Pesticide About Pesticides & Regulations

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Spring Tips for Pollinator Protection

Pollinators can be some of the first spring insects we notice in the landscape. Honey bees and native bees may begin to forage on grape hyacinth or snowdrops. You may even notice butterflies

like, my favorite, the mourning cloak, as they emerge from their overwintering sites. This makes spring a great time to brush up on tips for pollinator protection.



A closeup of a flying bee between grape hyacinths in jena (462073878), Marrow83, AdobeStock

Choosing a pesticide:

Choose a pesticide with lower bee toxicity.

Some products, like neonicotinoid insecticides, are highly toxic to bees. While our target insects are killed by the application rates on the specific use section of the product label, some non-target insects may be sensitive to smaller quantities of the material.

- Products that are more problematic to bees will have a <u>Bee Advisory Box</u> on the label. The Bee Advisory Box will give additional information about the use of the product regarding pollinator safety. For example, it may say the product cannot be applied when bees are present, can only be used after petal fall or it may give additional information about avoiding particle drift.
- To view a list of pesticides that are highly toxic, moderately toxic and relatively nontoxic to honey bees, visit Purdue University's publication, <u>Protecting Honey Bees From Pesticides</u>.

Avoid microencapsulated formulations.

Microencapsulated pesticides are droplets of pesticide surrounded by plastic or starchy materials. This coating allows the pesticide to be applied safely and breakdown to release the pesticide after application. Unfortunately, the particles are similar in size to pollen grains, so bees may collect them and carry them back to the hive where they breakdown and harm the bees.

Conditions for application:

Apply when temperatures are below 55°F, when bees are not active.

Honey bees begin to forage when the temperature is 55°F or greater. The minimum temperature honey bees require for flight is 54°F, if bees' flight muscles are cooler than that, they are unable to fly and forage.

Timing the application:

Apply treatments before dawn or after dusk, when bees are not active.

Honey bees forage during the day after temperatures reach 55°F and return to their hives as the sun sets. Applying treatments when bees are not active is a good way to avoid honey bee exposure.

Avoid applying systemic treatments to plants prior to or during bloom.

Systemic pesticides are taken up and transported throughout the plant and persist for longer periods of time. If a systemic treatment is applied on or near a flowering plant, that treatment may later become present in the pollen. If a flowering plant must be treated with a systemic insecticide, it is best to do so after the plant is done flowering to avoid pollinator exposure.

Location of the application:

Try not to make spray applications close to blooming flowers.

This can help prevent particle drift onto the flowers and prevent pollinator exposure when they visit the flowers. Alternatively, granular pesticides can be applied to prevent particle drift onto flowers.

Keep in mind that clover and weeds in turfgrass are also visited by pollinators.

Often flowering weeds are used as early season food sources for pollinators coming out of dormancy. If an early season treatment with a contact insecticide is necessary, mowing the flowers off of clover or weeds prior to the application is an option to avoid pollinator contact with an insecticide.

Determine whether there are sensitive areas near your application site.

Check the <u>IDNR Awareness Tool for Applicators</u>, an interactive map that allows applicators to determine if there are sensitive areas near their application site. Sensitive areas may include preserves or areas that are habitat to threatened or endangered species, like the rusty patched bumble bee. Certain pesticides may be prohibited in those areas.

Notify beekeepers:

Notify beekeepers within 3 miles of the applications site 48 hours prior to applying a product toxic to bees.

Visit <u>Illinois DriftWatch</u> or <u>FieldWatch</u> to identify beekeepers near your application site and notify them that you plan to apply pesticides. This gives beekeepers the chance to cover hives, move hives or otherwise accommodate

the bees so they can avoid bee exposure by preventing the bees from foraging during the application.

While 3 miles may seem like a large distance, research has shown that the foraging range around beehives is about 2 miles and some individuals may travel up to 5 or 6 miles to find pollen and nectar.

Sarah Hughson

Women and Personal Protective Equipment

When speaking with applicators on reasons they might not wear personal protective equipment, a theme occurs around comfort. Much of the PPE made is fitted for men and not for women which complicates matters. According to the 2017 census, women now play a much more significant role in farming. More than half (51 percent) of all farming operations in the United States had at least one-woman operator, and 36% of U.S. farmers are women, according to the 2019 Agricultural Resource Management Survey (ARMS).

A woman's physique is different than a man's. Traditionally the practice with protective equipment was for a woman to purchase a size smaller for a correct fit. Since women and men are shaped differently, sizing down doesn't necessarily work. Men's shoulders are typically broader, the waist is cut higher, and the chest area requires more space. Additionally, men's garments also have a wider collar area and narrow hip. Men's hands are also typically wider, longer, and have different finger patterns than that of women. So, sizing down in PPE can lead to ill-fitting, uncomfortable, and hazardous items.

When I was in school learning to weld, I was required to get a pair of coveralls. I sized down for the coveralls, but they were still large on me. The arms were past my fingers,

and the length of the legs was very long. I rolled the cuffs and pushed up the sleeves. While welding, a spark landed on the cuff of the pants and caught the pant leg on fire. Concentrating on my welds with a shield on my face, it wasn't until the teacher grabbed me that I realized I was on fire. This could have been prevented if the ember had not landed in the cuff of the pants.

PPE that is too big can lead to tripping hazards and exposure issues with spray particles or drift entering gaps. Gloves that do not fit properly can cause dexterity issues, fatigue, and continually grabbing and adjusting the gloves could lead to dermal exposure. Respirator fit should be considered as well. Medical fit tests are required so that you may be the best protected from inhalation exposure. We have learned a lot about masks and their ability or inability to be protective through the pandemic. Masks are also not necessarily made with a women's face in mind, so be sure to look for masks that will provide protection and comfort, Then, be sure to follow with a fit test.



Different sizes of coveralls, Martha Smith, University of Illinois

PPE is meant to protect the body from the pesticides being used, and with ill-fitting protective equipment, the risk of exposure is much greater. With more women involved

in the agriculture industry, the availability of women's PPE has come a long way and is now more readily available. However, it is still not at the same accessibility, so manufacturers and employers need to continue to make it a priority to provide and create products that fit, making them comfortable to wear.

An employer has a responsibility to protect their employees and prevent injuries. Providing PPE that fits properly is a step in that direction. Check your measurements before just ordering a size down and remember that "One size" doesn't necessarily fit all.

Maria Turner

Private License FAQ

As you would expect, the University of Illinois Pesticide Safety Education Program answers plenty of questions related to pesticide licensing. We are glad to be here to help you with your questions and to help you to comply with the state's pesticide regulations. Here are some questions that we commonly encounter regarding private applicator licenses.

Do I need a license to apply pesticides to my own land?

Yes, but only if you choose to use a restricted-use pesticide (RUP). These products have an obvious "Restricted-Use Pesticide" statement at the top of the pesticide label. If the product is not a RUP, it is a general-use pesticide, and, as a farmer or homeowner, you do not need a license to apply it to land you own or rent.

I farm and operate a custom pesticide application business. Which license do I need?

If you use restricted-use pesticides on your farm, you must be licensed as a Private Applicator. You also need to be licensed as a Commercial for Hire Pesticide Applicator for your custom application business, regardless of whether the pesticides are General-use or Restricted-use. Passing the commercial general standards exam qualifies you for a private applicator license. Though, you will need to submit a separate application and licenseing fee for your private applicator license.

Does my private applicator license allow me to spray another farmer's land?

Yes, but with certain restrictions. Illinois law allows private applicators to apply pesticides to other property if done without compensation other than trading of personal services. Essentially, the private applicator cannot be paid for the applications. The law also limits these applications to no more than two producers of agricultural commodities. You will need a Commercial for Hire Applicator license if you receive compensation or apply for more than two producers.

Do I need a private applicator license to apply pesticides as a hired farmhand in Illinois?

Illinois law requires most employees to be licensed when using pesticides in the course of their employment. However, hired farm hands are not required to be licensed as they likely meet the definition of a "Handler" within the US EPA's Worker Protection Standard (WPS). Accordingly, the employing farmer will need to comply with all the requirements of the WPS. Be aware not all farm operations fall under the WPS. If you are unsure, use the The Worker Protection Standard: Does It Apply To You? tool produced by the Pesticide Educational Resources Collaborative, or review the How to Comply With the 2015 Revised Worker Protection Standard For Agricultural Pesticides Manual.

There are some advantages to a farmhand being certified as a private applicator even though the law does not require it. If WPS applies to the farm operation, the employer must provide annual pesticide safety training using EPA-approved materials. Certain

employees, including certified private applicators, may be exempt from the annual training requirement. The US EPA exempts certified applicators because they have demonstrated the necessary competency to use restricted-use pesticides for pest control in the production of agricultural commodities. The competency standards for certified applicators also exceed the annual pesticide safety training content requirements. In Illinois, private applicators must recertify by written exam every three years. Some farmhands and agricultural employers prefer the recertify every three years instead of training on an annual basis.

Michelle Wiesbrook and Travis Cleveland

Illinois EPA Announces Nine Spring 2022 Household Hazardous Waste Collection Events

Illinois EPA Director John J. Kim has announced nine upcoming Household Hazardous Waste (HHW) one-day collection locations for the spring of 2022. Each year, Illinois EPA provides residents with free HHW collection events to safely dispose of unused or left-over hazardous products commonly found in homes. Illinois EPA HHW collections continue to be contactless for the safety of participants and workers. Collection events are funded through the Illinois EPA's Solid Waste Fund.

"Each year, we see a continued need for Household Hazardous Waste collection events throughout the state. We are pleased to continue offering this important program, providing residents with opportunities to safely dispose of unwanted chemicals and potentially hazardous products," said Director Kim. "We are grateful to our local partners and co-sponsors who make these events possible throughout Illinois."

One-day collections are open to all Illinois residents and operate from 8:00 a.m. to 3:00 p.m. on the day of the event. Pre-registration is required for all of the spring 2022 collection events. Residents participating in these events are encouraged to bring chemical cleaners, oilbased paints, thinners, antifreeze, motor oil, gasoline, kerosene, weed killers, insecticides, and pesticides, old or outdated medication, and similar hazardous household products. Fluorescent and other high-intensity discharge lamps may also be brought to the collections. ITEMS NOT ACCEPTED include latex paint, explosives, propane tanks, fire extinguishers, smoke detectors, agricultural chemicals, and business wastes.

For safe transport of HHW, residents are asked to:

- Pack HHW items in a disposable box to avoid spilling during transport.
- Keep like chemicals together and separate unlike chemicals.
- Secure lids and make sure containers are not leaking.
- Place box(es) of HHW in empty trunk of your vehicle, away from passengers during transport.
- Remain in vehicle at collection site. On-site personnel will remove the HHW from your vehicle.

A complete list of wastes that are and are not accepted is available online at https://www2.illinois.gov/epa/topics/waste-management/waste-disposal/household-hazardous-waste/Pages/acceptable-wastes.aspx. The spring 2022 one-day collections are scheduled on Saturdays as follows:

- April 9 Champaign, Champaign County, SE Quad Parking Lot, U of I State Farm Center, 1800 South First Street, Pre-Register: https://www.hhwevent.simplybook.me/v2/
- May 14 Mattoon, Coles County, Coles

County Memorial Airport, 432 Airport Road, Pre-Register: https://www.co.coles.il.us/events/

- May 14 Peoria, Peoria County, Expo Gardens, 1601 West Northmoor, Pre-Register: www.peoriacounty.gov/recycle
- May 21 Ottawa, LaSalle County, La-Salle County Court House, 707 East Etna Road, Pre-Register: https://events.juvare.com/IL-IDPH/405bd6a4-43fc-4914-a10c-1820077f35a1/
- June 4 Carbondale, Jackson County, SIUC Arena Parking Lot, 1400 Arena Drive, Pre-Register: https://JCHDonline.as.me/Shred-Med2022
- June 4 Macomb, McDonough County, Western Illinois University, 306 West University Drive, Pre-Register: https://tinyurl.com/MCHHW2022
- June 11 Mount Carroll, Carroll County, Highway Garage Building, 10735 Mill Road, Pre-Register: Link TBA
- June 25 Taylorville, Christian County, Christian County Fairgrounds, 1716 West Spresser Street, Pre-Register: Link TBA
- June 25 Crystal Lake, McHenry County, Prairie Ridge High School, 6000 Dvorak Drive, Pre-Register: https://mchenrycountyhhwevent.as.me/schedule.php

In addition to the one-day collections, longterm collection facilities are available for disposal of household hazardous waste throughout the year. Those locations, and additional information can be found online.

Source: Illinois Environmental Protection Agency Press Release, March 29, 2022, Springfield, IL; adapted by Michelle Wiesbrook

EPA Continues to Take Actions to Address PFAS in Commerce

The U.S. Environmental Protection Agency (EPA) is announcing two important actions to safeguard communities from products containing Per- and Polyfluoroalkyl Substances (PFAS). First, as part of EPA's effort to identify, understand and address PFAS contamination leaching from fluorinated containers, the agency is notifying companies of their obligation to comply with existing requirements under the Toxics Substances Control Act (TSCA) to ensure unintentional PFAS contamination does not occur. The agency will also remove two PFAS from its Safer Chemical Ingredients List (SCIL) following a review of these substances (which were added to that list in 2012).

"Today's action will help ensure that responsible parties are held accountable for any future PFAS contamination affecting communities," said Assistant Administrator for the Office of Chemical Safety and Pollution Prevention Michal Freedhoff. "Additionally, keeping PFAS out of consumer products certified under the agency's Safer Choice program will help prevent potential exposures to PFAS from occurring in the first place."

TSCA Compliance Notification Letter to Industry on PFAS in High-Density Polyethylene (HDPE) Containers

EPA notified manufacturers (including importers), processors, distributors, users, and those that dispose of fluorinated HDPE containers and similar plastics (i.e., fluorinated polyolefins) that the presence of PFAS formed as a byproduct in these containers may be a

violation of TSCA.

In an open letter Letter to Fluorinated **HDP Industry**, EPA outlines notifications requirements under TSCA for such PFAS. Certain PFAS, including long-chain PFAS as defined in EPA's 2020 long-chain perfluoroalkyl carboxylate (LCPFAC) Significant New Use Rule (SNUR), that are found to be present in or on fluorinated polyolefins may be subject to TSCA regulations and enforcement. LCPFAC chemical substances that are byproducts of the manufacturing process for fluorinated polyolefins do not meet the requirements of the byproduct's exemption. This means that the uses require notice to EPA via a Significant New Use Notice (SNUN), EPA review of potential risks of this use under TSCA section 5, and a determination of whether (and under what conditions) such uses can continue.

In March 2021, EPA made testing results available related to PFAS found in fluorinated containers. The contamination was first noted in HDPE containers used to store and transport a pesticide product. As the agency continues to determine the potential scope of the use of this fluorination process outside of its use for pesticide storage containers, EPA is issuing this letter to notify industry of their statutory obligations under TSCA and to help prevent unintended PFAS contamination.

Under the PFAS Strategic Roadmap issued by EPA Administrator Regan in October of 2021, EPA has committed to improve approaches for tracking and enforcement of PFAS requirements in new chemical consent orders and SNURs. The released letter supports this goal by ensuring that manufacturers, processors, distributors, users, and those that dispose of these containers are aware of and are complying with the SNUR requirements.

For questions concerning this matter, contact EPA at TSCA_PFAS@epa.gov.

Removing PFAS from the Safer Chemical Ingredients List

EPA will also remove two PFAS first listed on the SCIL in 2012 under EPA's Safer Choice program to better protect consumers and ensure that products certified under this program are free from PFAS.

EPA's Safer Choice program is a voluntary program that helps consumers, businesses, and purchasers find products containing ingredients that are safer for human health and the environment. The SCIL includes chemicals that meet the criteria of the Safer Choice program and can be used in Safer Choice-certified products because they have been determined to be among the safest for their functional use.

Under the PFAS Roadmap, EPA committed to taking a fresh look at previous PFAS decisions, and, as part of this review, undertook a review of the SCIL.

EPA's process for removing a chemical from the SCIL is to first mark the chemical with a grey square on the <u>SCIL webpage</u> to provide notice to chemical and product manufacturers that this chemical may no longer be acceptable for use in Safer Choice-certified products. A grey square notation on the SCIL means that the chemical may not be allowed for use in products that are candidates for the Safer Choice label, and any current Safer Choice-certified products that contain this chemical must be reformulated unless relevant health and safety data is provided to justify continuing to list this chemical on the SCIL. The data required would be determined on a case-by-case basis. In general, data useful for making such a determination would provide evidence of low concern for human health and environmental impacts. Unless information provided to EPA adequately justifies continued listing, this chemical would then be removed

from the SCIL 12 months after the grey square designation.

EPA initially listed these two PFAS on the SCIL in 2012 based on the data available and the state of the agency's knowledge at the time. EPA has updated the SCIL listing for these PFAS to a grey square because of a growing understanding of the toxicological profiles for certain PFAS, and incomplete information on the potential health and environmental effects of these substances. This means that

these two PFAS will not be allowed for use in new products applying for Safer Choice certification. Additionally, any existing Safer Choice-certified products that contain these two PFAS must be reformulated.

For more information on the Safer Choice program and the SCIL, visit <u>Safer Choice</u>.

Source: EPA Press Release, March 16, 2022, press@epa.gov; adapted slightly by Michelle Wiesbrook.

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