guide Available on Handling Pesticide Drift Complaints. 5**

Uncrewed Aircraft Systems



Uncrewed Aircraft System. Photo by Rantizo

Pesticide Applicator Licensing for Uncrewed Aircraft Systems (UAS)

While the regulatory environment around UAS pesticide applications is rapidly evolving, the following certification components are currently required to legally apply pesticides from a UAS in the state of Illinois.

The first component is satisfying Federal Aviation Administration (FAA) requirements. The details of which can be found on their [Dispensing Chemicals and Agricultural Products \(Part 137\) with UAS](#) page. In summary:

1. Obtain a [Part 107 Remote Pilot Certificate](#) from the FAA.
2. Since you will be operating under [14 CFR Part 107](#) and [14 CFR Part 137](#), and will unlikely be able to completely satisfy the requirements of each, you'll need to petition the FAA for applicable exemptions. You can view [examples of exemptions](#) for drones conducting agricultural operations.
3. Apply for an Agricultural Aircraft Operator Certificate (AAOC) from the FAA. This process is described in [FAA Advisory Circular \(AC\) 137-1B](#).



Illinois Extension
UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN

College of Agricultural, Consumer and Environmental Sciences
University of Illinois, U.S. Department of Agriculture Local Extension Councils Cooperating
University of Illinois Extension provides equal opportunities in programs and employment.

The second component is satisfying Illinois Department of Agriculture (IDA) requirements. The details of which can be found on their [Certification and Licensing](#) page. In summary:

- [Commercial Applicators](#) should pass both the Aerial General Standards Exam, and any applicable category exams (Field Crops, Vegetable Crops, etc.). A license application form (mailed to you after the exam), license fee, and certificate of insurance with proper coverage (for-hire applicators only) will then be required to be submitted to IDA.
- [Private Applicators](#) should pass the Private Applicator Exam OR the Aerial General Standards Exam. A license application form (mailed to you after the exam) and license fee will then be required to be submitted to IDA.

The third component is adhering to all applicable pesticide labeling. No deviations from label requirements (including spray droplet size and application rate) are permitted.

Michelle Wiesbrook

Lingering Pesticide Supply Issues with Covid

The masks are off, but not everything is back to normal. The rush of stockpiling is over, but the shelves are still not full. This is due to the supply chain disruptions that continue to be a problem. These disruptions are impacting both imports as well as exports. It isn't just consumers dealing with the shortages, but many in production agriculture are also feeling the pain of not easily being able to obtain what they need in a timely fashion at a reasonable cost. This compounded with the weather, explosive demand for critical products, regulatory issues, and increased price volatility has left some chaos for this farming season.

This year is like no other in that there have been limitations with glyphosate and glufosinate says Kevin "KJ" Johnson the president of the Illinois Fertilizer and Chemical Association. There is only 70-80% of what is needed based on current demand, a leading cause is due to hurricane Ida hit Luling, Louisiana, shutting down the Bayer plant, the largest U.S. producer of glyphosate. This shutdown forced manufacturers to source ingredients from other locations. Many products are coming from Asia and all Liberty (glufosinate) is produced overseas. Labor shortages, the bottleneck at shipping terminals, and trucking issues left for not ideal conditions in getting ingredients on time, thus wreaking havoc on acquiring containers of formulated, finished product pesticides for applicators to use.

Along with a substantial reduction in raw materials, port delays, and other active ingredient (A.I.) shortages, there is also a short supply of packaging materials. These include: plastic containers, baling twine, cardboard boxes, polymer resins, and even the foil seals for most containers. Without enough people to create and supply these packaging materials, manufacturers cannot keep up with the demand.

The long waits for loaded ships in local ports and trucking delays increase the time to get goods. The projected timeline to get materials from China to the U.S. to finish goods can take 90 to 130 days. In roughly the last three months, the price of glyphosate has increased by 40% and atrazine 25%. The trucking delays could continue to worsen with a diesel fuel shortage and increase in diesel prices, leading to a tremendous increase in freight expense. With this in mind, manufacturers are using any A.I. products they can get their hands on to put into high-value brands. Some generic products may not be available.

There are a few ways to work around and potentially avoid these supply chain issues.

One way is to plan and over-order supplies to help cover what you think you'll need in the future. That's a precarious proposition, as future planning is tricky at the best of times. Plus, there is the issue of chemical storage. Finding a place to store way too many toilet paper rolls is one thing, but this is another problem entirely considering safety and security needs. Another way to navigate supply chain issues is to consider alternative herbicide programs and to remain flexible with the product, prices, and package size. Maintain good communication with chemical dealers about when products come in and what your needs are. Our planting season may have been slightly delayed by cool and wet weather, allowing time for some products to reach the shelves for spring application. Have patience and plan. Know your alternatives, even if it means considering plan B or plan C. We need each link in our supply chain to be operating to keep the steady, affordable pesticide supply we are accustomed to in a typical production season. It may take a little longer to get back up to full speed so be patient.

Material for article was provided by KJ Johnson-IFCA

Maria Turner

2022 Agrichemical Container Recycling Program Schedule

The Illinois Department of Agriculture has announced the single-day collection sites and dates for the 2022 Pesticide Container Recycling Program. Dates and locations are available on the Illinois Department of Agriculture website. <https://www2.illinois.gov/sites/agr/Environment/Agrichemicals/Pages/Agrichemical-Container-Recycling-Program.aspx>.

Year-round disposal is available at two permanent collection sites. Please call to ensure the facility will be open.

- Griggsville, IL. Logan Agri Sry, Inc., contact Josh Schaver, 217-833-2375
- Lawrenceville, IL. Klein Flying Service, contact Robert Klein, 618-884-1040
- Carmi, IL. Klein Flying Service, contact Bri Klein, 812-890-8605

The Illinois Department of Agriculture is encouraging farmers and agrichemical facilities to save their empty agrichemical containers. Beginning in late July and continuing in August, single-day sites throughout the state will collect containers. The containers will be recycled to make shipping pallets, fence posts, drainage tubing, plastic lumber and other useful products. Over 1.6 million pounds of plastic have been collected since the program started more than 20 years ago.

The Agrichemical Container Recycling sites will accept: # 2 HDPE plastic from small bottles to 5-gallon containers, drums over 5-gallons, and mini-bulk containers that are caged or free standing. Collection sites will only accept agrichemical containers that are clean and dry. Participants are responsible for rinsing them and removing all caps, labels, booklets and foil seals.

Preparing pesticide containers for recycling:



Agrichemical containers rinsed and ready to recycle, Travis Cleveland, University of Illinois

Rinsing right after use is the best way to ensure a clean container. Depending on what system fits your operation, you can either triple rinse or pressure rinse your containers. Your local agricultural chemical dealer can give you more information about pressurized rinse systems.

Triple Rinsing

1. Fill the empty container about 20% full with water.
2. Replace the cap securely and shake the contents to rinse all inside surfaces.
3. Pour rinse water into the spray tank and drain for at least 30 seconds.
4. Repeat steps 1-3 twice more until the container is clean.
5. Inspect the container (inside and out) for formulation residues. Repeat as needed.

Pressure Rinsing

1. Use a special nozzle attached to a water hose.
2. Hold the container upside down over the spray tank with the cap removed. Puncture the side of the container with the pointed nozzle.
3. Pressurized water cleans the inside surfaces while the rinsate flows into the spray tank.
4. Rinse for 30 seconds or longer while rotating the nozzle to rinse all surfaces.
5. Inspect the container (inside and out) for formulation residues. Repeat as needed.

Additional instructions

- **# 2 HDPE plastic from small bottles to 5-gallon containers** can be placed in clear plastic bags or strung together with baler twin in groups of 25 each.
- **Drums over 5 gallon** - cut off top and bottom and cut down the side top to

bottom

- **Caged mini-bulk containers** – cut off top and bottom, cut into 4 separate sides
- **Free standing mini-bulk containers** – cut into 1foot square pieces
- Discard the cap, foil seal, labels, fittings, and any metal from the container since they will not be accepted for recycling
- Please notify the Department of Agriculture’s Pesticide Hotline at 1-800-641-3934 if your facility has 20 or more mini-bulk containers that are in good to excellent condition before preparing to be recycled

The program is a cooperative venture between the Illinois Department of Agriculture, Agriculture Container Recycling Council, GROWMARK, Inc., Illinois Fertilizer and Chemical Association, G. Phillips and Sons, L.L.C., Illinois Farm Bureau, and the University of Illinois Extension.

Additional information can be found on the IDOA website at agriculture.illinois.gov, click on the “Environment” tab and then “Agrichemicals”. To obtain a free brochure about the program, call the Illinois Department of Agriculture toll-free at 1-800-641-3934.

Travis Cleveland

IDOA Schedules Clean Sweep Collection

Residents of ten Illinois counties can dispose of unwanted agrichemicals for free this year through the Illinois Department of Agriculture’s (IDOA) agricultural pesticide “Clean Sweep” program.

“Clean Sweep” collections have been scheduled in late summer for Fulton, Henderson, Knox, Marshall, Mercer, Peoria, Putnam, Stark, Warren, and Woodford counties. The collection, which rotates among

Illinois counties, is open to farmers, retired farmers, nursery owners, private pesticide applicators, structural pest control applicators and landowners who inherited unwanted agricultural pesticides with their property.

“There are two main reasons to take advantage of this program,” said Brad Beaver, Acting Bureau Chief of Environmental Programs. “One, the Department is able to provide the service free of charge thanks to a grant obtained from the U.S. Environmental Protection Agency. If individuals were to properly dispose of agrichemicals on their own, it would be expensive. Secondly, the state of Illinois, not the program participant, will assume liability for the proper disposal of all materials collected.”

Participants must register the products they plan to dispose of by Thursday, July 27. Registration is required to give the waste disposal contractor time to prepare for the different kinds of materials that will need to be handled. Forms can be obtained either by calling the Illinois Department of Agriculture’s Pesticide Hotline at 1-800-641-3934, online at <https://www2.illinois.gov/sites/agr/Pesticides/Pages/Pesticide-Clean-Sweep-Program.aspx>.

Completed forms should be mailed or faxed to the Illinois Department of Agriculture. The mailing address is: Clean Sweep Program, Illinois Department of Agriculture, State Fairgrounds, P.O. Box 19281, Springfield, IL, 62794-9281. The fax number is (217) 524-4882. Participants then will be sent a reservation card indicating the date, time and location of their collection.

The “Clean Sweep” program began in 1990 in Illinois. Since the inception of the program, the Department has held 52 collection events through the state and collected 626,669 pounds of material from 2,196 participants. Visit [IDO’s website](#) for a complete listing of the 2022 Clean Sweep Program sponsors.

Illinois Department of Agriculture, May 25, 2021 press release, modified by Travis Cleveland

New Guide Available on Handling Pesticide Drift Complaints

How to Handle Pesticide Drift Complaints

A Guide for Those Affected by Drift

FOR PRODUCERS, GARDENERS, AND HOME OWNERS



Introduction

Pesticides play an important role in managing pests. They protect plants and animals from insects, weeds, and diseases; prevent damage to houses and other buildings; improve the efficiency of food, feed, and fiber production; and provide for more comfortable living. But all pesticides must be treated as chemicals that may endanger people, pets, livestock, plants, and the environment. They should be used only when necessary, applied correctly, stored safely, and disposed of properly.

In 1966, Illinois became one of the first states to regulate pesticides. Illinois still has one of the most thorough licensing and enforcement programs, surpassing even federal guidelines. Through education about the proper use of these chemicals, the Illinois Department of Agriculture (IDOA) and University of Illinois Extension work together to reduce pesticide misuse.

The most common type of pesticide misuse is pesticide drift. For many years, of the 120 or so pesticide misuse complaints received each year on average by the IDOA, about 60 percent of them involved pesticide drift. Complaint numbers have been considerably higher in recent years due to increased use of dicamba on soybeans and resulting drift injury. Regardless, drift complaints have been around for as long as pesticides have and certainly, dicamba is not the only pesticide that has caused unintended injury. Should you find yourself involved in a pesticide drift complaint, this document is designed to help you answer common questions.

What is Pesticide Drift?

The movement of pesticide spray particles and vapors off target by air is referred to as drift. Unfortunately, when applying pesticides there is a chance that some will escape from the target area. Drift is especially a concern because it removes a portion of the chemical from the intended target, making it less effective against the target species. That chemical may then be deposited where it is not needed or wanted.

This may threaten the safety and health of nearby people, cause injury to desirable plants and animals, impact environmental quality, and cause pesticide residues on non-target areas. Pesticide drift may have environmental, economic, health and legal ramifications.

There are two ways pesticides can be carried downwind to non-target areas: vapor drift and particle drift. Both types of drift should be considered when making an application, and steps should be taken to minimize their occurrence.

The first step should always be to read and follow the pesticide label.

Vapor drift occurs when vapors produced by a pesticide are carried out of the target area. The process of vapor production, called volatilization, can occur up to several days after an application. The occurrence of vapor drift is sometimes difficult to predict, and relies on weather conditions occurring after a pesticide application. Some pesticides are more volatile than others, as are different formulations of the same pesticide.

Particle drift is the actual movement of spray particles off target, usually by the wind. Particle drift results mostly from the smaller drops created in the spraying process. Wind speed and direction are major factors in determining if droplets are carried off target. Factors such as nozzle selection, spray pressure, height of the spray boom, and weather all play a role in particle drift.

© Copyright 2022 University of Illinois Extension

How to Handle Pesticide Drift Complaints:
A Guide for Those Affected by Drift

Pesticides play an important role in managing pests, but they must be used responsibly and according to label directions so that they don’t endanger people, pets, livestock, plants, and the environment. While there is much work done to educate pesticide users about safety and most applications are made according to label directions, cases of misuse still occur unfortunately. The most common type of pesticide misuse is pesticide drift and when it occurs, emotions can run high while seeking answers. Additionally, time is of the essence.

While written for producers and gardeners, this new guide could be beneficial to really anyone affected by drift. It can be used to help navigate the often challenging task of determining if pesticide drift could be the cause of injury to sensitive plants and

if so, what to do about it. The guide discusses:

- What drift is
- How it can be prevented
- What if it occurs
- Who can help
- What role each involved party plays
- The drift complaint process
- Answers to common questions concerning drift injury and complaints

- Contacts for suspected exposure and first aid
- Health and environmental concerns about pesticides
- Additional resources

This new guide can be found at the University of Illinois Pesticide Safety Education Program's website under Resources or via the following URL https://extension.illinois.edu/sites/default/files/public_pesticide_drift_complaint_guide.pdf

Michelle Wiesbrook

The development and/or publication of this newsletter has been supported with funding from the Illinois Department of Agriculture.

*Michelle Wiesbrook
Extension Specialist, Pesticide Safety Education
Email: buesinge@illinois.edu*

The *Illinois Pesticide Review* is published six times a year. For more information about pesticide safety or for more issues of this newsletter, please visit us at www.pesticidesafety.illinois.edu. You can also reach us at 800-644-2123.

Disclaimer: Mention of trade names in this newsletter is for general information purposes only and does not constitute endorsement of one product over another, nor is discrimination intended against any product.

Copyright © 2022, Board of Trustees, University of Illinois



We're on facebook! Search for the University of Illinois Extension Pesticide Safety Education Program (PSEP).