

PESTICIDE HIGHLIGHTS

January 2018

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Meet the PA Department of Agriculture (Bureau of Plant Industry) Staff



Len Jess John Don Jim

Len Brylewski is the Division Chief of Health and Safety. He manages the pesticide division team.

Jess Lenker is the Pesticide Certification and Education Specialist. She works with pesticide applicators and educators on licensing requirements, the hypersensitivity registry, meeting approvals, and credits.

John Lake is the state pesticide registration specialist. He handles the state registration of products registered under Section 3 of FIFRA and "minimum risk pesticides." Also he is responsible for experimental use permits, special local need registrations, and emergency exemptions to address urgent pest situations.

Don Gilbert is the Pesticide Compliance and Enforcement Specialist. He reviews pesticide sales and application records, pesticide use inspections, and pesticide misuse cases for violations of the PA Pesticide Control Act and FIFRA.

Jim Cunningham is a Pesticide Specialist. His primary responsibilities include CHEMSWEEP, Container Containment enforcement, Plastic Pesticide Container Recycling, Pesticide Establishment Inspections, and water quality monitoring program with the USGS.

Meet the Penn State Pesticide Education Program Staff



Tracey Sharon Carlos Kathy Garo Ed Julie Bill Jon

Jon Johnson is the Program Director. He provides leadership to the Pesticide Education Team in meeting the goals and objectives of all pesticide-related extension and outreach efforts.

Bill Riden is a Pesticide Education Specialist. He creates and presents pesticide certification presentations and helps to develop new certification manuals.

Julie Watson is an Education Program Assistant. She assists with the planning, organization, and staffing at outreach events such as the PA Farm Show and Ag Progress Days. In addition, she gathers the articles to produce this annual newsletter.

Ed Crow is a Pesticide Regulatory Education Specialist that is involved with the development of examination study materials, certification examinations, presentations and related educational materials, and pesticide regulatory issues.

Garo Goodrow is the Multimedia Specialist. His graphic design talent is used to develop educational materials for a variety of audiences, including pesticide applicators, homeowners, and youth.

Kathy Branstetter is the Administrative Support Coordinator. She monitors budgets, answers phone, and responds to email questions about the program and pesticide applicator certification.

Carlos Quesada is an IPM (Integrated Pest Management) Specialist with focus on phytophagous insect pests. He works with extension educators and other related groups to develop educational resources in both English and Spanish.

Sharon Gripp is the Information Specialist. Her primary responsibilities are to provide editing support for our staff; review content to ensure consistency; and create a framework to house online learning courses and recertification modules.

Tracey Harpster is an Extension Educator. She creates and presents pesticide recertification presentations and helps to develop new certification manuals.

Recordkeeping 101 for ALL Applicators

Maintaining complete and accurate records is an important practice that every applicator needs to pay close attention to each time an application is made. The Pennsylvania Department of Agriculture (PDA) requires all private applicators and commercial pesticide application businesses, including public agencies, to maintain pesticide application records. Besides being required, application records also provide valuable information that can be used to protect yourself, company, or agency in the event of a misapplication complaint filed with PDA or in a lawsuit. When conducting a complaint investigation, the application records are one of the first things that a PDA inspector will be asking for, and similarly with a lawsuit the attorneys will be seeking copies of them as well.

Remember, PDA requires that application records be completed within 24 hours of the application and be maintained for a period of 3 years. In addition, they must be made immediately available to PDA upon request and to medical personnel in an emergency. Private applicators are required to maintain records for all applications involving the use of a restricted use pesticide while commercial businesses, including public agencies, are required to maintain records for all applications involving the use of both general and restricted use pesticides. A listing of the specific information that must be maintained by a private applicator and commercial business can be found at Penn State Extension's website: extension.psu.edu/pests-and-diseases. Click on *Pesticide Applicators*, then on *Guides and Publications*, and look for the publication titles *Pennsylvania Pesticide Laws and Regulations for Private Applicators* and *Pennsylvania Pesticide Laws and Regulations for Commercial and Public Applicators*.

Besides PDA's requirements, additional recordkeeping requirements are needed for those applications falling under the provisions of the federal Worker Protection Standard (WPS). Private applicators and commercial businesses, including public agencies, must also maintain the active ingredient, restricted entry interval (REI), and the date(s) and times the application started and ended as part of their records. A copy of the Safety Data Sheet (SDS) for each pesticide applied must also be maintained.

Although not required by PDA, all applicators should consider maintaining weather conditions as part of your application records. This can provide valuable information to help in protecting yourself in the event of a complaint investigation or lawsuit involving drift. Keep track of temperature, wind speed, and wind direction at the site of application. In addition, the rela-

tive humidity can also provide useful information. Take measurements at boom or nozzle height and record the average wind speed instead of a range or variable speed. Also, list the wind direction in degrees instead of NW, SE, etc. This information can be recorded in a general "Notes" section of the records if there is not a specific section for weather conditions.

PDA does not have a mandated recordkeeping form, but leaves the format of the records up to each private applicator, pesticide business, or agency to maintain in a manner that suits their operation. Records can be kept electronically provided all of the information is maintained and they are immediately accessible upon request. To assist with recordkeeping the Pesticide Education Program has revised and reprinted the *Pesticide Application Recordkeeping Manual with Worker Protection Standard and Calibration Information*, which includes a sample form. Distribution of the manual is being finalized, but a PDF file of the revised Pesticide Application Record form is available on the Pesticide Education Program's website at <https://extension.psu.edu/recordkeeping-form-for-pesticide-applicators>.

In addition to pesticide application records, PDA requires several other types of records to be maintained by each place of business or agency. These include registered technician ID and training, both initial and annual training, along with a copy of a government-issued ID of the employee. Records are also required to be maintained regarding the prior notification of individuals requesting advance notification of an ornamental or turf application, nonagricultural area wide applications of a restricted use pesticide, and any hypersensitivity notification or attempted notification. In addition, under the provisions of the federal

WPS, records must be maintained for the training of workers and handlers.

For the specific requirements regarding PDA's recordkeeping requirements, consult the Pennsylvania Pesticide Control Act of 1973, as amended, and the Pennsylvania Code Title 7 Chapter 128 Pesticides regulations, which can be found at www.pacode.com/secure/data/007/chapter128/chap128toc.html.

Remember, make sure your records contain all of the required information. If you have employees, stress the importance of maintaining thorough records and completing them in a timely manner. Accurately document the application; treat each application as if it may be the one going to court. The initial time spent on your records may very well be time well spent in the long run. Protect yourself and/or your company/agency, and document, you cannot have too much information.

Pesticide Application Records Records must be maintained for three years and completed within 24 hours of the pesticide application.

Business/Organization Name:				E.U. #:		Grower Name:			
Date (M/D/Y)	Customer or Grower Name and Address	Applicator/Technician Name	Brand Name of the Pesticide Used	EPA Registration #	Dosage or Rate Used	Amount of Pesticide Used	Site, Crop, or Commodity Treated ¹	Completion Time (AM/PM)	Notes
Start Time (AM/PM)	Application Location if different than above	Applicator Certification # / Technician Registration #		Active Ingredient	Size of Treated Area ¹			Restricted Entry Interval ² (in hours)	
								AM PM	
AM PM								AM PM	
								AM PM	
AM PM								AM PM	
								AM PM	
AM PM								AM PM	

¹Required for the production of an agricultural commodity but recommended for all applications.
²If customer falls under the provisions of the Worker Protection Standard, the restricted entry interval (REI) must be recorded.

Extension Has a New Website: What Do You Want to Learn About?

As you may have noticed, Penn State Extension launched a brand new website in early Fall. Instead of just updating the look, the entire website has been redesigned. The new concept is for users to enter in search terms to find what they are looking for, rather than just going to a specific web page or program website with information and links. This allows you to find other related information that may also be helpful to you.

When you go to extension.psu.edu, the rotating prominent images have a center search bar that says, “What do you want to learn about?” This is where you enter the topic that interests you. Most searches will yield a large number of results. However, you can easily fine-tune these results by clicking on key words that appear on the left side to narrow the search results. Here you will see main categories (such as education format, application, language, industry, fruit, vegetable, turfgrass/lawn, author/instructor) with key terms listed underneath to click. These main categories will change depending on your initial search terms.

The new website has very few “traditional” web pages like the ones we were used to seeing. Now, the majority of pages include only one topic and each page is classified as an article, downloadable, guide/publication, news, online course, video, webinar, conference, or workshop.

However, we still have a landing page that contains information just for applicators: extension.psu.edu/pests-and-diseases/pesticide-applicators. On the top right, you can find links to three main pages:

- [Certification and Study Materials](#): Contains information about the certification process and links to order the Commercial/Public Core Packet, Private Applicator Packet, and all the category packets. You do need to create an account with Penn State Extension in order to purchase anything.
- [Recertification](#): Contains information about how to get recertification credits and links to our online recertification courses. We are still encouraging you to search for all other recertification opportunities using the Pennsylvania Department of Agriculture’s PaPlants website at: <https://www.paplants.pa.gov/Index.aspx>.
- [Resources and Best Practices](#): Contains pesticide safety fact sheets, recordkeeping forms, Pennsylvania Department of Agriculture’s regional office contacts, and various videos, including calibration.

You can still contact us with questions, via email: PestEdPrograms@ag.psu.edu. And, let us know what you think of the new website!

Off-target Movement Caused by Drift and Volatility

Controlling pesticide drift should be an important issue to every pesticide applicator. The off-target movement of pesticides, particularly herbicides from the site of application, referred to as drift, continues to be a problem both in Pennsylvania and nationwide. Drift can cause injury to desirable plants located in adjacent fields or properties. Drift can injure foliage, shoots, flowers, and fruits resulting in reduced yields, economic loss, and illegal residues on exposed crops. Damage to vineyards from drift is a growing problem, particularly from the phenoxy family of herbicides which includes the active ingredients 2,4-D, dicamba, and trichlopyr. However, drift is not limited to exterior applications; it can occur indoors.

The extent of herbicide injury to nontarget plants is dependent on a number of factors including: the plants growth stage at the time of exposure; if the plant was directly impacted by drift and/or through volatilization; the distance between the impacted vegetation and application site; weather conditions, including wind; how it was applied (pressure, nozzles, pesticide used); and general condition and health of the impacted crop or plant. Although most volatility which causes injury occurs within the first 12 to 24 hours following application, volatilization can still occur several days after the original application.

Traditionally when spray drift is mentioned, herbicides come to mind, due to the visible evidence that appears on vegetation. However, insecticides can also cause significant drift problems, such as to beehives, aquatic environments, and illegal residues

on neighboring crops, including organic crops, along with phytotoxicity issues to sensitive plants.

Remember, by regulation the Pennsylvania Department of Agriculture (PDA) must be notified if you are aware of an accident or incident involving a pesticide which causes damage resulting in an economic loss of plants, organisms, structures, or stored commodities. In addition, the regulations state that a pesticide application may not be made when the weather conditions will be such that a pesticide will be expected to move off of the proposed application site. Make sure you follow all label requirements, or restrictions, regarding equipment setup and application as it pertains to off-target movement.

Develop a good drift management program that uses drift-reducing techniques that are appropriate for your operation. First and foremost, before spraying evaluate weather conditions including: wind direction, wind speed, temperature, relative humidity, and conditions favoring temperature inversions. Also, identify sensitive crops around the application site, work with your neighbors, and adjust application equipment to reduce the risk of spray drift. These steps will help minimize the potential for off-target movement, or drift, of pesticides. When making indoor applications, pay attention to air handling units and ventilation systems. Remember, it is every applicator’s responsibility to apply a pesticide in such a manner that will keep the pesticide from moving off the intended target site.

The Dicamba and Soybean Issue

With the introduction of the new technology of Xtend and Enlist varieties of soybeans in 2016, a whole new set of problems regarding off-target movement has arisen. This has been especially true in Arkansas, Mississippi, Missouri, Tennessee, and other states in the mid-south. The Xtend variety of beans are tolerant to dicamba while the Enlist beans are tolerant to 2,4-D. Both of these varieties have newly developed dicamba and 2,4-D formulations that have been specifically designed for use on these new soybean varieties. These products are formulated to reduce the risks associated with drift and volatility. They can be applied to soybeans as a burndown at planting or overtop of beans as a postemergent application to control broadleaf weeds. The new formulations of dicamba are being marketed under the trade names of Xtendimax With VaporGrip Technology, Engenia, and FeXapan Plus VaporGrip Technology.

These dicamba products were given a conditional registration for use with Roundup Ready Xtend soybeans by the U.S. Environmental Protection Agency (EPA) for a two-year time frame which expires in 2018. These products have full labels and can also be used in other crops like corn, pastures, etc. just like the other dicamba products. This two-year process for the dicamba application to Xtend soybeans allows EPA to easily make label changes to address issues or let the registrations expire if too many problems are associated with their use. As part of the registration process, EPA required the manufacturers to include mandatory label restrictions for reducing damage and off-target movement of these products. These include: the use of specific nozzles; not to exceed recommended spray volumes and pressures for the specific nozzle; a maximum allowable ground speed and boom height; wind speed and temperature inversion restrictions; and the establishment of downwind buffers when spraying adjacent to sensitive vegetation. In addition, these products have rate restrictions, timing restrictions based on plant development, and restrictions that only allow tank mixing with other products specified by the label or at each product's specific online website.

However, since the introduction of the Xtend variety of soybeans, a large number of acres have been damaged by the use of dicamba, particularly in fields planted with traditional soybean varieties. Initially in 2016, much of the damage was thought to be the result of illegal uses of unapproved, more volatile, formulations of dicamba since the new dicamba formulations were not available. In addition, some of these were used at night and likely drifted due to temperature inversions. However, in 2017 damage to entire fields of traditional soybean varieties has continued to be a problem, even with the availability

of the new dicamba formulations. Soybeans are extremely sensitive to dicamba and plants in these fields have cupped leaves, a typical sign of dicamba exposure, uniformly across entire fields. Leaf stems can also be twisted and seed pods are damaged which has significantly reduced yields. Other crops such as grapes, tomatoes, and orchards along with ornamental and vegetable garden plants on residential properties have also been damaged. Because this is new technology with many unanswered questions, specialists are cautioning growers not to use it on all of their acres, but in those situations where specific weed problems exist, and especially not in areas having very diverse crops.

Plant damage has still been occurring even after these products were applied according to label directions. Although temperature inversions and improper tank cleanout may still be contributing factors, now the thinking of university weed scientists regarding the continued damage relates more to the timing of when the applications are made during the growing season. With the Xtend soybeans, these new formulations of dicamba are being applied later in the growing season when temperatures are higher and soybean plants are mature, versus when dicamba was traditionally applied to corn much earlier in the growing season when temperatures were cooler and susceptible crops were not yet growing or were less sensitive.

Another factor that relates to these high levels of damage experienced in the mid-south, at least in part, is the extended growing seasons for this region. This results in the soybeans being planted over a longer time period which increases the timespan in which dicamba is being applied. In addition, a higher percentage of acreage is being planted with dicamba-resistant soybean varieties compared to other parts of the United States. This is due, mostly, for the need to control Palmer amaranth, a herbicide resistant pigweed.

Because of these continuing problems involving dicamba damage, Arkansas banned the sale of Xtendimax in 2017. In November, the Arkansas Plant Board passed an in-season application ban of dicamba to soybeans and cotton from April 16 to October 31 for the 2018 growing season. In addition, Missouri issued a Special Local Needs label for 2018 that establishes an application cutoff date of either June 1 or July 15 depending on the county and restrictions that it can only be applied between 7:30 am and 5:00 pm. Fortunately Pennsylvania has not seen widespread issues regarding its use, so far, like the mid-south states are experiencing. Currently only the Xtend beans are being used in Pennsylvania with an estimated 30 percent of Pennsylvania's total soybean acreage being planted with

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Registered Technician Training Materials

The Penn State Pesticide Education Program has developed a new training package that will help businesses meet the initial training requirements for their new registered technicians. This package satisfies all of the areas of knowledge that a technician must receive as required by regulation except for the pest identification and application equipment components. The Pennsylvania Department of Agriculture (PDA) and an industry representative have reviewed the training content in this package.

These presentations are in a PowerPoint format and will be available with a recorded audio version, so that they can be used like a video. A booklet will also be included that has an introduction to the registered technician training process and copies, or samples, of the required forms that must be submitted to PDA. In addition, the booklet has review question sheets (and answers)

for each of the 12 presentations to reinforce the concepts being presented. Also included are two registered technician recordkeeping forms that you can copy and use to document training, along with a certificate of training that can be copied and presented to the registered technician after the training is completed. Finally, copies of supplemental information sheets pertaining to several of the presentations will also be included. Please note this training package will not take the place of the on-the-job training that registered technicians are also required to receive.

The final formatting is being completed on the PowerPoints along with the details on cost and distribution of the training package. It is anticipated that the Registered Technician Training Package will be available in Spring 2018. If you would like to receive information when it becomes available, send an email to pesticide@psu.edu.

This training package includes the following 12 presentations on the various topics of basic pesticide information that a technician must know to properly use and handle pesticides:

- The Pesticide Label
- Pesticide Storage and Security
- Proper Use
- Transportation of Pesticides
- Application Equipment
- Laws and Regulations
- Pesticide Disposal
- Personal Protective Equipment (PPE)
- Pesticide Spills
- Pesticide Formulations
- Pesticide Toxicity & Human Health Concerns
- Pesticides in the Environment

(Dicamba and Soybean con't from previous page)

this new variety in 2017.

Also, the EPA and manufacturers of the dicamba products have recently reached an agreement regarding the use of these products for 2018 growing season in an effort to prevent the continued problems of off-target movement. New use restrictions and requirements have been placed on the products, which include:

- Classifying these products as restricted use;
- Requiring dicamba specific training for all applicators prior to the 2018 growing season and annually thereafter to reinforce proper use;
- Requiring specific records and information be maintained regarding the use of these products to improve compliance with label restrictions;
- Reducing the maximum wind speed when an application can be made from 15 mph to 10 mph;

- Placing further limitations on the time of day during which applications can occur;
- Including mandatory language concerning tank cleanout to prevent cross contamination; and
- Enhancing language regarding susceptible crops and recordkeeping requirements regarding sensitive crop registries to increase awareness of risk to sensitive crops near application sites.

Product labels will be revised in time for the 2018 growing season, with newly produced products having the new label while those containers already in the channels of trade will be stickered with the new labels. With these new requirements, there are still some issues that EPA will need to further address in order for states to implement them, particularly the mandatory training. The PA Department of Agriculture is currently addressing these issues. Once they are resolved, applicators will be informed about these requirements and how they will be implemented.

Update on the Worker Protection Standard

Starting in January 2017, most aspects of the 2015 revision of the Worker Protection Standard became enforceable and the Pennsylvania Department of Agriculture (PDA) started inspecting agricultural operations for the new requirements.

The last three aspects of the revision will come into effect as of January 2018 at which time PDA will start inspecting for the complete Worker Protection Standard (WPS) revision. If you are unsure of these requirements, now is the time to make sure that you are ready for a WPS inspection. Help is available from the Pennsylvania Office of Rural Health at Penn State by emailing Jim Harvey at jdh18@psu.edu or calling him at 814-863-8214. Jim can also provide Pennsylvania growers with the required pesticide safety information poster or training materials.

A good resource is the How to Comply with the 2015 Revised Worker Protection Standard for Agricultural Pesticides: What Owners and Employers Need to Know (the How to Comply manual), which can be found at www.epa.gov/pesticide-worker-safety or requested from Jim.

The last three aspects of the WPS to be implemented:

1. The Pesticide Safety Information (the poster): Unlike the past when everyone needed the standardized poster, you can now have your own poster as long as it contains all the required information (see the How to Comply manual). Pennsylvania growers can get free posters from Penn State that fulfill all the requirements. Be sure to fill in the required emergency medical facility information plus your regional PDA office phone number and address. Under the revision, the poster must be at your central location AND the permanent decontamination supply site. Temporary decontamination supply sites for eleven or more workers must also display the poster. As of January 2018, the old standardized posters are outdated and need replaced.

2. New Training Materials: Due to additional training requirements, the old training materials approved by the Environmental Protection Agency (EPA) that you used in the past are outdated as of 2018. New training materials have been developed and more are coming. You can access new materials from the Pesticide Education Resources Collaborative, who is developing materials for EPA. Go to pesticideresources.com to download training PowerPoints or access training DVDs. Penn State is also working on various new training materials and is waiting on EPA approval for their DVDs. Penn State has developed an English-only Worker Training Handbook for growers that do not use computer-based materials or DVDs and should be printed in January 2018.

3. The Application Exclusion Zone (AEZ): Starting in 2018, the AEZ extends off the agricultural operation property onto neighboring properties and public roads when someone comes within the AEZ even off the property. The handler must now “suspend” application when applying in border areas when someone comes within the AEZ. High drift applications such as air blast sprayers have an AEZ of 100 feet in every direction. Lower drift applications such as boom sprayers have an AEZ of 25 feet in every direction.

Although the respirator fit test requirement started in 2017 for handlers using pesticide products requiring respirators, many handlers have not yet complied. For both employee handlers and owner handlers, an initial health evaluation is required, followed by an annual respirator fit test. Respirator training is only required for employee handlers. Be sure to document these requirements for each and keep on file for at least two years. And, if medical history changes, or working conditions change, another medical evaluation may be needed.

Use of a Pesticide Inconsistent with its Labeling

With the introduction of the brown marmorated stink bug and now the spotted lanternfly, the question keeps coming up: What can I use to control them? Currently, these insect pests are not on any product labels but what if an insecticide is found to be effective? Under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), all pesticides must be used in accordance with their label directions. However, Section 2(ee) is a provision within FIFRA that does allow for specific variances from this requirement, **provided it is not prohibited** by the product label. Not all states recognize these variances, but the Pennsylvania Department of Agriculture (PDA) does recognize them and allows the use of these variances within Pennsylvania.

One of these allows for the use of a pesticide to control a pest not specifically listed on the label. While the specific pest does not have to be listed, **the site or specific crop where the pesticide will be applied does have to be listed** on the product label. So, for instance, the spotted lanternfly does not have to be specifically

listed on the label for a product to be used, but if the pesticide is going to be applied to grapes, the crop has to be listed on the label. So in this case, grapes would have to be listed on the label. Similarly, if a pesticide was to be applied to peaches or ornamental plants for controlling the spotted lanternfly, the label would need to list peaches or exterior ornamental plants as a site on the label. Otherwise, that pesticide could not be legally used for controlling the spotted lanternfly.

Remember, the pest, which includes weeds, does not have to be specifically listed on the label, but **the site or crop has to be on the label**. In addition, **the variance cannot be used if the label prohibits its use**. This variance along with the other three variances can be found in Pennsylvania’s Pesticides Rules and Regulations [7 PA Code Ch 128] in Section 128.2 Definitions – Use, or cause to be used, a pesticide inconsistent with its labeling. If you have questions concerning these variances, contact PDA at 717-772-5231.

2018 Penn State Extension - Pesticide Recertification Credits 2 + 2 Agronomic Educational Meetings

**Additional meeting details (fees, category credits assigned) and registration will be available by
calling the central extension phone number at: 877-345-0691**

PDA Region 1: Clarion, Crawford, Elk, Erie, Forest, Jefferson, McKean, Mercer, Venango, and Warren				
Clarion	February 5, 22 February 7, 22	1:00 pm 7:00 pm	Structural Modular, Inc. 101 Southern Ave.	Strattanville, PA
Crawford	February 5, 15, 22 February 7, 8, 22	1:00 pm 7:00 pm	Crawford County Extension Office 1099 Morgan Village Road, Suite A	Meadville, PA
Erie	February 15, 22	1:00 pm	Erie Co. Emergency Management Facility 2880 Flower Road	Erie, PA
Forest	February 7	7:00 pm	Forest County Extension Office 668 Elm Street, Suite C	Tionesta, PA
Mercer	February 5, 15, 22 February 7, 22	1:00 pm 7:00 pm	Mercer County Extension Office 463 North Perry Highway	Mercer, PA
Venango	February 22 February 22	1:00 pm 7:00 pm	Venango County Extension Office 867 Mercer Road	Franklin, PA
Warren	February 5, 15, 22 February 8	1:00 pm 7:00 pm	Warren County Extension Office 100 Dillon Drive, Suite 101	Youngsville, PA
PDA Region 2: Cameron, Clinton, Columbia, Lycoming, Montour, Northumberland, Potter, Snyder, Tioga, and Union				
Columbia	March 3	1:00 pm	Columbia-Montour Vo-Tech 5050 Sweppenheiser Drive	Bloomsburg, PA
Montour	March 6	7:00 pm	Danville High School 600 Walnut Street	Danville, PA
Northumberland	February 27	7:00 pm	Line Mt. High School 185 Line Mountain Road	Herndon, PA
Union	February 21	7:00 pm	Sun Tech School 815 Market Street	New Berlin, PA
Union	March 15 <i>*fumigation credits only</i>	10:00 am	Union County Extension Office 343 Chestnut Street	Mifflinburg, PA
PDA Region 3: Bradford, Carbon, Lackawanna, Luzerne, Monroe, Pike, Sullivan, Susquehanna, Wayne, and Wyoming				
Luzerne	March 6	6:00 pm	Back Mountain Regional EMA Bldg 3593 State Route 118	Dallas, PA
Monroe	February 15	1:00 pm	Monroe County Extension Office 724 Phillips Street	Stroudsburg, PA
Wayne	February 5 February 7	1:00 pm 7:00 pm	Wayne County Extension Office 648 Park Street	Honesdale, PA

**PDA Region 4: Allegheny, Armstrong, Beaver, Butler, Fayette, Greene,
Indiana, Lawrence, Washington, and Westmoreland**

Armstrong	February 8 March 28	7:00 pm 1:00 pm	Armstrong County Extension Office 124 Armsdale Road, Suite 112	Kittanning, PA
Beaver	February 5, 15 February 8, 22	1:00 pm 7:00 pm	Beaver County Extension Office 1000 Third Street, Suite #3	Beaver, PA
Butler	February 5, 15, 22 February 7, 8	1:00 pm 7:00 pm	Butler County Extension Office 101 Motor Pool Way	Butler, PA
Fayette	February 5, 15, 22 February 8, 22	1:00 pm 7:00 pm	Fayette County Extension Office 34 West Peter Street, Federal Bldg	Uniontown, PA
Greene	February 22	1:00 pm	Greene County Extension Office 26 West High Street, Room 1	Waynesburg, PA
Lawrence	February 15, 22	1:00 pm	Lawrence County Extension Office 430 Court Street, Courthouse	New Castle, PA
Washington	February 22	1:00 pm	Washington County Extension Office 100 West Beau Street, Suite 601	Washington, PA
Westmoreland	February 15	1:00 pm	Westmoreland Co Extension Office 214 Donohoe Road, Suite 214	Greensburg, PA
Westmoreland	February 21	7:00 pm	Greensburg Garden & Civic Center 951 Old Salem Road	Greensburg, PA

**PDA Region 5: Bedford, Blair, Cambria, Centre, Clearfield, Fulton,
Huntingdon, Juniata, Mifflin, and Somerset**

Bedford	January 29	7:00 pm	Bedford 4-H Center 108 Telegraph Road	Bedford, PA
Blair	March 21 *fumigation credits March 28	11:00 am 1:00 pm	Blair County Extension Office 266 Aviation Way	Martinsburg, PA
Huntingdon	February 1 February 20	1:00 pm 7:00 pm	Huntingdon County Extension Office 10722 Fairgrounds Road	Huntingdon, PA
Mifflin	March 6	7:00 pm	Mifflin County Extension Office 152 East Market Street	Lewistown, PA

**PDA Region 6: Adams, Cumberland, Dauphin, Franklin,
Lancaster, Lebanon, Perry, and York**

Dauphin	March 28	7:00 pm	Dauphin County Extension Office 1451 Peters Mountain Road	Dauphin, PA
Franklin	February 5	1:00 pm	Franklin County Extension Office 181 Franklin Farm Lane	Chambersburg, PA
Lancaster	March 28	7:00 pm	Lancaster Farm & Home Center 1383 Arcadia Road	Lancaster, PA
Perry	February 19	10:00 am	Perry County Extension Office 8 S Carlisle Street	New Bloomfield, PA
York	February 21 & March 14 February 21 & March 14	12:30 pm 7:00 pm	York County Annex 112 Pleasant Acres Road	York, PA

**PDA Region 7: Berks, Bucks, Chester, Delaware, Lehigh, Montgomery,
Northampton, Philadelphia, and Schuylkill**

Bucks	February 20	7:00 pm	Bucks County Extension Office 1282 Almshouse Road	Doylestown, PA
Bucks	February 27	7:00 pm	Milford Township Building 2100 Krammes Road	Quakertown, PA
Northampton	March 20	6:30 pm	Gracedale Nursing Home 2 Gracedale Avenue	Nazareth, PA
Schuylkill	March 19	6:30 pm	Schuylkill County Ag Center 1202 Ag Center Drive	Pottsville, PA

2018 Penn State Extension - Pesticide Recertification Credits Green Industry Educational Programming

Additional meeting details (fees, category credits assigned) and registration will be available by calling the central extension phone number at: **877-345-0691**

January 2018			
January 10	Eastern PA Turfgrass Conference & Tradeshow	Shady Maple Smorgasbord	East Earl, PA
January 16	Conifer ID for Green Industry Professionals	4-H Center	Collegeville, PA
January 18	Southeast Greenhouse Growers Day	Shady Maple Smorgasboard	East Earl, PA
January 25	2018 NE PA Turfgrass Conference and Tradeshow	Woodlands Inn and Resort	Wilkes Barre, PA
January 29	Winter Turf & Ornamentals School	Holiday Inn	Grantville, PA
January 30- February 1	Mid Atlantic Fruit & Vegetable Convention	Hershey Lodge & Convention Center	Hershey, PA
January 31, February 1, 7, 8	Arborist Short Course	York County Extension	York, PA
February 2018			
February 7	Municipal Arborist Certification Study Course	Delaware Valley Trusts	Willow Grove, PA
February 7	Green Industry Spotted Lanternfly Workshop	Penn State Lehigh Campus	Center Valley, PA
February 13	LCAP Winter Lawn Care Conference	Holiday Inn Conference Ctr.	Breinigsville, PA
February 14	Turf and Ornamental Conference	Kutztown Grange	Kutztown, PA
February 16	Annual KAFMO Athletic Field Conference	Holiday Inn Harrisburg	Grantville, PA
February 27-28	Western PA Turfgrass, Ornamental, and Landscape Conference	Doubletree Hilton	Cranberry Township, PA
March 2018			
March (TBD)	Western PA Spring Greenhouse Nightliner		Wexford, PA
March 1	Landscape IPM Seminar		Wexford, PA
March 3	NE Christmas Tree Growers Meeting	Carbon County	
March 6	Turf & Ornamental Update		Altoona, PA
March 9	Christmas Tree & Turf Seminar	Indiana County	
March 12	Professional Pest Manager's School	Eden Resort	Lancaster, PA
March 15	Turf & Ornamental Update		Somerset, PA
March 20	NW Turf & Ornamentals Conference		Meadville, PA

Pesticide Enforcement Actions: July 2016 to June 2017

The following report is a summary of all official pesticide enforcement actions taken by the Pennsylvania Department of Agriculture's Division of Health and Safety against private applicators, commercial applicators, dealers, pesticide businesses, and citizens of the Commonwealth.

The Division of Health and Safety in the Bureau of Plant Industry conducted 769 pesticide-related inspections and investigations during fiscal year 2016 (FY July 1, 2016 – June 30, 2017). During this time, 77 enforcement actions were taken by the Pennsylvania Department of Agriculture. Enforcement actions take the form of either a Request for Compliance, a Notice of Warning, or a Civil Penalty. All enforcement actions were taken under the authority of the Pennsylvania Pesticide Control Act (PPCA).

During FY 2016, the Pennsylvania Department of Agriculture (PDA) issued civil penalties to 40 Pennsylvania businesses and an out of state business. Some of these businesses had multiple violations of the Pennsylvania Pesticide Control Act. The civil penalties issued by PDA ranged from \$200 to \$1,600. Below is a summary of the civil penalties issued by the Pennsylvania Department of Agriculture:

- 27 businesses for operating a pesticide business without a certified applicator.
- 18 businesses for operating a pesticide business without appropriate business licensing.
- 16 businesses for failure to maintain pesticide application records.
- 6 businesses for failure to notify individuals on the Hypersensitivity Registry.
- 5 agricultural facilities for violations of the Worker Protection Standard.
- 4 businesses for unwanted residue of a pesticide product to the property of another (drift).
- 3 businesses for selling a Restricted Use Pesticide to an unlicensed applicator.
- 2 businesses for permitting a certified applicator to work outside of their category.
- 2 businesses for having unregistered technicians.
- 1 business for using a pesticide inconsistent with its label.
- 1 business for failure to notify PDA of a significant pesticide accident or incident.
- 1 business for having untrained technicians.

During FY 2016, the Pennsylvania Department of Agriculture issued 17 Notice of Warning letters and 25 Request for Compliance letters for violations of the Pennsylvania Pesticide Control Act. Notice of Warning letters and Request for Compliance letters are official enforcement actions and are pursued for minor violations of the PPCA or when there is insufficient evidence to support a civil penalty.

Below is a summary of the most violated sections of the Pennsylvania Pesticide Control Act (PPCA) and Federal Insecticide, Fungicide and Rodenticide Act (FIFRA):

<u>Section</u>	<u>Description</u>	<u># Violations</u>
128.10	Pesticide Dealer Licensing	1
128.11	Pesticide Dealer Recordkeeping	2
128.31	Business Licensing Requirements	42
128.33	Assignment of Work	3
128.34	Pesticide Business Operating Without Insurance	1
128.35	Pesticide Recordkeeping Non-Agricultural	30
128.41	Certification	11
128.51	Pesticide Technician Training	1
128.52	Pesticide Technician Registration	2
128.65	Pesticide Recordkeeping Agricultural	1
128.101	Reporting Significant Pesticide Accident/Incident	1
128.103	Pesticide Handling and Usage	12
128.112	Hypersensitivity Registry, Lack of Notification	7
40 CFR 170	Worker Protection Standard	10
8(a), 8(s)	FIFRA Prohibited Acts	2

PDA recently participated in two EPA initiatives through the 2017 Fiscal Year. The first, surveying and reporting spray drift from agriculture and non-agriculture activities. The second, surveying and reporting incidents involving pollinators and pollinator protection. Both of these programs will help supply data that will be used to shape policy in regard to both issues.

If you have any questions about the nature of this report, please call Don Gilbert, Pesticide Enforcement Specialist, at 717-772-5214.

CHEMSWEEP / Plastic Pesticide Container Recycling

What is the Difference?

The **CHEMSWEEP** Program collects pesticides that are no longer usable or wanted by pesticide applicators and pesticide businesses.

The **CHEMSWEEP** Program is available to pesticide applicators and pesticide businesses across Pennsylvania on a four-year rotation. Active private applicators and pesticide businesses in **Adams, Allegheny, Beaver, Cameron, Carbon, Centre, Chester, Clearfield, Clinton, Elk, Franklin, Jefferson, Lancaster, Lehigh, Monroe, Pike, Potter, Northampton, and Washington**, received an inventory package in November 2017. Use the inventory form to list any waste pesticides you wish to dispose of and mail back to the regional PDA office listed at the top by **February 28, 2018**.

You will be contacted to have your inventory verified by a PDA inspector. They will look for any special circumstances such as leaking containers, unknown products, or other issues that may be of concern to the disposal contractor. Once the inventories are verified, PDA will work with the CHEMSWEEP contractor to schedule the pickups. This year we will be collecting pesticides from June through October. It takes some time to get the inventories verified, logged, and scheduled by the contractor, so you may not hear anything for a while. The contractor will mail a yellow postcard two weeks prior to your pickup date. They will come right to your farm or business, package your old pesticides, and send them to an EPA-approved incinerator for destruction.

CHEMSWEEP is not intended as an inventory management tool. As applicators, you have the responsibility to manage your pesticide inventories and spray materials according to the label.

- Store pesticides properly to prevent freezing or other damage.
- Do not buy more product than you will use.
- Manage leftover tank mix and rinsate responsibly as described on the label. Rinsate and tank mix will not be accepted for CHEMSWEEP disposal.

If you live in a selected county and did not receive the inventory mailer, contact your regional PDA office. There is no cost to participate unless your quantity exceeds 2,000 lbs. For inventories, more than one ton, the participant will be charged for the overage at PDA's contracted price.

Over **2.4 million pounds** of unwanted or unusable pesticide products have been disposed of by CHEMSWEEP in Pennsylvania from applicators just like you. Take this opportunity to properly dispose of those old, unwanted pesticides. If you have unwanted pesticides but do not live in a selected county, please call **717- 772-5210** for assistance.

The **Plastic Pesticide Container Recycling (PPCR)** Program collects plastic jugs and barrels for recycling from pesticide applicators.

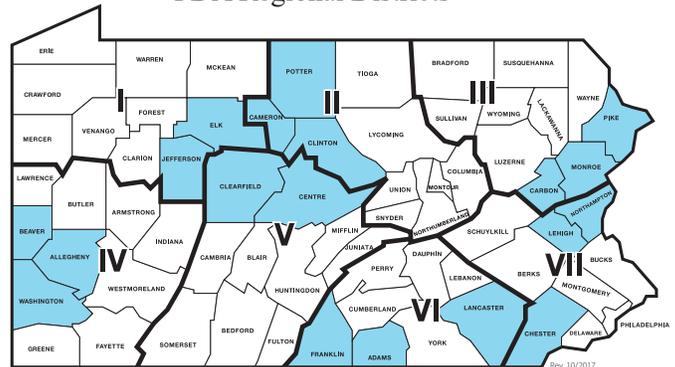
The **Plastic Pesticide Container Recycling** Program is available to agricultural and commercial pesticide applicators across Pennsylvania. This voluntary program offers pesticide users generating sizable plastic waste a free, easy, and responsible way to dispose of clean, empty containers. A clean container has been triple rinsed; has no residue pesticide inside or out; and has no labels, foil, or caps on it.

This is also part of the law as pesticide labels contain statements such as: clean container promptly after emptying. Since the label is the law, not rinsing your empty containers in a timely manner would be a violation. Pour rinsate back into spray equipment and use as part of your fill. The only plastic that can be collected now is #2 HDPE plastic pesticide containers. Most of the collections are 2.5 gallon jugs, and 30 and 55 gallon barrels. Barrels must be cut lengthwise into equal quarters for us to process.

Sixty-four recycling partners serve as drop off points for smaller generators of empty rinsed containers (see list on page 13). The predominant use for recycled pesticide containers is drain pipes, but it may also be used for fence posts, pallets, speed bumps, and marine pilings. For more information on the recycling program, call **717-705-5858**.



PA CHEMSWEEP 2018 PDA Regional Districts



- Region 1: 814-332-6890
- Region 2: 570-433-2640
- Region 3: 570-836-2181
- Region 4: 724-832-1073



- Region 5: 814-793-1849
- Region 6: 717-346-3223
- Region 7: 610-489-1003

Plastic Pesticide Container Recycling Program

Cooperating Businesses

Please bring pressure-rinsed or triple-rinsed plastic pesticide containers during posted business hours.

City	Business	Phone #	City	Business	Phone #
PDA Region 1: Clarion, Crawford, Elk, Erie, Forest, Jefferson, McKean, Mercer, Venango, and Warren			PDA Region 6: Adams, Cumberland, Dauphin, Franklin, Lancaster, Lebanon, Perry, and York		
Erie	Site One	814-455-7850	Biglerville	Helena Chemical Comp.	717-677-4599
Lake City	Neiger Milling	814-774-3703	Carlisle	GROWMARK FS, Inc.	800-825-4769
Meadville	Ernst Conservation Seeds	814-720-0819	Codorus	GROWMARK FS, Inc.	717-229-2311
North East	North East Fruit Growers, Inc.	814-725-3705	East Berlin	GROWMARK FS, Inc.	717-259-9573
Sandy Lake	Lakeview Fertilizer	724-376-3615	Elizabethville	Campbell Crops	717-362-1111
Shippenville	J & J Feeds	814-226-6066	Elizabethville	Perdue Grain & Oilseed	717-362-8440
Tionesta	Long Acre Potato Farm	814-744-8454	Ephrata	Henry B. Hoover Agway	717-733-6593
Waterford	Team Turf Supply	814-796-1111	Gettysburg	Ag Com, Inc.	717-334-6224
Waterford	Troyer Farms	814-796-1435	Gettysburg	Adams County Conservation District	717-334-0636
PDA Region 2: Cameron, Clinton, Columbia, Lycoming, Montour, Northumberland, Potter, Snyder, Tioga, and Union			Greencastle	Horstdale Farm Supply	717-597-5151
Jersey Shore	Eck's	570-398-2770	Harrisburg	Site One	717-652-5813
Klingerstown	Steve's Custom Application	570-648-4465	Harrisburg	PA Dept. of Agriculture ¹	717-705-5858
Kreamer	Kreamer's Feed Store	570-374-8148	Kinzers	Mr. Gideon King	N/A
Mifflinburg	Farmer's Exchange	570-966-1001	Lancaster	Site One	717-291-4434
Mill Hall	Webb's Super-Gro	800-258-6689	Lancaster	Mel Weaver & Sons	717-898-9050
Mt. Pleasant Mills	Mountain View Harness	570-539-2102	Leola	Daniel's Farm Store	717-656-6982
Washingtonville	Crop Production Services	570-437-3121	Millerstown	N.O. Bonsall & Son	717-589-3146
PDA Region 3: Bradford, Carbon, Lackawanna, Luzerne, Monroe, Pike, Sullivan, Susquehanna, Wayne, and Wyoming			Mt. Joy	Snyder's Crop Service	717-653-1120
Columbia Crossroads	Judson's, Inc.	570-297-2153	Myerstown	GROWMARK FS, Inc.	717-866-5205
Montrose	Andre & Son	570-278-1131	Myerstown	James Patches	717-949-3860
Montrose	Palmatier Enterprises	570-278-3350	New Holland	Martin's Ag Service	717-354-4996
Towanda	GROWMARK FS, Inc.	570-265-8141	New Holland	R & M Nolt	717-354-0198
PDA Region 4: Allegheny, Armstrong, Beaver, Butler, Fayette, Greene, Indiana, Lawrence, Washington, and Westmoreland			Quarryville	Little Britain Ag Supply	717-529-2196
Adrian	GROWMARK FS, Inc.	724-543-1101	Shippensburg	Crop Production Services (formerly CVC)	717-446-0434
Eighty Four	GROWMARK FS, Inc.	724-222-4303	PDA Region 7: Berks, Bucks, Chester, Delaware, Lehigh, Montgomery, Northampton, Philadelphia, and Schuylkill		
New Wilmington	Centerra Cooperative	724-901-7063	Bethlehem	Site One	610-866-6665
Volant	Deerfield Farms Service	724-533-8004	Coplay	GROWMARK FS, Inc.	610-799-3115
PDA Region 5: Bedford, Blair, Cambria, Centre, Clearfield, Fulton, Huntingdon, Juniata, Mifflin, and Somerset			Johnsonville	GROWMARK FS, Inc.	610-588-1095
Bedford	GROWMARK FS, Inc. ¹	814-623-9061	Leesport	GROWMARK FS, Inc.	610-926-6339
Belleville	Union Mill Chemgro	717-935-2185	Reading	Timac USA, Inc.	610-375-7272
Clearfield	W & W Farm Supply	814-765-9044	Richland	Ag Land Crop Protection	717-933-7000
Curryville	GROWMARK FS, Inc.	814-793-3664	Tamaqua	Mountain Road Chemicals	570-277-0146
Port Royal	GROWMARK FS, Inc.	717-527-4306	¹ Please call before going.		
Pleasant Gap	GROWMARK FS, Inc.	814-359-2725			
Somerset	GROWMARK FS, Inc.	814-445-5177			
Thompsontown	Agronomy Center	717-535-5151			
Warriors Mark	Helena Chemical Comp.	814-632-5177			

Hypersensitivity Registry: Q & A

As you begin to plan for your upcoming pesticide applications, you should remember to keep an open line of communication with clients and neighbors near the site where you will be spraying. By talking to them before you spray, it may help to alleviate some of their concerns. In addition, you should always double check the Hypersensitivity Registry. A listing in the Registry does not prevent the pesticide application from being made.

Q: What is the Hypersensitivity Registry?

A: The Pennsylvania Department of Agriculture (PDA) maintains a list of individuals who have been verified by their physician as being hypersensitive to pesticides. Pesticide hypersensitivity is defined by the PDA as excessive or abnormal sensitivity to pesticides. These hypersensitive individuals may request to have listings of their home, place of employment, school (if a student), and vacation home placed in the Registry.

Q: So how does the Hypersensitivity Registry help those individuals?

A: Commercial and public applicators must notify those individuals before any pesticide application can be made within 500 feet of any address listed in the Registry. The notification gives these individuals the opportunity to protect themselves, so they do not react to the chemicals being used.

Q: Does the Hypersensitivity Registry apply to private applicators?

A: No. Private applicators are not required to notify anyone before they apply pesticides. However, keeping the lines of communication open with neighbors around the areas where you spray is a good, proactive idea. A simple conversation about the times of year you spray is appreciated and can help alleviate concerns they have.

Q: Where can I locate a copy of the Hypersensitivity Registry?

A: The Registry is distributed twice a year by the PA Department of Agriculture to all commercial and public pesticide businesses. In addition, it can be accessed by registered users on www.paplants.pa.gov.

Q: When must the notification be done?

A: Notification to individuals on the Registry must be done between 12 and 72 hours prior to the application.

Q: How can applicators notify the individual?

A: Individuals on the list can be notified in several ways: telephone, leaving a telephone message, personal contact, certified mail, email, or FAX.

Q: What if I still can't notify them?

A: If notification cannot be made after at least two telephone attempts, notification may be made by placing the written information on the front door of the listed address on the registry, again between 12 and 72 hours prior to the application.

Q: How will they know I tried to notify them?

A: You need to keep a record of every time, contact method, and attempts that you made within 24 hours following the application and maintain these records for at least 3 years. These records shall be made immediately available to PDA upon request.

Q: What information must I provide in the notification?

A: Here is the list of what must be included: (1) Date, location of the application site, earliest possible start time and latest possible finish time of the application (may not be greater than 24 hours). (2) Brand name, EPA registration number, and the active ingredient common name of the pesticide products that may be used. (3) The name, telephone number, and pesticide license number of the applicator (or pesticide application business).

Remember, communication is the key for ALL applicators, specifically to those on the hypersensitivity registry, for maintaining good relations.



Pesticide Spill - Are You Prepared?

The best way to handle a spill is to prevent it from happening. Evaluate your methods for storing, mixing, loading, and transporting pesticides to identify areas for additional precautions and modifications.

A spill may be a minor problem with a leaking container to a major accident, such as an equipment malfunction where the contents of a fully loaded spray tank are suddenly released. The inability to respond properly to such an emergency—no matter how minor the problem—could seriously endanger public health and environmental quality.

The suggested guidelines in the event of a hazardous chemical spill are included under the “Three C” concept: **Control** the spill, **Contain** the spill, and **Clean Up** the spill.

The “Three C’s” of Pesticide Spills

A Spill Happened—Act quickly!

1. Put on personal protective equipment, **ALWAYS PROTECT YOURSELF FIRST!**
 - Unlined gloves, disposable coveralls, eyewear/goggles, rubber boots/booties
2. Rescue any victims.

CONTROL the spill

1. Always act as quickly as possible to stop the spill and lessen the damage.
 - For smaller spills/leaks, turn containers upright. Smaller containers can be put into larger empty containers.
 - For larger spills/leaks that require more help, someone **MUST** stay on site until help comes. Contact emergency management office or 911. Your regional PA Department of Agriculture office may also need to be contacted.
2. Isolate the area. With larger spills, rope off the contaminated site.
3. Keep people at a safe distance away from spill; 30 feet is recommended.

CONTAIN the spill

1. Contain the spilled material in as small an area as possible and keep it from spreading. Prevent it from entering water sources or storm drains.
2. For liquid spills, spread absorbent materials such as fine sand, vermiculite, clay, or pet litter over the entire spill. Use pillows and tubes to dike directly around the spill.
3. For dry spills such as dusts, wettable powders, or granular materials, lightly mist the material with water or cover with some sort of plastic overlay.
4. The most important point to remember is **DO NOT** get any spilled material into any body of water, no matter how small the spill.

CLEAN UP the spill

1. Always wear personal protective equipment!
2. Check the label and SDS for clean-up information.
3. If absorbent material has not yet been used to control the spill, it must now be spread over the contaminated area. Then sweep it up and place in a steel or fiber drum lined with a heavy-duty plastic bag. Keep adding the absorbent to the spilled area until all the liquid is absorbed. Repeat as needed to ensure that the area has been thoroughly decontaminated.
4. Use a broom and dust pan to collect all contaminated materials.
5. All materials generated by the cleanup, including PPE and equipment, must be treated as hazardous waste. Label all waste containers as hazardous.
6. When necessary, contact a licensed commercial hazardous waste disposal company for collection and proper disposal.



PennState Extension



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DEPARTMENT OF AGRICULTURE

Pesticide Highlights

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