



PESTICIDE HIGHLIGHTS

For Public/Commercial Pesticide Applicators

August 2004

Check Your Recertification Credit Status ON-LINE!

The Pennsylvania Department of Agriculture (PDA) and the Penn State Pesticide Education Program (PEP) are proud to announce the availability of the new Recertification Credit Information web page at <http://www.pested.psu.edu/>.

This web page works very similar to the Recertification Meeting Finder. The PDA maintains the information in a database and sends a data file weekly to the PEP. A program was developed by the PEP to read the data file and display relevant information about the applicator's recertification status. The PEP staff has read-only access to this data file, so they cannot make any changes to this data. If you have any questions about your status as indicated on this web page, you must contact the PDA, as they are the only ones who can make changes to the database.

To find this page, go to the PEP home page and click on the "Check Your Recertification Credit Status" icon

on the Popular Topics bar (on the left hand side of the page). You must enter your certification number and last name, **as it appears** on your certification card, then hit the "View Credit Information" button.

Basic information (name, address, BU number, etc.) will be displayed along with a table listing the categories you are certified in, the number of credits you acquired and the number required, and a note indicating how many credits you need by a specific date OR that your requirements have been met. If credits are needed, a hot link is provided that goes directly to your PDA region and the category

section in which credits are needed of the Recertification Meeting Finder. This system also has the ability to indicate if your certification has expired or is in escrow.

We are very excited that we are now able to provide this much-requested service to pesticide applicators. Please read the related article, "Make a Recertification Credit Plan," on page 5.



In This Issue

Check Recertification Credit Status ON-LINE1	New Training Materials and Exams..... 3
Know Your Chemical Customers1	Pesticide Enforcement Actions..... 4
Application Reentry Times for Schools2	Where to Find Spanish Resources..... 4
Dr. George W. Hamilton Passes Away2	A Pest Management Survey for Consumers 5
Safety Precautions for Transporting Pesticides .2	Make a Recertification Credit Plan 5
Making a Good First Impression3	CHEMSWEEP: Waste Pesticide Program 6
Proposed Pesticide Regulation Changes.....3	Plastic Pesticide Container Recycling Program ... 7

Know Your Chemical Customers

The following story is from Mona Bond of the Agribusiness Association of Iowa. The theft of several thousand pounds of farming chemicals from a small community in Iowa has caught the attention of the highest levels of law enforcement.

The theft occurred at Wickman Chemical located in Atlantic, Iowa, about 60 miles west of Omaha. On a recent Friday evening, an employee from Wickman Chemical sold seven types of herbicides, totaling 7,000 pounds, to a man who claimed to be from Minnesota. On Monday morning, Wickman Chemical discovered the check that the man had written to pay for the herbicide

was fraudulent.

This case became a national security issue with the FBI and the Department of Homeland Security (DHS) getting involved. The out of state customer didn't alert any suspicions because Wickman Chemical deals with customers from all over the United States. However, this scenario illustrates the risk of not knowing your customer and selling products outside your normal trade area. DHS advises all retailers not to sell HAZMAT products to unknown customers. Recent news reports indicate that the stolen pesticides, although poisonous, are not explosive, and were most likely taken to be sold on the black market.

Pesticide Application Re-entry Times for Schools

The PA Department of Agriculture (PDA) has been receiving many questions concerning reentry times to school buildings and school grounds following pesticide applications. The School IPM Legislation (Acts 35 and 36 of 2002) mandating notification and posting for pesticide treatments at schools require a minimum reentry time of seven hours (or longer if indicated on the label) following the application of most pesticides indoors and outdoors.

The only pesticides exempted from the 7-hour reentry requirements are: sanitizers, disinfectants, and swimming pool chemicals. Additionally, self-containerized baits, and gel type baits placed in cracks, crevices, or voids used in areas not accessible to students, are exempt.

For all other indoor applications, the application site and all areas sharing a common ventilation system and not physically separated by at least fire doors must be off limits for school-sponsored activities for seven hours or more following an application.

For outdoor applications, the application area and "immediate vicinity" must be closed for at least seven hours following the application to all "normal and extracurricular" school activities. Determination of immediate vicinity is left to the school's or applicator's judgment. The PDA suggests a buffer area, which is large enough to prevent a student from inadvertently entering the treated area.

The applicator must provide the school a "Pesticide Control Information Sheet" and a "Pest Control Sign" that contains the (proposed) date of the application and the applicator contact information. The applicator must provide this information to the school with as much lead time as possible as the school is required to give staff and others requesting notification for this information at least 72 hours prior to the application.

Should the need for an "emergency" application arise, the application can be made without the prior notification and posting. Then during or following the application, the area must still be closed off to students for at least seven hours and posted for 48 hours. In addition, notice must be given to any persons requesting notification of emergency treatments.

Remember, Acts 35 and 36 apply to public school districts, Intermediate Units, and vocational and technical schools but are a good idea for all schools and daycares.

The PA IPM Program has a series of *Frequently Asked Questions* about the School IPM Legislation along with sample "Pest Control Information Sheets" and "Pest Control Signs" for posting available at <http://paipm.cas.psu.edu/schools/faq.html>. The newly revised *IPM for Pennsylvania Schools: A How-to Manual* is also available as a PDF file at <http://paipm.cas.psu.edu/schoolmn/contents.htm>.

Dr. George W. Hamilton Jr. Passes Away

Dr. George W. Hamilton Jr., 43, passed away on July 9, 2004 after a year-long battle with cancer. George grew up on golf courses and as a teenager worked with his father, a golf professional and course superintendent, where he developed a passion for the game.

Graduating from Penn State with a B.S. in Agronomy in 1983, George joined Penn State's turfgrass program. After completing his Ph.D. in 2001, he attained the position of Assistant Professor. He was the technical advisor for the Two-Year Golf Course Turfgrass

Management Program at Penn State. He also taught courses and conducted research and developed new technologies for the turfgrass industry.

George received many professional honors during his career. He consulted for many golf courses, and volunteered his time and expertise to various community projects. George's positive outlook, innovation, and commitment to students and the turfgrass industry will be greatly missed. (Taken from obituary published in the *Centre Daily Times* newspaper on July 11, 2004.)

Safety Precautions for Transporting Pesticides

Place product labels and material safety data sheets (MSDS) for each product being transported in the vehicle prior to leaving the loading area. These contain information about active ingredients; personal protective equipment; human, environmental, and other hazards; first aid; precautions needed for emergency personnel; and emergency telephone numbers. Having this information in the transport vehicle will help guide the operator and/or emergency personnel responding to a spill or release of a pesticide. In addition, shipping papers may be required for products that are regulated as hazardous materials.

Emergency phone numbers should be in the vehicle for 24-hour assistance (spill cleanup, etc.). A mobile phone unit is a worthwhile investment for those routinely involved in the transport of pesticides or working alone in remote locations. Carry personal protective equipment

appropriate for the pesticides in transit and a spill kit, either a commercial or self-assembled version. Operators must be trained to use this equipment properly.

Containers should be in serviceable condition, with legible and attached labels, tight closures, and pesticide-free outside surfaces prior to loading. Handle containers carefully during loading to avoid rips and punctures. Packing or shipping containers, and synthetic liner or tarpaulin for the floor and sides can be used to provide extra protection and secondary containment. Organize the load to maximize stability while maintaining access to containers. The fewer times containers are handled, the less likely they are to be damaged. Secure the load with tarps, ropes, brace bars, etc. to prevent containers from shifting in the cargo area, and secure anything else that

(continued on bottom of page 5)

Making a Good First Impression for Your Business and Industry

What message are you sending about your business? What about your industry? A PA Department of Agriculture (PDA) Inspector was recently at a recertification meeting. When he arrived at the meeting location he noticed a small stream of liquid slowly advancing down the parking lot hill. The source of the fluid was the back of a pickup with a 100-gallon tank that was no longer full. Inspection of the uncovered truck bed also revealed some unsecured pesticide containers including an opened pail of rodent bait. If the BU numbers had been on the truck, the operator would have been much easier to identify and locate.

Our PDA office received a call from the neighbor of where a lawn care application was being made. The caller was worried as it was a windy day and his garden was only a few feet from the application site. During the conversation he stated, "I know that guy doesn't care about me...he doesn't even care about himself! He was out there in that wind wearing shorts and a T-shirt. That spray had to be all over him."

What response can we give in the latter case? The applicator does not apparently care about himself. What message is the applicator sending to his customers and the community? Did he read the label? The minimum PPE for any pesticide is: a long sleeve shirt, long pants, socks,

and shoes. Failure to follow label instructions including the use of proper PPE is a violation. But more importantly, the risk of possible short or long-term health effects is also at stake. As a manufacturer's representative told a group of applicators at a recertification meeting some years ago, "Wear your PPE, if the label says wear gloves—please wear them. I like you. I need your business. I don't want to come back here in five years and say, 'Remember when I told you it was important to wear your PPE? Well we just found out how really important it was that you wore that PPE.'"

We cannot all buy a new vehicle every year or wear a new set of clothing for every job; however, keeping

equipment in good repair and wearing proper PPE is possible for everyone. Check for leaks every time you use the equipment. If you find one—fix it. Keep ALL pesticides locked up while in transit and at job sites. Mix pesticides at the job site when possible. Cleaning up a few gallons of concentrate is far easier (and cheaper) than cleaning a 150 gallon spill of diluted product should something go wrong. Keep the fill lid locked on application equipment to avoid someone tampering with your spray mixture.

You are a representative of your industry and business. Be proud of your business and industry. Remember to always be responsible and committed to safety.

You represent your industry and business. Be proud of your business and industry. Remember to always be responsible and committed to safety.

Proposed Pesticide Regulation Changes

Over the past two years, the Pennsylvania Department of Agriculture (PDA) has been working with the Pesticide Advisory Board, trade associations, and advocate groups to make several changes to the Pesticide Regulations. Many of the changes are designed to clarify existing requirements but several proposed new changes may affect you. These changes stem from two areas: the need for additional security of pesticides and pesticide sales, and national movements to standardize pesticide requirements across the country. The proposed regulation changes will:

- Set a minimum age of 16 to become a certified or registered as a pesticide applicator.
- Require testing and licensing of at least one employee at each Pesticide Dealer location.
- Require positive identification for certification, licensing, distribution, or delivery of Restricted Use Pesticides (RUPs).
- Require a signature for delivery of RUPs.

- Require three years of certification or an educational background to provide recertification training.
- Combine Categories 10: Right-of-Way and 14: Industrial Weeds.
- Require the return of "voided" certification and registration cards to the Department.
- Require completion of records within 24 hours of the application.
- Require state registration for EPA "approved" pesticides.
- Expand the requirements for pesticide applications on school and daycare property.
- Establish penalties for falsification of recertification information.

The Department is interested in your comments. To see the latest draft of the proposed changes or if you have comments, please write the Division of Health and Safety, PA Department of Agriculture, Bureau of Plant Industry, 2301 N. Cameron St., Harrisburg, PA 17110-9408.

Interior Plantscape Has New Study Materials and Examination

The commercial and public pesticide Category 22 Interior Plantscape study packet has been updated and will be replaced with new study materials starting September 1, 2004. Applicants for this category will be able to take the old or new certification examination based on the study

materials they have until November 1, 2004. However, after November 1st, only the new examination will be offered. The study materials are available from the Penn State Publications Distribution Center by calling 1-877-345-0691.

Pesticide Enforcement Actions from October 1, 2003 to March 31, 2004

The following table is a summary of all the official pesticide enforcement actions taken by the Pennsylvania Department of Agriculture's Division of Health and Safety against commercial and private applicators, dealers, pesticide businesses, and citizens of the Commonwealth. All enforcement actions were issued between October 1, 2003 and March 31, 2004. The following violations resulted from either a routine inspection or investigations generated by a complaint or tip.

During this time period, nine Notice of Warning letters

were issued for violations of the PA Pesticide Control Act, as Amended. Warning letters are official enforcement actions and are pursued for minor violations or when insufficient evidence is obtained to support a penalty.

Also during this time period, 22 Civil Penalties were assessed for violations to the Pennsylvania Pesticide Control Act, as Amended. The following table provides the number of Warnings and Civil Penalties along with a brief description of the violation and the dollar amount of the Civil Penalty.

Number of Enforcement Actions	Commercial Businesses Issued for:
2 Notices of Warning	Failing to maintain all required use records
1 Notice of Warning	Causing unwanted residues on another's property
	Businesses Issued for:
3 Notices of Warning	Allowing a non-certified applicator to apply pesticides
11 Civil Penalties	Operating without a business license and certified applicator (combined penalty of \$2,900)
3 Civil Penalties	Failing to pre-notify a pesticide hypersensitive individual (combined penalty of \$1,200)
2 Civil Penalties	Using inconsistent and non-certified applicator (combined penalty of \$2,000)
1 Civil Penalty	Using a non-certified applicator and record and reporting violations (\$1,400)
1 Civil Penalty	Allowing a non-certified applicator to apply pesticides (\$600)
1 Civil Penalty	Using applicator not certified in proper category (\$400)
1 Civil Penalty	Failing to maintain registered technician training records (\$100)
1 Civil Penalty	Allowing business license to expire (\$100)
	Dealers Issued for:
1 Civil Penalty	Distributing RUP to a non-permitted applicator (\$300)
	Private Applicators Issued for:
1 Notice of Warning	Failing to maintain required RUP use records
	Miscellaneous Issued for:
1 Notice of Warning	Applicator—Purchasing a RUP without a permit
1 Notice of Warning	Homeowner—Vandalizing another's property

Where to Find Spanish Resources

In the past few years, the Penn State Pesticide Education Program (PEP) office has been asked more frequently for Spanish resources. To help respond to this demand, our office applied for and received an amendment to our current contract with the PA Department of Agriculture to develop new resources in Spanish and/or have current fact sheets translated into Spanish.

Rick Johnson, the PEP Urban/Consumer Education Specialist, is taking a leadership role on this front. In the past year, Rick has developed five fact sheets mostly for consumers, but industry is also using them, on Pesticide Safety with topics such as Reading the Pesticide Label,

Disposing of Pesticides, Storing Pesticides, Protective Clothing, and Choosing a Qualified Pest Control Company. These fact sheets have been translated and are now under review by several people, who will read each one for accuracy and to confirm our message is being communicated properly. The next step is redesigning the fact sheets and printing them. Look for these fact sheets on our web site by early fall.

To meet this demand, the PEP has a page on their web site (<http://www.pested.psu.edu/resources/spanish/>) that provides a list of Spanish resources from other sources and includes the following.

- Extension en Espanol, CSREES and State Extension Services: <http://extensionenespanol.net/>
- Pesticides: Health and Safety, EPA: <http://www.epa.gov/oppfead1/safety/spanish/workers/workers.htm>
- Department of Entomology, Penn State: <http://www.ento.psu.edu/extension/SpanishFactSheets.htm>

A Pest Management Survey: Focus on Consumers

The Penn State Pesticide Education Program, in cooperation with the Penn State Department of Horticulture, is conducting a Consumer Pest Management Survey. The survey has been administered at various events to diverse audiences, which include, but will not be limited to, the Philadelphia Flower Show, Ag Progress Days, garden centers, county fairs, urban garden sites, and teacher's association meetings. So far, over 1,400 surveys have been collected! The survey questionnaire was designed to identify areas where pesticide safety outreach education is needed the most. Specific areas addressed in the survey include: pest tolerance, sources of pest control information, IPM awareness, recognizing pesticide products, defining IPM and pesticides, what parts of the label are read, where and how pesticides are stored and disposed, who applies pesticides and where, and how people would choose a pest control company.

Analysis of the survey data will not only focus on areas of need for outreach education regarding pesticide safety to protect humans and animals, but also to protect the environment. For example, preliminary analysis shows that

many pesticides are not stored in locked areas and/or above five feet to prevent access to them by curious children. Outreach education is important to address issues such as this and to help provide consumers and youth with information so they can make informed decisions regarding pest control, alternatives to pesticide use, and safe use of pesticides when they are necessary.

Developing user-friendly materials will also help educate consumers, as well as youth (as future consumer and also to educate their parents), to take an active role in putting concepts they learn such as reducing the use of pesticides and using them safely when needed, into practice. Based on comments people made when returning completed surveys, an unexpected outcome of just taking the survey is that they now feel they are more aware of what they may be doing wrong, such as improper storage or not reading the entire label. Final survey analysis will be completed this fall; watch for results in the Pesticide Highlights newsletter next summer. Results will also be available on our web site when the analysis is complete. This project was funded through an EPA Region III Pesticide Safety Education Program (PESP) Grant.

Make a Recertification Credit Plan

Every year, the PA Department of Agriculture offices, Penn State Pesticide Education Program, and Penn State Cooperative Extension offices receive many calls and emails from applicators wanting to know their recertification credit status. Using the Recertification Credit Status web page—highlighted on the front page—can help applicators quickly determine how many credits/meetings they need to maintain their certification. Since this web page has been launched in November 2003, over 10,000 visitors have accessed this web page.

Some applicators may be uneasy or anxious about using the web—especially inputting their last name and certification number—to run the status report. This web page does not track, monitor, or save anyone's information who uses the web page.

This web page can be used to help make a recertification credit/meeting plan so that a month before September 30th of the year your license expires, you are not scrambling to get credits. Remember, recertification credits are due in three year cycles. For example, although you could need around 20 credits (with core and two categories), just earning 7 credits a year would meet your needs.

On another note, if you do not earn enough credits by the expiration date, your license is no longer valid. Applicators have one year to earn the recertification credits without having to retest. (Note: You cannot just retest in that first year.) Keep in mind that until the license is reinstated, pesticide applications cannot be made. Making a plan in advance is very important!

Safety Precautions (Continued from page 2) could damage a container during transport.

Protect chemicals from temperature extremes and moisture during transit. Extremely high or low temperatures (<40°F or >110°F) can alter the stability and effectiveness of some chemical formulations. Moisture can destroy paper and cardboard, and promote rusting of metal containers. A waterproof cover can provide protection from the weather.

Do not allow people, pets, or livestock to ride in a cargo area loaded with pesticides. Food, livestock feed, seed, veterinary supplies, and plant materials should be kept separate from pesticides because contamination may render them unusable or result in a poisoning incident. When possible, herbicides should be kept separate from fertilizers and other pesticides because of the potential for cross-contamination. When pesticides must be transported

with other materials in a single cargo area, elevate the other products in the load to reduce the possibility of contaminating these products with pesticides in the event of an onboard leak or spill.

Never leave your vehicle unattended when transporting pesticides in an open vehicle. The owner and operator of the vehicle are responsible if curious children, careless adults, or vandals are poisoned or release pesticides that result in contamination or injury to other persons or the environment. If the cargo area cannot be locked, covering the load with a tarp can reduce the likelihood of tampering by unauthorized individuals.

This excerpt is from the "Transporting Pesticides in Pennsylvania" fact sheet which is available through the Publications Distribution Center at 1-814-865-6713 or on-line at <http://www.pested.psu.edu/resources/facts/>.

CHEMSWEEP: PA's Premiere Waste Pesticide Collection Program

Several changes and trends have occurred since the Pennsylvania Department of Agriculture's (PDA) waste pesticide collection program began in 1993. These changes and trends have made the CHEMSWEEP program more dynamic as well as a major stakeholder in pollution prevention for the Commonwealth.

Since the program was implemented, over 1.4 million pounds of waste pesticides have been collected. During the 2003 collection season, the CHEMSWEEP program collected 107,744 pounds of waste pesticides from participants wishing to use the program.

The CHEMSWEEP collection program consists of on-site pick-ups, also called "Milk Runs," and central collection sites. Historically, the collection activities are held during the months of July and August, compressing the year's collection activities in 4 to 5 weeks each summer. One of the challenges that has existed with the hazardous waste contractor headquartered in California, was the time schedule for collections and properly addressing participants in need of collections due to emergency situations. Emergency situations vary from a bankrupt business pending sale and the financial institution discovering shelves of pesticide products or families preparing for farm auctions and discovering stashes of banned, cancelled, or unwanted pesticides. With both situations, the unwanted or waste pesticides need to be properly collected and disposed of in a timely manner.

In May 2003, MSE Environmental, the PDA's CHEMSWEEP contractor, opened an office in southeastern Pennsylvania in Norristown. Having the contractor located within Pennsylvania has increased program efficiency. MSE is now capable of making day runs to facilitate special collections.

An example of how Pennsylvania benefited can be illustrated with the following situation. The CHEMSWEEP program began in January of 2004 with an emergency collection of unwanted pesticides from a bankrupt garden center that had remained idle for three years. The property was to be auctioned in February; the PDA Regional office was contacted in January by the

financial institution concerned about the proper disposal of the stored pesticides. Within two weeks of the initial contact, the CHEMSWEEP contractor removed approximately 2,800 pounds of unwanted pesticides.

Currently trends show an increase in Household Hazardous Waste (HHW) collection activities where PDA partnered with the PA Department of Environmental Protection, with a reduction of site-to-site collections.

PDA and the PA Department of Environmental Protection (DEP) have partnered to allow counties and other municipalities to sponsor Household Hazardous Waste (HHW) collection events in conjunction with scheduled CHEMSWEEP on-site collections. By establishing a central HHW collection event and using the PDA selected CHEMSWEEP contractor, a sponsor can conduct an HHW collection event without completing all the normal DEP registration protocol. The PDA CHEMSWEEP Program covers the cost of collection and disposal of waste pesticides collected and sponsors apply for 50 percent reimbursement from DEP for the homeowner generated paints, solvents, and other non-pesticide HHW products collected.

The 2004 HHW collection activities began in Lehigh County on April 3 with 7,828 pounds of waste pesticides collected from homeowners. Nine additional HHW events have generated an additional 12,961 pounds, bringing our early 2004 HHW collection total to 20,789 pounds with eight additional HHW collection events scheduled through October 2004.

While traveling to HHW events, on-site collections are made to enhance our collection capabilities. The day before the early April HHW, our contractor made a farm-to-farm collection, which resulted in the removal of 936 pounds of DDT from a former fruit production farm. The owner is deceased and family members discovered the material in March while preparing for the auction in May. The flexibility and cooperation received from the CHEMSWEEP contractor has benefited this pesticide stewardship program.

National Poison Center Info

For Poison Information & Emergencies...

POISON
Help
1-800-222-1222



Pesticide Urban Initiative
www.pested.psu.edu



Do You Need to Find Recertification Meetings?

Try one of these:

Recertification Meeting Finder on the Web:

<http://www.pested.psu.edu/applicators/rmf/>

FAX BACK: 814-865-1636

Phone Toll-Free: 1-800-Penn-IPM (736-6476)

The Plastic Container Recycling Program Update

The Plastic Pesticide Container Recycling (PPCR) Program continues to expand in 2004 as new recycling locations are added. The PPCR program has locations in all seven agricultural regions of Pennsylvania, with recycling sites in 52 of 67 counties.

The PPCR partner collection system implemented in 2000 has been very effective in providing a convenient means of participating. The system involves pesticide dealers and/or commercial pesticide application businesses collecting recyclable plastic pesticide containers for the PA Department of Agriculture (PDA) at their business or facility. These locations are known as PPCR Partners and are available at any time throughout the year for recycling. Program participants may take their recyclable containers to these locations at their convenience.

Currently, 144 PPCR locations collect plastic pesticide containers in Pennsylvania. Seventy-four locations are Public Partners, fifty-three are Private Partners and seventeen are Governmental Agency Partners. PPCR Partner locations are continually added as PDA staff identifies and promotes the program to new areas. A list of

current sites is available on-line at <http://www.pested.psu.edu/pdaprog/ppcr/>.

The PPCR Program recycles only #2 HDPE plastic pesticide containers, and is open to all commercial users of pesticides. PPCR is not available to homeowner-applicators at this time. For the 2003 recycling season, the PPCR program collected and granulated 131,720 pounds of plastic pesticide containers, representing a 30 percent increase over the previous year. Since the beginning of 2004 recycling season, the program has collected and granulated over 49,000 pounds plastic pesticide containers.

The Plastic Pesticide Container Recycling Program is addressing the needs of pesticide applicators statewide by providing a responsible means of container disposal. PDA's program is making an impact on a national level as well. Pennsylvania is the only state to have implemented a collection network using private agri-businesses and chemical dealers as collection sites for applicators to conveniently dispose of waste plastic pesticide containers. Several states are studying the PPCR Program to possibly duplicate this system into their own recycling programs.

Contacting Your Regional PA Dept. of Agriculture Office

Region #	Counties Included	Address, Telephone, & FAX
I	Clarion, Crawford*, Elk, Erie, Forest, McKean, Mercer, Venango, and Warren	13410 Dunham Road Meadville, PA 16335-8344 (814) 332-6890 FAX (814) 333-1431
II	Cameron, Clinton, Columbia, Lycoming*, Montour, Northumberland, Potter, Snyder, Tioga, and Union	542 County Farm Road, Suite #102 Montoursville, PA 17754-9209 (570) 433-2640 FAX (570) 433-4770
III	Bradford, Carbon, Lackawanna, Luzerne, Monroe, Pike, Sullivan, Susquehanna, Wayne, and Wyoming*	Route 92 South, P.O. Box C Tunkhannock, PA 18657-0318 (570) 836-2181 FAX (570) 836-6266
IV	Allegheny*, Armstrong, Beaver, Butler, Fayette, Greene, Indiana, Jefferson, Lawrence, Washington, and Westmoreland	#6 McIntyre Road Gibsonia, PA 15044-7829 (724) 443-1585 FAX (724) 443-8150
V	Bedford, Blair*, Cambria, Centre, Clearfield, Fulton, Huntingdon, Mifflin, and Somerset	1307 7 th St., Cricket Field Plaza Altoona, PA 16601-4701 (814) 946-7315 FAX (814) 946-7354
VI	Adams, Cumberland, Dauphin*, Franklin, Juniata, Lancaster, Lebanon, Perry, and York	P.O. Box 5184 Harrisburg, PA 17110-0184 (717) 346-3223 FAX (717) 346-3229
VII	Berks, Bucks, Chester, Delaware, Lehigh, Montgomery*, Northampton, Philadelphia, and Schuylkill	Route 113, P.O. Box 300 Creamery, PA 19430-0300 (610) 489-1003 FAX (610) 489-6119

* County in which the regional office is located.

PENNSTATE



Pennsylvania



Pennsylvania Department of
AGRICULTURE

PESTICIDE HIGHLIGHTS

For Public/Commercial Pesticide Applicators

August 2004

Pennsylvania Pesticide Highlights is published by:

Pesticide Education Program
The Pennsylvania State University
114 Buckhout Lab
University Park, PA 16802-4506
Telephone (814) 863-0263

Bureau of Plant Industry
PA Department of Agriculture
2301 N. Cameron Street
Harrisburg, PA 17110-9408
Telephone (717) 772-5231

This publication is available in alternative media on request.

The Pennsylvania State University is committed to the policy that all persons shall have equal access to programs, facilities, admission, and employment without regard to personal characteristics not related to ability, performance, or qualifications as determined by University policy or by state or federal authorities. It is the policy of the University to maintain an academic and work environment free of discrimination, including harassment. The Pennsylvania State

University prohibits discrimination and harassment against any person because of age, ancestry, color, disability or handicap, national origin, race, religious creed, sex, sexual orientation, or veteran status. Discrimination or harassment against faculty, staff, or students will not be tolerated at The Pennsylvania State University. Direct all inquires regarding the nondiscrimination policy to the Affirmative Action Director, The Pennsylvania State University, 328 Boucke Building, University Park, PA 16802-5901; Tel. (814) 865-4700/V, (814) 863-1150/TTY.

Where trade names are mentioned, no discrimination, criticism, or endorsement is implied or intended by the Pennsylvania Department of Agriculture or The Pennsylvania State University. All information, unless indicated as being reprinted from another source, may be reprinted without permission as long as credit is given. Kindly contact the originating source for permission to use articles which have been reprinted in this newsletter.