

DRI Pest Management Policy Statement

It is the policy of the Desert Research Institute to control structural and landscape pests by using Integrated Pest Management (IPM) practices. IPM is a comprehensive approach to controlling rodents, insects, weeds and plant pathogens with environmentally and economically sound practices.

IPM procedures will determine when to control pests and whether to use mechanical, physical, chemicals, cultural, or biological means. The full range of available controls, including no action will be considered. The use of a pesticide will be based on review of all available options and a determination that other options are not acceptable or are not feasible. Cost or staffing considerations alone will not be adequate justification to use chemical control agents and non-chemical pest management methods will be implemented whenever possible to provide the desired level of control. Applying IPM principles prevents unacceptable pest activity and damage by the most economical means and with the least hazard to people, property and the environment.

When it is determined that a pesticide should be used to meet pest management goals, the least hazardous materials will be selected. The application of pesticides is subject to the Environmental Protection Agency (EPA), the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), Occupational Safety and Health Administration (OSHA) regulations, and Nevada state regulations.

Pesticide applicators will be licensed and educated according to applicable regulations. Outdoor applications may be performed by either licensed contractor or DRI Facilities Operations personnel. Indoor applications of pesticides are subject to review by EH&S prior to application and may be performed by either licensed contractors or Facilities Operations personnel.

All uses of pesticides will comply with the attached Pesticide Use Policy. With the exception of research uses of pesticides, the DRI Director of Facilities Operations shall be responsible for the overall management of both indoor and outdoor treatments.

Attachment -- DRI Pesticide Use Policy

Introduction

Faculty, staff and visitors at the Desert Research Institute (DRI) have the right to know about potential exposure to hazardous materials, including pesticides. In addition, protection of the environment through the use of best management practices shall be considered prior to the application of pesticides. Storm water run off should also be protected from pesticide exposure to prevent unnecessary environmental exposures.

Objectives

This policy has two major objectives:

- To outline methods to inform DRI faculty, staff and visitors of campus pesticide uses.
- To outline methods to minimize unnecessary environmental exposure and pesticide-contaminated runoff from DRI lands.

Definitions

Pesticide: A pesticide is any substance or mixture of substances intended for preventing, destroying, repelling or mitigating any pest. Though often misunderstood to refer only to insecticides, the term pesticide also applies to herbicides, fungicides, and various other substances used to control pests. Under United States law, a pesticide is also any substance or mixture of substances intended for use as a plant regulator, defoliant, or desiccant.

Pest: Pests are living organisms that occur where they are not wanted or that cause damage to crops or humans or other animals. Examples include:

- insects,
- mice and other animals,
- unwanted plants (weeds),
- fungi,
- microorganisms such as bacteria and viruses, and prions

Applicability

This policy is applicable to the DRI's Reno, Las Vegas and Boulder City campuses. Facilities Operations personnel and private contractors providing pest management programs for these campuses are responsible for following the policy. Pesticide use in research is expected to abide by this policy's objectives, although alternative procedures may be allowed for the purposes of academic study. With the exception of recordkeeping and reporting (see below), this policy applies to both the indoor and outdoor use of pesticides.

Integrated Pest Management (IPM) includes:

- **Best Application Practices.** Pesticide applicators shall use a comprehensive approach to controlling pests by employing environmentally and economically sound practices that maximize effectiveness and safety and minimize environmental impact.
- **Continuously Improve Practices.** Applicators are to minimize pesticide risks by following current best practices and integrated pest management practices and by using the least hazardous pesticides whenever feasible. Through periodic training, applicators shall stay informed of current best practices.
- **Decide with Care.** The following factors should be among those considered with deciding to use pesticides: risks of pesticides to health and the environment; pest population; pest risks to health

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and safety; and potential for economic or aesthetic damage. Routine and preventive uses should be minimized where possible.

Informing the Campus Community

Informing faculty, staff and visitors of pesticide application may occur in one or more ways. Advance notification should be standard practice for planned routine application (and is a requirement to those individuals who have requested notice as part of a reasonable accommodation under the Americans with Disabilities Act).

- *Advance Notice.* At least one day prior to any planned or routine application send an email to potentially affected personnel and post perimeter of affected area.
- *Uncertain Date Notice.* Where standard advance notice of planned or actual application date is not possible, such as weather dependent spraying, the email notice should list the potential dates along with follow up notices of the actual date of application, when determined.
- *Immediate Notice.* An infestation that requires immediate attention and application may be necessary. Verbal notification to those in and adjacent to the affected area must occur followed by email notification to a broader audience.
- *Seasonal Notice.* Occasionally, multiple applications may be necessary during a portion of the year. A schedule of preventative maintenance applications should be developed and communicated at the beginning of the application season.

Supplementary Information

In addition to the notification procedures outlined above, faculty, staff and visitors should be informed of campus pesticide use by reasonable and effective means, such as:

- Posting signs where pesticides have been applied (for example, signs on areas frequented by people);
- Distributing posters, flyers or electronic mail to people who may frequent the application area
- Publishing a notice on employee safety bulletin boards or the internal Facilities home page.

Information to Include in Notifications

- The pesticide's common or brand name
- The date and time and place of application
- Any post-application or reentry precautions
- The date and time of reentry
- The person/company who will (or has) applied the pesticide
- The location of Material Safety Data Sheets for the pesticide

Recordkeeping and Reporting

DRI Facilities shall record and report all outdoor pesticide use and specify the use of any pesticides that may lead to runoff to the storm sewer system. Annual use records are to be submitted to EH&S and must include the total amount of pesticide used, why they were used and any special precautions taken. These reports will be used for public information and internal review. Private pest control contractors must also provide this information to EH&S

Because of the small quantities used and decentralization of purchasing records, internal reporting is currently not required for pesticides used in research. When such data is available, however, researchers are encouraged to report annual usage to EH&S

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Pesticide Use in Occupied DRI Buildings

All pest control measures by licensed DRI employees or contractors shall adhere to the following:

1. Minimize internal application by utilizing external management strategy or IPM practices
2. Internal spraying must not expose employees to hazardous vapors:
 - 2.1 Large area applications are to be conducted after hours when building is not occupied
 - 2.2 Limited "spot" applications may be performed, but personnel should leave the immediate area during application. Otherwise the appropriate personnel protective equipment must be used as stated on the label
3. Per the Hazard Communication Standard, building occupants have the right to be informed of pesticide use in their work area
 - 3.1 Materials Safety Data Sheets and label for each pesticide used must be readily available
 - 3.2 The schedule for application must be communicated effectively
 - 3.3 Employees must be informed of the type of application and unprotected employees should be instructed to leave the affected area during spray application
4. Only food safe pesticides will be used inside buildings that house employees or foodstuffs.
5. Pesticide residues will not be left on working surfaces (desks, tables, chairs, benches, etc.)
6. Only licensed applicators will select and apply pesticides using approved methods and following label requirements. Indoor applications are subject to EH&S review before application.

Practices for Spill Prevention and Response

Mixing, loading, emptying and rinsing of pesticide containers shall follow manufacturer's requirements and government regulations. Precautions must be taken to prevent spills and prepare for spill cleanup. These operations should be done on an impervious surface with secondary containment, such as a kiddie wading pool. A sufficient amount of spill absorbents should be readily available.

Pesticide users are responsible for clean up of any pesticide spills. If the spill is large or hazardous atmospheres may be present, an outside contractor will need to be employed in spill abatement.

All spills, regardless of size, must be reported to EH&S.

Practices for Waste Management and Minimization

Pesticide users should carefully plan their needs so that they purchase, store and prepare only amounts equal to their immediate need.

Researchers should minimize waste by accepting samples only in quantities for which they have immediate plans. Whenever possible, arrangements should be made to return left over samples to the generator.

Rinsate should be disposed by applying the material at or less than the prescribed application rates. Waste and surplus pesticides and spill residues may also be disposed of by appropriate application at application rates.

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Spill debris and larger quantities of waste and surplus pesticides generated by DRI activities may be disposed via the EH&S Department at no cost to the user.

DRI pesticide users should review their storage areas at least annually. Contact EH&S to arrange for removal of any surplus materials. Before declaring an unwanted pesticide as hazardous waste, contact the Nevada Department of Agriculture, 775-688-1180, for information on recycling options.

Contracted pesticide applicators are responsible for managing, removing and appropriately disposing of any left over pesticides, rinsates, or spill debris generated by their activities.

Compliance with Federal and State Laws

All DRI Divisions, pesticide users and their supervisors shall comply with Federal and State laws that apply to pesticide uses. These include, but are not limited to:

- Pesticides must be stored, handled and disposed in accordance with label directions (29 CFR 1910.1200, 40 CFR 150-189)
- Under some circumstances, persons who use pesticides must be trained or certified or be directly supervised by someone who has received formal training. (NAC 555.018)
- Pesticide applicators who apply (or are likely to apply) restricted-use pesticides must be certified through a Pesticide Applicator's Certification Program (NRS 555 and 586)