



Oregon's Pesticide Use Reporting System (PURS) Falls to Budget Axe

Facing billions of dollars of deficits, Oregon's Legislature chose to suspend a costly and controversial reporting requirement for pesticide users.

Essentially, PURS was enacted in 1999. It was designed to be a reliable and cost-effective system for collecting and organizing information on all categories of pesticide use within the state. Information from all types

of pesticide users, including agricultural and forest producers, government agencies, utilities and industrial users, commercial application companies, firms making applications in urban settings and homeowners, was collected. The first annual report of actual pesticide use was published in 2006. To date, tens of millions of dollars of state-appropriated funds, not to mention untold amounts of applicator time and effort, have gone into complying with PURS.

On Aug. 27, 2009, the Oregon Department of Agriculture (ODA) announced that applicators subject to reporting requirements are off the hook because money won't be available to support PURS.

What follows is the ODA statement:

"Due to state budget constraints, PURS is not available until January 2013. Pesticide users cannot file reports of pesticide use into PURS. Reports previously filed into PURS are not available to the pesticide users who filed those reports.

The 2009 Oregon Legislature amended the PURS statutes. Among those amendments was that no pesticide user is required to report pesticide use information into PURS from July 1, 2009, through June 30, 2011. In addition, Oregon Administration

Rules (OAR) state that no enforcement action shall be taken for failure to report pesticide use ... for any calendar year in which the Department does not provide a fully effective means for pesticide users to report pesticide use. Other amendments to the PURS statutes will result in changes to PURS, which are not expected to be in place until January 2013.

Requirements under federal and Oregon laws to keep records of pesticide use are independent of PURS. Those recordkeeping requirements exist even while PURS is not available."

This is one of the few instances where the cost of implementing and running a pesticide regulatory program trumped environmental and/or social benefits.

In this issue . . .

Oregon's Pesticide Use Reporting System (PURS) Falls to Budget Axe	1
Coordinator's Comments	2
Total Release Foggers – Why Reading and Following the Label Is So Important: Two Recent Incidents	2
Certified Crop Adviser Continuing Education Units Available at Commercial Pesticide Applicator Trainings	3
EPA's New Labeling for Soil Fumigants	4
"Environmental Hazards" Section as Important as "Directions for Use"	5
2009-10 Commercial Pesticide Certification Calendar	6
Training Opportunities for New Applicators/Dealers	8
Why Did They Spray DDT Like That?	8

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County Commissions, NDSU and U.S. Department of Agriculture Cooperating. This publication will be made available in alternative formats for people with disabilities upon request, (701) 231-7881.

Need help with pesticide certification or general pesticide use issues?

Contact:

NDSU Pesticide Training and Certification Program
 NDSU Dept. 7060
 205 Walster Hall, P.O. Box 6050
 Fargo, ND 58108-6050 USA

Phone: (701) 231-7180

Fax: (701) 231-5907

E-mail: NDSU.pesticide@ndsu.edu

Web: www.ndsupesticide.org

Total Release Foggers – Why Reading and Following the Label Is So Important: Two Recent Incidents

In Oregon this past year, a set of foggers exploded in a car. Extraordinary pictures of the fogger's metal container puncturing the front window of the car were

displayed prominently on a Portland news outlet's Web site.

An investigation into the incident revealed a failure to heed warnings on the label about storage under

extreme temperatures. The containers had been thrown in the backseat of a car and driven around for about two weeks, subjecting the cans to big temperature swings. Eventually, one of the containers failed at the crimped bottom, setting off the other two. If someone had been inside the vehicle, the result of the explosions could have been fatal.

In a separate but more serious August incident in Lebanon, Pa., the owners of a row house decided to release a couple of dozen canisters to control roaches. Against the label instructions and warnings, too many foggers were released for the given area and the gas concentration became high enough to become flammable.

When the gas came into contact from a spark (from a light switch) or when it came into contact with a pilot light (from a stove), an explosion occurred. The pressure in the building was so great that it blew out the sidewall of the multistory home and two people were thrown from a second-story balcony. (Fortunately, while these folks were treated for injuries, the injuries were not life-threatening.) A video describing the incident can be found at: www.wgal.com/news/20581541/detail.html.

Coordinator's Comments

The cool winds of fall mark the beginning of the pesticide certification training season. This year is no exception, but by the time you read this issue of Pesticide Quarterly (PQ), we already will have conducted several trainings. We are starting much earlier than in years past because we have a very aggressive calendar. This PQ is chock-full of news, notices and opportunities, so read it carefully, especially if you will need to participate in trainings this year to maintain your certificate.

Some of the high points you should take note of are:

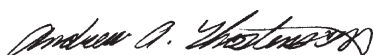
- If your certification category(s) expires April 1, 2010, you will need to participate in a training session(s), complete a home-study correspondence course(s) and/or take monitored exam(s) to obtain a new three-year certificate.
- **Preregistrations are required** for all trainings in 2009-10. Registrations at the door will be taken on a space-available basis only.
- Six Introductory Basic Core trainings (for those who are preparing to take exams) are being offered via Web streaming. They were well-received this last year, so we are doubling our

efforts and are making them available throughout the fall, winter and spring.

- Certified crop adviser credits will be offered for our commercial agricultural pest trainings.

Finally, this past year was a difficult one for dealing with the blizzards and the floods, especially notifying applicators when a training either was canceled or rescheduled. So during the summer, we came up with a scheme to use mass and targeted e-mails to alert folks about sudden changes to our schedule. The good news is about half the folks in our database have viable e-mail addresses. While that's great, 80 percent or 90 percent coverage would be marvelous. So when you register or order study materials from us this winter, if you have e-mail, share your address with us. We promise we will not flood your inbox with spam or share it. We will use it only to improve communication with our office.

Best regards,



Andrew A. Thostenson
Pesticide Program Specialist

Certified Crop Adviser Continuing Education Units Available at Commercial Pesticide Applicator Trainings

The NDSU Extension Service Pesticide Program is offering certified crop advisers the opportunity to obtain their continuing education units (CEU) at selected commercial agricultural pest recertification training sessions. (At the time of this writing, credits have been applied for with the North Dakota Certified Crop Advisors Board. Actual categories are yet to be assigned.)

Please note that you must attend 100 percent of the training to receive CEU credits. No exceptions allowed!

Fees for attending a session are as follows:

- \$ 5 per credit for crop advisers who also are attending for commercial pesticide recertification.
- \$10 per credit for crop advisers who are attending for CEU only.

Please preregister 10 days before a training to ensure adequate space at each location. Call the NDSU Extension Pesticide Program with any questions at (701) 231-7180 or (701) 231-6388.

Dec. 1, 2009; <i>Northern Ag Expo</i>	Registration 7 a.m., Training 8 a.m.-4:30 p.m.	Fargodome, 1800 N. University Drive
Jan.13, 2010; <i>Jamestown Ag Show</i>	Registration 7:30 a.m., Training 8:30 a.m.-4 p.m.	Jamestown, Civic Center, 212 3rd Ave. S.W.
Jan. 26, 2010	Registration 7:30 a.m., Training 8:30 a.m.-4 p.m.	Williston, Research Extension Center, 14120 Hwy 2
Feb. 3, 2010	Registration 8 a.m., Training 8:30 a.m.-4 p.m.	Langdon, Research Extension Center, 9280 107th Ave. N.E.
Feb. 3, 2010	Registration 8 a.m., Training 8:30 a.m.-4 p.m.	Linton, Emmons County Extension, 100 4th St. N.W.
Feb. 3, 2010	Registration 8 a.m., Training 8:30 a.m.-4 p.m.	Mohall, Renville County Extension, 205 Main St. E.
Feb. 4, 2010	Registration 7:30 a.m., Training 8:30 a.m.-4 p.m.	Bismarck, Capitol Building- Pioneer Room, 600 Boulevard Ave. E.
Feb. 11, 2010	Registration 7:30 a.m., Training 8:30 a.m.-4 p.m.	Dickinson, Days Inn/Dakota Lodge 532 15th St. S.W.
Feb. 17, 2010	Registration 7:30 a.m., Training 8:30 a.m.-4 p.m.	Minot, Grand International, 1505 Broadway
March 3, 2010	Registration 7:30 a.m., Training 8:30 a.m.-4 p.m.	Carrington, Research Extension Center, 663 Hwy 281 N.
March 16, 2010	Registration 8 a.m., Training 8:30 a.m.-4 p.m.	Crosby, Divide County Extension, 300 2nd Ave. N.
March 16, 2010	Registration 8 a.m., Training 8:30 a.m.-4 p.m.	LaMoure, LaMoure County Courthouse, 202 4th Ave. N.E.
March 16, 2010	Registration 8 a.m., Training 8:30 a.m.-4 p.m.	Fessenden, Wells County Extension, 600 Railway St. N.
March 16, 2010	Registration 8 a.m., Training 8:30 a.m.-4 p.m.	Wahpeton, Richland County Courthouse, 418 2nd Ave. N.
March 16, 2010	Registration 8 a.m., Training 8:30 a.m.-4 p.m.	Watford City, McKenzie County Courthouse, 201 5th St. N.W.
March 23, 2010	Registration 7:30 a.m., Training 8:30 a.m.-4 p.m.	Fargo, Ramada Plaza Suites, 1635 42nd St. S.

Certified Crop Adviser – CEU Preregistration 2009-10

Include Fee
(Please print)

Name _____

Phone _____

Address _____

City _____

State _____ ZIP _____

I will attend the following workshop:

Date ____/____/____

City _____

Fee \$ _____

Attending for CEU only?

6 credits x 10 Total \$ _____

Attending for pesticide certification also?

6 credits x 5 Total \$ _____

Make checks payable to:
NDSU Extension Pesticide Program

(If paying by personal check, the state of North Dakota requires your birth date on the check)

Return to:

NDSU Extension Pesticide Program
NDSU Dept. 7060, P.O. Box 6050
Fargo, ND 58108-6050



EPA's New Labeling for Soil Fumigants

Editor's Note: Soil fumigants are not widely used in North Dakota. But they do play an important role in the preparation of land for the production of irrigated potatoes. The scope of these changes are huge and the complexity of the new use directions are enormous. Even though these changes do not impact very many people, I believe that eventually we could see these types of concepts be implemented on a broader array of pesticides.

Due to their volatile nature, soil fumigants have the potential to pose risk concerns to people involved in the application (handlers), workers who re-enter fumigated fields (workers) and people who may be near the treated area (bystanders).

The EPA's Amended Reregistration Eligibility Decisions (RED) for the fumigants chloropicrin, dazomet, metam sodium/potassium and methyl bromide include a suite of measures designed to work together to reduce exposures, enhance safety, and facilitate compliance and enforcement.

These mitigation measures include: worker protections, fumigant management plans, stewardship and training programs, good agricultural practices, buffer zones, posting requirements, emergency preparedness and response measures.

The Amended RED are based on public comments, new scientific data and information submitted in response to EPA's July 2008 Soil Fumigant RED. For additional information, please see the agency's Web page at www.epa.gov/oppsrrd1/reregistration/soil_fumigants on risk mitigation measures for the soil fumigants.

Buffer Zones Fact Sheet: This fact sheet summarizes new requirements for buffer zones around fumigated fields. Buffer zones will increase protections for agricultural workers and bystanders – people who live, work or otherwise spend time near fields that are fumigated. When new fumigant labels that require buffer zones appear in the marketplace in 2011, fumigant users will need to establish buffer zones around treated fields to reduce risks from acute inhalation exposure to bystanders.

Posting Fact Sheet: This fact sheet summarizes new requirements for posting buffer zones around fumigated fields. Making sure bystanders stay out of buffer zones is important. When new fumigant labels with buffer zones appear in the marketplace in 2011, fumigant users will need to post buffer zones to ensure people know where those zones are and to stay out.

Worker Protection Measures Fact Sheet: This fact sheet summarizes new requirements to protect fumigant handlers and workers from fumigant exposures. When new fumigant labels appear in the marketplace in 2010, fumigant users will need to comply with these new requirements to protect fumigant handlers and other workers.

Fumigant Management Plans and Post-application Summary Reports Fact Sheet: This fact sheet summarizes new requirements for fumigant management plans (FMP) and post-application summary reports. When new fumigant labels appear in the marketplace around 2010, fumigators will need to ensure that a site-specific FMP is in place before beginning a fumigant application.

They also will need to prepare a post-application summary report to document any deviations from the FMP that may have been necessary, as well as results of air monitoring done during and after the application.

Site-specific Emergency Preparedness and Response Fact Sheet: This fact sheet summarizes new emergency preparedness and response requirements for fumigant applications. These requirements address potential risks to people who live or work near areas where soil fumigants are applied in case the fumigant moves outside the buffer zone at concentrations of concern. New fumigant labels that appear in the marketplace in 2011 will require fumigators to adopt these measures.

Applicator and Handler Training Programs: The EPA is requiring fumigant registrants to develop and implement training programs on proper use and good agricultural practices for applicators in charge of soil fumigations so these applicators are better prepared to manage fumigant operations effectively. The registrants also must prepare and disseminate training information and materials for fumigant handlers (those working under the supervision of the certified applicator in charge of fumigations).

Providing safety information to other fumigant handlers will help them understand and adhere to practices that will protect them from risks of exposure. The training materials must include elements designed to educate workers regarding work practices that can reduce exposure to fumigants and thereby improve safety for workers and bystanders.

Good Agricultural Practices: Current fumigant labels recommend

practices that help reduce off-gassing and improve the safety and effectiveness of applications. The agency has determined that including certain practices on labels as requirements rather than recommendations will minimize inhalation and other risks from fumigant applications. Several fumigant products already incorporate some of these measures on their labels. Examples of good agricultural practices include proper soil preparation/tilling, ensuring optimal soil moisture and temperature, appropriate use of sealing techniques, equipment calibration and weather criteria.

Application Method, Practice and Rate Restrictions: The agency is restricting certain fumigant application methods and practices for which data are not available to determine appropriate protections or that lead to risks that are otherwise difficult to address. These include certain untarped applications for some fumigants. The EPA also is lowering maximum application rates to reflect those rates needed for effective use, thereby reducing the potential for inhalation exposure and risk.

Restricted-use Pesticide Classification: All soil fumigant products containing methyl bromide, 1,3-dichloropropene, iodomethane and chloropicrin are restricted-use pesticides, but many soil fumigant products containing metam sodium/potassium and dazomet are not restricted-use pesticides. The agency has determined that all of the soil fumigants undergoing reregistration must meet the criteria for restricted use. Therefore, the EPA will reclassify metam sodium/potassium and dazomet as restricted-use pesticides.

Compliance Assistance and Assurance Measures: Assuring

compliance with new label requirements is an important part of the package of mitigation measures. Some states have mechanisms in place to obtain information needed to assist and assure compliance with new fumigant requirements. Therefore, in states that wish to receive this information, fumigators must notify state and tribal lead agencies for pesticide enforcement about applications they plan to conduct. This information will aid those states in planning compliance assurance activities. The EPA will work with all the states to amend their cooperative agreements with the agency to include strategies for assuring compliance with new fumigant labels. States that do not

choose to receive notification will need to document in their cooperative agreements their methods of identifying fumigant application periods and locations.

Community Outreach and Education Programs: The EPA is requiring fumigant registrants to develop and implement community outreach programs to ensure that information about fumigants and safety is available within communities where soil fumigation occurs. Outreach and information will address the risk of bystander exposure by educating community members about fumigants, buffer zones, how to recognize early signs of fumigant exposure and how to respond appropriately in case of an incident.

“Environmental Hazards” Section as Important as “Directions for Use”

This summer, the North Dakota Department of Agriculture was called in to investigate a suspected bee kill alleged to have been caused by an insecticide application to a nearby field crop. Sadly, one of the folks interviewed in the course of the investigation said he did not read nor did he know of any prohibitions against the use of chlorpyrifos insecticide around bees. (Chlorpyrifos was the alleged pesticide responsible for the damage.)

While blaming this person for this incident is premature, the person’s statement demonstrates an incredible level of ignorance at best or unbelievable indifference at worst. For the record, Dow AgroSciences’ Lorsban products and MANA’s chlorpyrifos products carry the following statement in the “Environmental Hazards” section:

“This product is highly toxic to bees exposed to direct treatment

or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.”

While in the heat of the growing season, a person understandably would tend to focus only on the “Directions for Use,” but doing so can have terrible consequences. In addition to specific warning about bees, this part of the label also warns about exposure to fish. Applied inadvertently to surface water, it could result in a major fish kill, which could make the nightly news and or become the basis for a lawsuit that could result in the loss of future uses for the product.

For the sake of your business and all the folks who depend upon pesticides to make a living, do not overlook the “Environmental Hazards” section of the label!

2009-10 Commercial Pesticide Certification Calendar

Here are schedules you can use for planning your training needs during the next several months. These recertification trainings are structured to give currently certified commercial/public applicators/dealers the information necessary to maintain or renew their certificates in the appropriate categories.

Preregistration is required for all trainings because of material and space limitations. If you do not preregister, you have no guarantee you will get seated at the training.

A *Training Preregistration* form is published in this newsletter. Electronic forms for downloading and printing also are available at <http://ndsupesticide.org>.

Home-study course recertification is available for those categories that are not on the training calendar or for the following minor categories: home industrial and institutional, metam-sodium, public health, vertebrate and wood preservation. Request your materials for these courses with the *Non-Training Study Materials* request form, which also is printed in this newsletter.

■ Ground and Aerial for AgPest, Right of Way, Seed Treatment, and Research and Demonstration Recertification

Date	Time	Location
Dec. 1, 2009; <i>Northern Ag Expo</i>	Registration 7 a.m., Training 8 a.m.-4:30 p.m.	Fargodome, 1800 N. University Drive
Jan.13, 2010; <i>Jamestown Ag Show</i>	Registration 7:30 a.m., Training 8:30 a.m.-4 p.m.	Jamestown, Civic Center, 212 3rd Ave. S.W.
Jan. 26, 2010	Registration 7:30 a.m., Training 8:30 a.m.-4 p.m.	Williston, Research Extension Center, 14120 Hwy 2
Feb. 3, 2010	Registration 8 a.m., Training 8:30 a.m.-4 p.m.	Langdon, Research Extension Center, 9280 107th Ave. N.E.
Feb. 3, 2010	Registration 8 a.m., Training 8:30 a.m.-4 p.m.	Linton, Emmons County Extension, 100 4th St. N.W.
Feb. 3, 2010	Registration 8 a.m., Training 8:30 a.m.-4 p.m.	Mohall, Renville County Extension, 205 Main St. E.
Feb. 4, 2010	Registration 7:30 a.m., Training 8:30 a.m.-4 p.m.	Bismarck, Capitol Building-Pioneer Room, 600 Boulevard Ave. E.
Feb. 11, 2010	Registration 7:30 a.m., Training 8:30 a.m.-4 p.m.	Dickinson, Days Inn/Dakota Lodge 532 15th St. S.W.
Feb. 17, 2010	Registration 7:30 a.m., Training 8:30 a.m.-4 p.m.	Minot, Grand International, 1505 Broadway
March 3, 2010	Registration 7:30 a.m., Training 8:30 a.m.-4 p.m.	Carrington, Research Extension Center, 663 Hwy 281 N.
March 16, 2010	Registration 8 a.m., Training 8:30 a.m.-4 p.m.	Crosby, Divide County Extension, 300 2nd Ave. N.
March 16, 2010	Registration 8 a.m., Training 8:30 a.m.-4 p.m.	LaMoure, LaMoure County Courthouse, 202 4th Ave. N.E.
March 16, 2010	Registration 8 a.m., Training 8:30 a.m.-4 p.m.	Fessenden, Wells County Extension, 600 Railway St. N.
March 16, 2010	Registration 8 a.m., Training 8:30 a.m.-4 p.m.	Wahpeton, Richland County Courthouse, 418 2nd Ave. N.
March 16, 2010	Registration 8 a.m., Training 8:30 a.m.-4 p.m.	Watford City, McKenzie County Courthouse, 201 5th St. N.W.
March 23, 2010	Registration 7:30 a.m., Training 8:30 a.m.-4 p.m.	Fargo, Ramada Plaza Suites, 1635 42nd St. S.

■ Fumigation Recertification

Date	Time	Location
Dec. 16, 2009	Registration 9:30 a.m., Training 10 a.m.-2:30 p.m.	LaMoure, LaMoure County Extension, 202 4th Ave. N.E.
Dec. 16, 2009	Registration 9:30 a.m., Training 10 a.m.-2:30 p.m.	Grand Forks, Grand Forks County Extension, 151 4th St. S., S302
Dec. 16, 2009	Registration 9:30 a.m., Training 10 a.m.-2:30 p.m.	Mohall, Renville County Extension, 205 Main St. E.
Dec. 16, 2009	Registration 9:30 a.m., Training 10 a.m.-2:30 p.m.	Watford City, McKenzie County Courthouse, 201 5th St. N.W.

continued

Jan. 20, 2010	Registration 9:30 a.m., Training 10 a.m.-2:30 p.m.	Bismarck, Burleigh County Extension, 3715 Bismarck Expressway E.
Jan. 20, 2010	Registration 9:30 a.m., Training 10 a.m.-2:30 p.m.	Minot, Research Extension Center, 5400 Hwy 83 S.
Jan. 20, 2010	Registration 9:30 a.m., Training 10 a.m.-2:30 p.m.	Wahpeton, Richland County Courthouse, 418 2nd Ave. N.
Jan. 20, 2010	Registration 9:30 a.m., Training 10 a.m.-2:30 p.m.	Cooperstown, Griggs County Extension, 808 Rollins Ave. S.W.
Feb 9, 2010	Registration 9:30 a.m., Training 10 a.m.-2:30 p.m.	Fargo, Cass County Courthouse Annex, 1010 2nd Ave. S, Lower Level
Feb 9, 2010	Registration 9:30 a.m., Training 10 a.m.-2:30 p.m.	Devils Lake, Ramsey County Courthouse, 524 4th Ave. N.E. #5
Feb 9, 2010	Registration 9:30 a.m., Training 10 a.m.-2:30 p.m.	Williston, Williams County Courthouse, 205 Broadway E.
Feb 9, 2010	Registration 9:30 a.m., Training 10 a.m.-2:30 p.m.	Fessenden, Wells County Extension, 600 Railway St. N.

■ Greenhouse, Ornamental and Turf Recertification

Date	Time	Location
Dec. 15, 2009	Registration 8 a.m., Training 8:30 a.m.-4 p.m.	Bismarck, Burleigh County Extension, 3715 Bismarck Expressway E.
Dec. 15, 2009	Registration 8 a.m., Training 8:30 a.m.-4 p.m.	Grand Forks, County Extension, 151 4th St. S., S302
Dec. 15, 2009	Registration 8 a.m., Training 8:30 a.m.-4 p.m.	Minot, Research Extension Center, 5400 Hwy 83 S.
Jan. 27, 2010	Registration 7:30 a.m., Training 8:30 a.m.-4 p.m.	Fargo, Expressway Suites, 4303 17th Ave. S.
Feb. 26, 2010; <i>NCTGA Convention</i>	Registration 7:30 a.m., Training 8:30 a.m.-4 p.m.	Fargo, Ramada Plaza Suites, 1635 42nd St. S.
March 18, 2010	Registration 8:30 a.m., Training 9 a.m.-4:30 p.m.	Devils Lake, Ramsey County Courthouse, 524 4th Ave. N.E. #5
March 18, 2010	Registration 8:30 a.m., Training 9 a.m.-4:30 p.m.	Williston, Williams County Courthouse, 205 Broadway E.
March 18, 2010	Registration 7:30 a.m., Training 8 a.m.-3:30 p.m.	Dickinson, Stark County Courthouse, 51 2nd St. E.

■ Home, Industrial and Institutional Recertification

Date	Time	Location
Nov. 5, 2009	Registration 8 a.m., Training 8:30 a.m.-3 p.m.	Fargo, NDSU Loftsgard 260

■ Aerial Applicators Recertification

Date	Time	Location
Feb. 23-25, 2010	TBA	TBA: Fargo, Holiday Inn, 3803 13th Ave. S.

■ Public Health Recertification

Date	Time	Location
May 27, 2010	Registration 9 a.m., Training 9:30 a.m.-4 p.m.	Bismarck, Burleigh County Extension, 3715 Bismarck Expressway E.
May 27, 2010	Registration 9 a.m., Training 9:30 a.m.-4 p.m.	Fargo, NDSU, IACC HALL, Room 422
May 27, 2010	Registration 9 a.m., Training 9:30 a.m.-4 p.m.	Grand Forks, County Extension, 51 4th St. S., S302
May 27, 2010	Registration 9 a.m., Training 9:30 a.m.-4 p.m.	Williston, Williams County Courthouse, 205 Broadway E.

■ Right of Way ONLY Recertification

May 25, 2010; NDWCA Annual Sprayer School	TBA*	TBA*, Western/Eastern N.D.
May 26, 2010; NDWCA Annual Sprayer School	TBA*	TBA* Western/Eastern N.D.

*TBA – To Be Announced in a future issue of the Pesticide Quarterly newsletter.

Why Did They Spray DDT Like That?

Veterans of my pesticide trainings will recall that I often play video clips from the late 1940s and early 1950s showing widespread and seemingly indiscriminate use of DDT (dichlorodiphenyltrichloroethane) insecticide, especially in urban settings. I was trying to make the point about why we don't do things

like we used to. While this helped me drive home the point as to why we should take more precautions, I always was bothered about why they sprayed so much of that stuff back then.

One of my hobbies is history, so I went on a hunt to understand what they were trying to do.

First, you have to understand that before World War II, living with flies, mosquitoes, bed bugs, lice and fleas was more or less the facts of life. So also was polio, malaria, yellow fever, typhus, itching after a hotel stay, plagues and other unpleasant facts of life (and even premature death). This was simply the way it was in the "good old days."

Training Opportunities for New Applicators/Dealers

"Introductory Basic Core Training"

The training is designed for commercial or public applicators and dealers who are new to pesticide certification in North Dakota. It will cover basic pesticide safety and handling practices, as well as relevant laws and regulations as they pertain to the distribution and use of pesticides. This training is not category specific. It will emphasize practices and procedures that should be useful to all applicators or dealers, whether they are seeking certification in the Agricultural Pest Control category, Wood Preservation category or any of the 10 other use categories found in North Dakota. The training also will describe the certification process and how to prepare and take exams to obtain a pesticide certificate.

We will offer these trainings live and in real time via the Internet to any location that can receive a Windows

Media Video Stream at 300 kbps or higher using Windows Media Video Version 9.0 or higher. For practical purposes, people who have a dial-up connection will not be able to participate in this training. To test your connection, go to:

www.ag.ndsu.nodak.edu/aginfo/pesticid/myth.htm

If you can view the Richard Zollinger videos, your computer and location will be able to connect to our webcast.

People who wish to participate should call the NDSU Pesticide Training and Certification Program office at (701) 231-7180 or (701) 231-6388 to preregister. Preregister at least 10 days before the training date so we can ship training materials and send you your confirmation information (this will include the Web location URL along with login instructions).

That all changed with the introduction of DDT during the war. For the first time, soldiers did not die from these maladies because their uniforms were impregnated with DDT, they dusted their bodies in DDT, and the Army Air Corps and Navy bombed friendly bases and even entire cities from the air with DDT. All of this was done to kill insects that spread diseases to allied troops or civilian populations. The results were astonishing and, by 1945, word spread back to the civilian population in the U.S. that this miracle powder was being used. Soon basement laboratories were set up to synthesize DDT so it could be sold on the black market (wartime rationing prevented it from being marketed over the counter). After the war, late in 1945, surplus Army/Navy DDT was being sold legally at prices that were next to nothing.

By 1946, public health districts, state health departments and federal health agencies began to think in terms of wiping out certain insect-borne diseases with DDT. Yellow fever, a disease that killed tens of thousands of people annually in the U.S. and nearly prevented the Panama Canal from being completed, was eradicated. Malaria, though a tougher nut to crack, was eliminated by about 1950.

Date	Time	Location
Nov. 9, 2009	Training 8:30 a.m.-4 p.m. CST	Statewide via Internet videocast
Dec. 21, 2009	Training 8:30 a.m.-4 p.m. CST	Statewide via Internet videocast
Jan. 25, 2010	Training 8:30 a.m.-4 p.m. CST	Statewide via Internet videocast
March 1, 2010	Training 8:30 a.m.-4 p.m. CST	Statewide via Internet videocast
April 12, 2010	Training 8:30 a.m.-4 p.m. CDT	Statewide via Internet videocast
June 4, 2010	Training 8:30 a.m.-4 p.m. CDT	Statewide via Internet videocast

In 2009, imagining what this meant to people living in that time is difficult. But for them, the elimination of these diseases must have been incredible, miraculous, a godsend – the adjectives and adverbs can go on and on.

The success in the eradication of malaria from the U.S. soon led the Rockefeller Foundation to propose a worldwide crusade to rid the world of malaria. In developed nations, the crusade largely was successful, but the world is a pretty big place and, by 1962, the foundation abandoned the idea of worldwide eradication mostly due to cost.

DDT's success at controlling insect-transmitted diseases led to other applications, some of them were logical and realistic, such as protecting crops. But on the other hand, some proposed uses were almost fantastic or even crazy. Take the plan by the Iowa Department of Agriculture in 1947. The department decided to wipe out flies. Department officials thought they could do it in spite of the fact that Iowa's livestock industry produced manure, for which the flies thrived upon, by the billions of tons. In a Time magazine article, they reported:

“The program, headed by the state's agricultural and health authorities, will take on all the trappings of a civic crusade. Local chambers of commerce, boards of health, Rotary and Kiwanis Clubs will march on the flies in close ranks. In northern Iowa a mechanized column of 40 former G.I.s is training with pressure spray outfits. They plan to hit Mason City on June 9, DDT-ing the whole town fly-less in two hours by the clock. Toxic ammo of the anti-fly movement is good new DDT, which will be sprayed on cattle, barns,

downtown restaurants, garbage pails, old-fashioned outhouses.”

While the Iowa anti-fly campaign seems farcical by today's standards, the folks dealing with polio outbreaks in the late '40s and '50s were desperate. Polio was killing and maiming tens of thousands of Americans per year and the doctors could not tell people how to protect themselves. When word got out that the polio virus has been found on the hairs of the common housefly, people turned to DDT.

An example of this is the sleepy Texas town of San Angelo with a population just less than 60,000 people. In 1949, the city fathers acted to stop the summer polio epidemic by wiping out house flies. In a 2005 thesis by J.C. Lee, written for his master of arts degree at Texas State University, he described the following:

“The most drastic measure was the repeated spraying of the entire city with DDT, which at the time was considered a completely viable health measure for controlling polio. That same summer San Antonio authorities regularly used helicopters and planes from the Texas Air National Guard to fumigate the entire city with insecticide. Though many of the citizens wanted it, San Angelo declined not to use airplanes. Their concern was not that people might have allergic reactions to the insecticide, but that it would cost the city upwards of \$38,000 dollars, and that much of the spray would probably blow away. Officials also argued that air spraying would waste DDT, since it would not get down into trash piles and alleyways where it needed to go. Airborne spraying,

they reasoned, would only waste the insecticide on roofs and treetops. Instead, the city opted to use a pair of foggers on the ground. One was borrowed from Abilene, and another was bought brand new. They were towed behind pickup trucks and boasted a hundred-gallon tank that lasted for eight hours. Throughout the summer the entire city was sprayed several times by the foggers.”

People were so desperate to protect their children from polio that they lined up by the thousands at hardware stores to fill their jars with DDT purchased by the city and the March of Dimes Foundation. Afterwards they went home and sprayed their outhouse and garbage cans, and they literally bathed themselves and washed their clothes with the miracle powder. While the benefits of using DDT to suppress polio were marginal at best, Lee talks about people feeling “comforted” because at least they were doing something.

So after a summer of reading, I found my answer as to why they sprayed DDT on such a massive scale. Sure, they used it out of fear and because it seemed like it would be nice to not have flies during an Iowa summer. But mostly they did it because it made sense. DDT saved lives and it helped feed a war-ravaged world. Makes sense to me. But I wonder if in our smug world of environmental impact statements, endangered species protections, Clean Water Act permits and pesticide reregistration eligibility decisions, do we ever think about what going back to the “good old days” would be like?

Commercial Pesticide Recertification Pre-registration Form

Training Pre-registration

PERSONAL INFORMATION (please print)
Name
Address <small>P.O. box and street address</small>
Phone
Date of birth
E-mail

EMPLOYER/BUSINESS
Name
Address <small>P.O. box and street address</small>
Phone
Fax
E-mail

Correspondence from the Pesticide Office should go to which of the above addresses? personal employer

N.D. County of Residence _____ N.D. Commercial Pesticide ID _____

Do you work for a government agency? Yes No

Is this certification for research and demonstration purposes? Yes No

Check all that apply on each line: **Core Status** Ground Aerial
Certification Status Applicator Dealer Consultant

Training/Pre-Registration		
Study materials are provided at training.		
Do not request material for training(s) indicated below.		
▼ Check each category you are training in:	▼ Location of training	▼ Date
<input type="checkbox"/> Ag Pest		
<input type="checkbox"/> Right-of-Way		
<input type="checkbox"/> Seed Treatment		
<input type="checkbox"/> Fumigation		
<input type="checkbox"/> Greenhouse		
<input type="checkbox"/> Ornamental and Turf		
<input type="checkbox"/> Home, Industrial and Institutional		
<input type="checkbox"/> Public Health		
Total training/pre-registration categories _____ X \$10 = \$ _____		
Base fee (one-time charge per training season)		\$55
Total		\$ _____

Method of Payment
(payment must be included)

Credit Card

Visa MasterCard Discover

Credit Card # _____

Expiration (mo/yr) ____/____

Cardholder name (print) _____

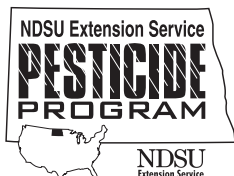
3-digit code _____ billing zip code _____

Check/Money Order # _____

Payable to NDSU Extension Pesticide Program
If paying by personal check, the state of North Dakota requires your birthdate on the check.

Send payment to:
 NDSU Extension Pesticide Program
 NDSU Dept. 7060, P.O. Box 6050
 Fargo, ND 58108-6050

Must be postmarked 10 days prior to training.



For questions, contact the
NDSU Extension Pesticide Program Office
phone (701) 231-7180 or (701) 231-6388; fax (701) 231-5907

Commercial Pesticide Study Material Request Form

Non-training Study Materials

PERSONAL INFORMATION (please print)
Name
Address <small>P.O. box and street address</small>
Phone
Date of birth
E-mail

EMPLOYER/BUSINESS
Name
Address <small>P.O. box and street address</small>
Phone
Fax
E-mail

Correspondence from the Pesticide Office should go to which of the above addresses? personal employer

N.D. County of Residence _____

N.D. Commercial Pesticide ID _____

Do you work for a government agency? Yes No

Is this certification for research and demonstration purposes? Yes No

Check all that apply on each line: **Core Status** Ground Aerial
Certification Status Applicator Dealer Consultant

Study Material									
▼ Check each category for study material needed:									
<input type="checkbox"/> Ag Pest									
<input type="checkbox"/> Fumigation									
<input type="checkbox"/> Greenhouse									
<input type="checkbox"/> Home, Industrial and Institutional									
<input type="checkbox"/> Ornamental and Turf									
<input type="checkbox"/> Public Health									
<input type="checkbox"/> Right-of-Way									
<input type="checkbox"/> Seed Treatment									
<input type="checkbox"/> Vertebrate									
<input type="checkbox"/> Wood Preservatives									
<table style="width: 100%; border-collapse: collapse;"> <tr> <td>Total study material categories _____ X \$10 = \$_____</td> <td></td> </tr> <tr> <td>Base fee (one-time charge per training season)</td> <td style="text-align: right;">\$55</td> </tr> <tr> <td>Shipping and handling</td> <td style="text-align: right;">+ \$5</td> </tr> <tr> <td style="text-align: right;">Total</td> <td style="text-align: right;">\$_____</td> </tr> </table>		Total study material categories _____ X \$10 = \$_____		Base fee (one-time charge per training season)	\$55	Shipping and handling	+ \$5	Total	\$_____
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Shipping and handling	+ \$5								
Total	\$_____								

Method of Payment (payment must be included)

Credit Card

Visa MasterCard Discover

Credit card # _____

Expiration (mo/yr) ____/____

Cardholder name (print) _____

3-digit code _____ billing zip code _____

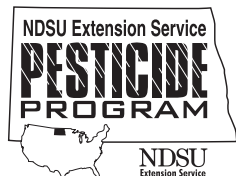
Check/Money Order # _____

Payable to NDSU Extension Pesticide Program

If paying by personal check, the state of North Dakota requires your birthdate on the check.

Send payment to:
 NDSU Extension Pesticide Program
 NDSU Dept. 7060, P.O. Box 6050
 Fargo, ND 58108-6050

Allow 7 to 10 business days for processing



**For questions, contact the
 NDSU Extension Pesticide Program Office
 phone (701) 231-7180 or (701) 231-6388; fax (701) 231-5907**

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