

DUQUESNE UNIVERSITY

PESTICIDE MANAGEMENT PROGRAM

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Purpose

A pesticide is any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest. Under United States law, a pesticide is also any substance or mixture of substances intended for use as a plant regulator, defoliant, or desiccant. This program outlines the controls to be utilized by Duquesne University to ensure the safety of on-site personnel during their work with pesticides.

Responsibilities

Administration - Duquesne University has the overall responsibility for providing a place of employment free of recognized hazards and unsafe conditions, as well as complying with federal, state, and local standards and regulations.

The Deans, Directors or Department Heads - Have the overall responsibility of ensuring that all pertinent personnel are provided with the required equipment and resources to conduct safe work operations. They must also ensure that proper safety equipment and training are made available to each worker involved in elevated work operations.

Environmental, Health and Safety - Has the responsibility of ensuring local, state, federal and insurance company compliance and the responsibility for guidance and technical expertise needed to oversee the program. Responsibilities also include providing training for affected personnel.

Department Supervisor (whose employee(s) engage in elevated work) - Ensure that all aspects of this Program are implemented and hazards are controlled so not to present a hazardous exposure to University employees,

students and visitors. It is also the responsibility of Department Supervisors to insure the employee(s) designated to use or work around pesticides utilizes the necessary procedures and equipment to minimize that employee's own exposure to the hazards generated. Responsibility also includes ensuring that all equipment is maintained in a safe operational manner.

University Employee(s) -Are responsible for following this Program and implementing controls that will eliminate or greatly reduce the hazards generated by their work for the protection of themselves, University employees, students and visitors. Personnel using tools or equipment for pesticide application are also responsible for ensuring that equipment is in proper working order.

Project Supervisor(s) for Outside Contractor(s) - Are responsible for ensuring outside contractors and sub-contractors involved in pesticide application have and follow a Pesticide Management Program or comply with the provisions of this Program.

Definitions

Agricultural plants – plants grown or maintained for commercial or research purposes. Examples are food, feed, fiber plants, trees, turf grass, flowers, shrubs, ornamentals, and seedlings.

Restricted-entry interval (REI) – the time immediately after a pesticide application when entry into the treated area is limited.

Workers – anyone employed for compensation, performing tasks such as harvesting, pruning, weeding, or watering in the production of agricultural plants.

Pesticide handlers – anyone who is employed for compensation, performing tasks such as mixing, loading, or applying pesticides, assisting in pesticide applications, cleaning, repairing, or adjusting spray equipment, or acting a flagger.

Hand labor – any agricultural activity performed by hand or with hand tools that might cause a worker to have substantial contact with surfaces that may contain pesticide residues.

Centrally Located Information about Pesticide Application

The Department Supervisor must ensure that certain information is displayed at a central location whenever any worker is on campus and a pesticide is about to be applied or has recently been applied. The information to be displayed is:

- Application list, including the location and description of the area to be treated, the product name, EPA registration number, the active ingredients of the pesticide, the time and date of application, and the restricted-entry interval for the pesticide.
- Emergency information, including the name, telephone number, and address of the nearest emergency medical facility.
- A pesticide poster, which must include either the EPA Worker Protection safety poster or an equivalent.

Restricted-Entry Interval Requirements

Each pesticide has a designated restricted-entry interval (REI), usually ranging from 4 to 72 hours, and the REI may be found on the label of the pesticide. The REI begins immediately after application, and workers are not permitted to enter a treated area for the first 4 hours after treatment under no circumstances. Exceptions to this provision are:

- A worker’s contact with treated surfaces is minimal and is limited to the feet, legs, hands, and forearms.
- The pesticide does not have a statement on the label requiring double notification.
- PPE for early entry is provided to the worker and must conform to label requirements. Minimum requirements include coveralls, chemical resistant gloves, socks, chemical resistant footwear, and eyewear.
- No hand labor activity is performed.
- The time in treated areas under a REI for any worker may not exceed 8 hours with a 24 hour period.
- Workers do not enter the restricted-entry area during the first 4 hours, and until application ventilation requirements have been met, and until any label specified inhalation exposure level has been reached.
- Before workers enter a treated area under a REI, the Department Supervisor shall provide oral or written notification of the specifics of the exception to early entry.

Personal Protective Equipment

Pesticide labels list the specific PPE to be worn while using the product. When PPE is required, the Department Supervisor will:

- Provide the specified PPE to each worker
- Ensure that the PPE is clean and in good condition
- Ensure that each worker wears and uses the PPE properly
- Provide a clean storage area for PPE, separate from personal clothing
- Take action to prevent heat-related illness while the PPE is being worn
- Provide soap, single use towels, and water to each person at the end of handling the pesticide when PPE is removed
- Prevent any worker from wearing or talking home any contaminated PPE
- If PPE will be reused, clean the PPE before each day of reuse with detergent and hot water or in accordance with manufacturer’s instructions
- Thoroughly wash and dry all PPE before it is reused or stored

With regard to respiratory protection, all respirators must be utilized in accordance with the Duquesne University Respiratory Protection Program.

Listed below is the minimum PPE required for pesticide handling.

| | Toxicity Category of End-Use Product | | | |
|--|---|---|---|---|
| | I | II | III | IV |
| Route of Exposure | | | | |
| Dermal toxicity or skin irritation potential | Coveralls worn over long-sleeved shirts and long pants Socks Chemical resistant footwear Chemical resistant gloves | Coveralls worn over long-sleeved shirts and long pants Socks Chemical resistant footwear Chemical resistant gloves | Long-sleeved shirt and long pants Socks Shoes | Long-sleeved shirt and long pants Socks Shoes |
| Inhalation toxicity | Respiratory protection | Respiratory protection | No minimum | No minimum |
| Eye irritation potential | Protective eyewear | Protective eyewear | No minimum | No minimum |

Storage and Security

All pesticides must be stored in the locked storage area located in the Grounds Garage. This area is for pesticides only and must be marked with the following signage:

DANGER

Pesticide Storage Area

All Unauthorized Persons Keep Out

Fire May Cause Toxic Fumes

All pesticides must be stored in their original containers with the labels attached and legible, and the containers shall be inspected regularly for damage and leaks. If a container is damaged, the contents shall be transferred to a container that has held the same pesticide.

Herbicides, insecticides, fungicides must be stored apart from each other. Dry formulations shall be stored above liquids, and glass containers shall be stored on the lowest level. All containers must be stored at least twelve inches above the floor. All pesticides must be stored away from fertilizers, gasoline and other fuels.

Surplus pesticides shall be held in a special area for disposal. Rinsate shall be placed in appropriate containers and labeled in a manner that lists the percentage of the active ingredient.

Disposal of all unwanted pesticides, rinsate and/or waste must be disposed as hazardous waste.

Spill Control and Cleanup

Accidental spills may occur at any time, but before attempting to control any spill, responders must first don the appropriate personal protective equipment. Efforts to rescue an individual in an unknown environment must not be attempted until one first protects oneself. Having done so, the following procedures should be followed:

- Control the spill as soon as possible
- Do not leave the site unattended – call x 2677 (COPS) for help.
- Isolate the area – create a containment zone of at least 30 feet
- Contain the spill by using absorbents, pillows, socks, etc. Avoid using sweeping compounds or sawdust.
- Collect contaminated absorbent materials and place them in steel or fiber drums lined with plastic bags.
- Decontaminate the spill area after absorbents have been removed using a bleach/water solution (30% bleach) or hydrated lime. Apply fresh absorbent to capture the decontamination solution. Place this material in the steel or fiber drum lined with plastic.
- Contact EHS at x4763 for disposal of spill waste.

If soil becomes contaminated, 2 to 3 inches must be removed and disposed as hazardous waste. The decontaminated area should then be treated with 2 inches of lime, and then topped with fresh topsoil.

All non-porous tools and materials used for cleanup must be cleaned with a bleach/water solution (30% bleach). Porous materials, such as brooms, shoes, disposable clothing, gloves, etc., must be disposed a hazardous waste.

Training

All applicators must be trained as commercial pesticide applicators in accordance with PA Department of Agriculture requirements. At a minimum, applicators must be exposed to following topics:

- Pest identification
- Pesticide labels and proper use
- Application equipment
- Calibration of equipment
- Equipment maintenance
- PPE
- Health effects
- Environmental effects
- Transportation and spill handling
- Disposal procedures
- State and federal regulations

Training is required an annual basis, and training records must be retained for three years.

Appendix A

MONTHLY PESTICIDE FACILITY CHECKLIST

LOCATION: _____

DATE: _____ INSPECTOR: _____

| | Yes | No | N/A |
|--|-----|----|-----|
| <i>General Information</i> | | | |
| • Clean, neat pesticide storage area | | | |
| • Clean area to dress available | | | |
| • All required PPE available in clean location | | | |
| • Current, on-site annual pesticide inventory | | | |
| • Labels on file for all pesticides | | | |
| • Accurate monthly storage inspection log maintained | | | |
| • Storage area temperature between 40° and 90° F | | | |
| <i>Pesticide Containers</i> | | | |
| • Containers marked with purchase date | | | |
| • Pesticides, herbicides, and fungicides segregated | | | |
| • Pesticides stored in original containers | | | |
| • Labels legible and attached to containers | | | |
| • Container caps tightly closed | | | |
| • Containers out of direct sunlight | | | |
| • No reused pesticide containers present | | | |
| • Pesticides stored off the floor and low to the ground | | | |
| • Liquid formulations have secondary containment | | | |
| • Feeds stored separately from pesticides | | | |
| • Used containers properly rinsed | | | |
| • Rinsed and unrinsed containers separated | | | |
| <i>Spills and disposal</i> | | | |
| • Storage area free from spills or leaks | | | |
| • Spill kit present and stocked | | | |
| • Floor drains sealed if flow to other than a holding tank | | | |
| • Holding tank in good condition and not full | | | |
| <i>Safety Information</i> | | | |
| • Safety equipment separated from pesticides | | | |
| • Fire extinguisher in good working order | | | |
| • First aid kit available | | | |
| • Phone available and emergency phone numbers posted | | | |
| • Storage room and windows locked | | | |
| • Storage area posted: "Danger Pesticide Storage Area" | | | |
| • Storage site well lit and ventilated | | | |