



PENN STATE UNIVERSITY PESTICIDE MANAGEMENT PROGRAM

GREENHOUSE PESTICIDE USE PROGRAM OVERVIEW

The Penn State University Pesticide Management Program has requirements for pesticide use on University property. This document presents a summary of the program requirements as they apply to pesticide use in greenhouses.

Responsibilities:

Pesticide Applicators must:

- Comply with program requirements,
- Read and follow pesticide label directions and be knowledgeable of the hazards of the pesticides being used,
- Wear or use all PPE required by the label,
- Report all unsafe practices/conditions to supervisors, and
- Take actions during an emergency

Supervisors must:

- Understand the requirements of this program and ensure that they are fulfilled,
- Ensure that required PPE is available and used,
- Ensure that Integrated Pest Management is used at their facilities,
- Take corrective actions when unsafe conditions are found, and
- Investigate accidents/incidents

Licensing/Certification:

Each Penn State facility that uses pesticides must have a business license as a public applicator and have certified applicators to apply pesticides. Certification categories that might apply, depending on the activity are: 1, 2, 3, 6, 18, 21, 22, and 23. Applications can only be made by an uncertified person if they are under the direct supervision of a certified applicator who is physically present and within sight of the uncertified applicator. Applicators must take required courses to maintain certification.

Proper Pesticide Storage:

- Liquids in secondary containment; heavier bags near, but not on the floor
- Segregate pesticides from fertilizers
- Ensure pesticides are stored in original containers with legible labels
- Date all containers – use older pesticides first
- Maintain annual inventory
- Provide access to MSDSs through web or hard copy
- Maintain proper temperature and keep out of direct sunlight
- Keep all containers closed when not in use
- Post door with “Danger – Pesticide Storage Area”
- Keep storage area secure and locked when not in use
- Maintain spill kit, first aid kit, and fire extinguisher
- Provide emergency contact info
- Provide separate storage area for PPE

Pesticide Handling and Use:

- Perform mixing and loading in a location where spills can be cleaned up (such as on a concrete pad) or vary the locations if doing this at the application site so that pesticides from small spills do not build up in the area.
- If spills occur, clean them up. Ensure that decontamination supplies are available (see below).
- Properly rinse all pesticide application equipment and spray the rinsate out in an appropriate labelled location.
- Use Integrated Pest Management.
- The label is the law – follow all PPE and other label requirements.
- Check PPE requirements to chemical resistance chart to ensure the correct material is used for the PPE.
- If a respirator is required to be worn, be in the EHS Respiratory Protection Program.
- If fumigating, develop standard operating procedures and have reviewed by EHS.
- Ensure ventilation criteria are met after application before entry by other than a trained and equipped handler.
- If a restricted entry interval is in effect, either keep workers out of the area until it expires or follow Worker Protection Standard requirements for early entry workers.

Notification:

- If a *hypersensitive person* is located within 500 feet of application area, notify that person
- If *general use pesticides* are applied on ornamental plants, notify contiguous landowners if they request this
- If *restricted use pesticides* are applied on nonagricultural plants, notify contiguous landowners orally or by certified mail
- If *restricted use pesticides* are used for agricultural plants, perform newspaper notification (two newspapers), or notify orally or by certified mail every contiguous landowner, or placard application site.
- If *required by the pesticide label*, notify workers of the proposed pesticide application orally or by posting warning signs, or if directed by the label use both methods

Decontamination Supplies:

Decontamination supplies must be present at the mixing/loading site, within ¼ mile of the application site, and at the location where applicators remove their PPE. The following supplies are required (per applicator):

- At least 3 gallons of water for washing,
- Soap and single-use towels,
- One pint of eyeflush (eyeflush required at application site only when label requires eye protection and must be immediately available), and
- Clean clothes (e.g., one-size coveralls).

The following is a list of decontamination supplies that are required for each worker (non-applicator) in an area where a pesticide was applied within the last 30 days or a restricted entry interval was in effect (per worker):

- At least 1 gallon of water for washing and emergency eyeflushing,
- Soap and single-use towels, and
- For early-entry workers, one pint of eyeflush (eyeflush required only when label requires eye protection and must be immediately available).

Pesticide Application Records:

- Date of the application and for a pesticide requiring a reentry time, the time completed,
- Restricted entry interval, if one exists,
- Location and address of application site and identification of the application site including specific field or land area, the plant, and the size of the treated area,
- Brand name and formulation used, active ingredient, and dosage rate,
- Name of applicator and registration number of each person making or supervising the application, and
- EPA registration number.

Central Location Posting Requirements:

- Emergency contact information,
- EPA pesticide safety poster, and
- Application list posted for 30 days following an application or the end of a restricted entry interval

Worker Protection Standard Training:

A certified applicator is not required to have additional training. Greenhouse workers that do not apply pesticides and pesticide handlers who are not certified applicators are required to complete Worker Protection Standard training every five years.

Disposal:

Dispose unneeded pesticides through PDA's CHEMSWEEP or through EHS Chemical and Chemical Waste Management Program. Dispose of clothing contaminated with restricted use pesticide concentrate through this program also, all other pesticide concentrate-contaminated clothing in the trash. Program manual contains laundering guide.

Pesticide Transportation:

Never transport pesticides in the same compartment of the vehicle as people. An open truck or pickup truck is preferred with the load secured to prevent containers from shifting. If you use an open vehicle to transport pesticides, never leave it unattended. Bring a small spill kit and place liquid pesticides in secondary containment.

Safety and Emergency Procedures:

Preplan for emergencies (see manual for requirements). Prepare the "Vital Building Information" if required.

Pesticide Spills and Releases:

- Identify problem
- Protect yourself (PPE)
- Stop the source of the spill or release
- Call 911 if an emergency release
- Contain the spill
- Recover the spilled material and absorbent
- Properly dispose of material
- Call EHS as soon as possible

Incident/Accident Documentation and Investigation:

Document and investigate all incidents/accidents within one week's time, and take corrective measures if needed. Communicate findings to the work group.

Documentation and Recordkeeping:

- Current business license and applicator certifications
- Hypersensitivity registry contacts (3 yrs)
- Prior notification (3 yrs)
- Records of pesticide applications (3 yrs), posted for 30 days following an application or the end of a restricted entry interval
- Training records for workers and handlers (if required)
- Annual Inventory
- Annual self-audit of program implementation – perform annually and submit to EHS by January 31st

Refer to the Penn State University Pesticide Management Program Manual at www.ehs.psu.edu for detailed information on these topics.