



Locked, Dry and Safe

Evaluating Pesticide Security and Storage Safety

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Audience: Private Applicators

Category: Core

Duration: 30 minutes to 1 hour

Teaching Aids/Materials:

- Slides on pesticide security and storage safety
- Discussion Sheet
- Checklist for Pesticide Storage and Security

Slides available on the Pesticide Education Program website at: <http://pested.osu.edu> on the agent information page

Handouts:

- Discussion Sheet
- Checklist for Pesticide Storage and Security

Take Home References:

- Farm*A*Syst Pesticide Storage Worksheet

Other Resources:

- Ohio State University Extension Factsheet AEX-522 On-Farm Agrichemical Mixing/Loading Pad available at: <http://ohioline.osu.edu/aex-fact/0522.html>
- Kansas State University Fact Sheet Pesticide Storage Facility <http://www.oznet.ksu.edu/library/AGENG2/AF169.PDF>
- University of Delaware Interactive lesson: "How safe is your pesticide storage facility?" at <http://www.udel.edu/pesticide/al.htm>

Topic:

Evaluation of methods to improve pesticide security on the farm. Focus on simple steps farmers can implement to create more security for their operation. Also explore the importance of safe pesticide storage on the farm. Review components of safe storage.

Learning Objectives:

- Evaluate storage systems based on security and safety risks
- List steps to improve security for on-farm pesticide storage
- Define parameters for safe pesticide storage
- Recognize the farmer's role in SARA Title III/Community Right to Know

Background:

After the events of September 11, 2001, pesticide and chemical security became a national priority. Crop dusters, agriculture dealers and farmers were asked to increase security measures for their pesticide application equipment and stored product.



Pesticide security and safe storage are closely related and an important part of the farmer's operation. The suggestions presented in this lesson are to help deter theft and vandalism, as well as protect farmers and their families.

The SARA Title III, also known as the Emergency Planning and Community Right-to-Know, is a federal law that was enacted in 1986. The law mandates a community right to know program that will give local officials and citizens information about hazardous chemicals in their communities.

Under SARA Title III, farmers must report stored chemicals that are on a list of extremely hazardous substances if the amount stored is above the threshold planning quantity. They also must report spills if they are above the reportable quantity. A fact sheet is available with the websites and phone numbers for the SARA Title III requirements.

**Method:**

1. Hand out the *Storage Dilemma* discussion sheet. You can either divide the room into small groups to work through the questions, or give everyone about five to seven minutes to answer the questions themselves. Give groups about 10 minutes to work through the questions, then bring the group back together.
2. Have a discussion about the two storage units pictured. Suggested answers are in the box on the right. But, be prepared for individuals to find other concerns or suggestions for the storage units. Work through the questions one at a time. You may need to prompt some of the answers if the group is not very interactive. If time permits, you could have a scribe take notes on a flip chart of the answers to the four questions.
3. Show the slides of *Pesticide Security and Storage*. During the slide show, there will be opportunities to refer back to some of the answers from the *Storage Dilemma* discussion sheet. Try to include answers from some of the groups and individuals that apply to the slides.
4. Hand out copies of the *Pesticide Security and Storage Checklist*. If time permits, take time to re-emphasize the points from the *Storage Dilemma* that are on the checklist.
5. Evaluation.

Additional idea: Set up a small, mock storage area using props (using paper, farm toys, etc.) in the middle of the room. Have participants walk over to the area and analyze the storage area, indicating what's right or wrong about the setup. Discuss their observations and ideas for improving the security and safety of the storage area. This provides a good break for participants if they have been sitting for a long time and need a chance to move around. It also provides an opportunity for informal interaction among the participants.

Suggested Answers for the Storage Dilemma

1. **What security and safety concerns do you see with Storage A?**
 - Not a separate storage area
 - No way to lock the pesticides
 - Could be accessed by children, pets and other animals
 - If pesticides spilled, the lumber would be contaminated.
 - Pesticides could easily become wet
 - Easily accessed by vandals
2. **How could you improve the security of Storage B?**
 - Provide lighting near the unit
 - Position the unit so it could not be easily loaded or moved
3. **Where else could thieves or vandals access pesticides on a farm?**
 - Unlocked storage areas
 - Full sprayers left in the field
 - Application equipment with the keys left in the ignition
 - Mini-bulk temporary storage that is not secured
 - Partially filled sprayers left on a mixing/loading pad
 - Deliveries made when no one is home

Storage Dilemma

Group Discussion



Storage A



Storage B

1. What **security and safety** concerns do you see with Storage A?
2. How could you improve the **security** of Storage B?
3. Where could thieves or vandals **access pesticides** on a farm?

Farm Pesticide Storage and Security Checklist

Storage Structure

- ☐ Dedicated structure for storage (*building, room or cabinet*)
- ☐ Good roof with no leaks
- ☐ Impermeable, liquid-proof flooring (*like concrete*)
- ☐ Secondary containment (*curbs around loading pad or pans under containers*)
- ☐ Sump available
- ☐ Located at least 100 feet from well
- ☐ Storage area kept locked
- ☐ Ventilation and lighting inside
- ☐ Outside fence if practical

Pesticide Storage

- ☐ Pesticides are stored in original containers
- ☐ Original labels are intact and readable
- ☐ Pesticides stored separate from food, feed, seed and fertilizer
- ☐ Pesticides protected from freezing
- ☐ Shelves made from steel, not wood
- ☐ Order only amount of pesticides needed and return unused amounts
- ☐ Store protective equipment separately
- ☐ Post warning signs on storage area: "Danger - Pesticides - Keep Out"
- ☐ Post "No Smoking" signs

Pesticide Security

- ☐ Don't sell or give products to people you don't know (*it's illegal for a non-dealer to sell*)
- ☐ Inspect storage regularly
- ☐ Report any thefts immediately
- ☐ Keep products for disposal locked
- ☐ Secure tanks and mini-bulks to avoid siphoning or stealing
- ☐ Good key control is exercised

Pesticide Emergencies

- ☐ Sign on storage entrance with contact person information
- ☐ Sign on storage entrance with emergency numbers (*poison control, police, fire departments*)
- ☐ Establish contact with local law enforcement and fire authorities
- ☐ Emergency response plan provided to Local Emergency Planning Committee and fire departments
 - list of products
 - average quantities
 - floor plan of facility
- ☐ Keep updated inventory (name, quantity and location)
- ☐ Store inventory records away from storage facility

Equipment

- ☐ Never leave ignition keys in application equipment
- ☐ Keep pesticide application equipment secure
- ☐ Lock transport vehicles when driver is away
- ☐ Equipment marked with Owner Applied Number (*helps law enforcement identify stolen property*)
- ☐ Vehicles are stored inside when possible
- ☐ Unauthorized people cannot get to stored vehicles or stored pesticides

General Security

- ☐ Watch for suspicious or unusual behavior
- ☐ All farm storage areas are substantial and in good repair with weeds and brush removed
- ☐ Fences are in good repair and present an orderly appearance
- ☐ Limit farm access with fences, gated driveways
- ☐ Have perimeter lighting, utilize guard dogs



S.A.R.A. Title III

Emergency Planning and Community Right-to-Know

Sara Title III, also known as the Emergency Planning and Community Right-to-Know, is a federal law that was enacted in 1986. The law mandates a community right-to-know program that will give local officials and citizens information about hazardous chemicals in their communities.

Farmers are required, under SARA Title III to:

- 1. Report stored chemicals.** The law has a list of *extremely hazardous substances*. Anyone (businesses, municipalities, *farmers*, etc.) who stores more than a specified quantity of any of these substances must provide notification to the State Emergency Response Commission (SERC). The specified quantities are known as the *threshold planning quantity* of the individual hazardous substances. A link to the list of the hazardous substances and threshold planning quantities is available at our website: <http://pested.osu.edu>
If you have a reportable quantity in your farm storage, contact SERC at (614) 644-2260 or (888) 644-2260. This is a one-time notification.
- 2. Provide information to the LEPC.** As part of the law in Ohio, every county has a Local Emergency Planning Committee (LEPC). A list of the contacts at the county LEPC is available on-line at www.epa.state.oh.us/dapc/serc. You must notify your LEPC if you have pesticides stored that are above the threshold planning quantity. In addition to identification of the pesticides stored on your farm, the LEPC will also need a map of your facility in case of emergencies.
- 3. Report spills.** Whether or not you are required to report to the LEPC and SERC for Threshold Planning Quantities, if you have a pesticide release at or above the Reportable Quantity, you are required to notify federal, state and local authorities. A link to the reportable quantities are available on our website at <http://pested.osu.edu>. Ohio EPA has a 24-hour emergency spill hotline at (800) 282-9378.

