



Owner EH&S/Grounds	DOC. NO. ENV – IPM(AC)	REV. 01	DATE 05/01/2019
DOC. TITLE Integrated Pest Management Program (IPM)			

Integrated Pest Management Program (IPM) Amherst College – Buildings and Grounds

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Richard A. Mears

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1. Regulatory Authority(s)

- Federal Insecticide, Fungicide, and Rodenticide Act – Public Law 92-516
 - 40 CFR 150 - 189
- Massachusetts Pesticide Act – M.G.L. Chapter 132B

2. Regulations Applicable

- Massachusetts Pesticide Regulations – 333 CMR 13.00
- Occupational Safety & Health Administration (OSHA)
 - Worker Protection Standard 29 CFR 1910

3. Enforcement

- Civil administrative penalties of up to \$1,000, against any person(s) who violates these requirements.

4. Responsibility(s)

- It is the responsibility of Amherst College to develop, implement and maintain an effective IPM program that uses best management practices to protect persons, the environment and property by minimizing the use of hazardous chemicals and efficiently communicating programs, applications and information on the products used to the college community and other interested persons. This pest management and IPM program is the responsibility of Environmental Health & Safety (EH&S) and the Facilities Department.

5. Definitions

- **Integrated Pest Management (IPM)** - is a comprehensive strategy of pest control created in an environmentally responsible manner to reduce the need for reliance on chemical pesticides. It is a combination of pest controls; which includes the use of housekeeping practices, inspection, monitoring, sanitation and physical barriers, as well as the introduction of natural pest adversaries, plantings, control measures and responsible use of the most environmentally-friendly pesticides when necessary.
- **Agricultural Areas** – includes but is not limited to. Actively cultivated gardens, greenhouses, orchards, fields, pastures and other areas where herbicides might adversely affect the vegetation under or around the cultivation or agricultural management.
- **Anti-Microbial Pesticides** – are disinfectants and sanitizers, which include pool chemicals. They are utilized by EH&S, HVAC contractors and shops, as well as pool operators. Anti-microbial pesticides are exempt from the pesticide regulations, but their use must be included in the IIPM.
- **Botanicals** – are insecticides that are naturally occurring chemicals (toxic to insects) that are extracted or derived from plants or minerals. These minimum risk pesticide products are considered exempt from the requirements of being registered as a pesticide because the EPA has determined that they pose little to no risk to human health or the environment as indicated in FIFRA, section 25(b).
- **Childcare Center** - Any public or private facility operated on a regular basis whether known as a day nursery, nursery school, kindergarten, child play school, progressive school, child development



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center or preschool, or known under any other name which receives children not of common parentage who are not more than six years of age.

- **Commercial Certified Applicator** – personnel within the department of Athletics and Grounds at Facilities who have fulfilled their state regulatory requirements and have been determined by the Commonwealth of Massachusetts to be competent in the use and handling of pesticides. Commercially Certified Applicators must have proven their competency by demonstrating both practical and written knowledge, before certification is granted. Under the direction or supervision of the Commercial Certified Applicator, a non-certified applicator working for the college can carry out the application of pesticides
- **Emergency Waiver** – a single use waiver issued to the childcare center, school, or a school aged program by the Board of Health Agent, Health Department, or the Department of Food and Agriculture. It can only be issued in case of emergency and when there are no other viable alternatives to the use of chemicals.
- **Foliar Applications of Pesticides** – technique of treating plants by application directly to the leaves of the plant, through absorption
- **Indoor Pesticide Application** - An indoor pesticide application is one where the applicator is standing inside of the facility making a pesticide application, or one where the applicator is standing outside of the facility and making the pesticide application towards the interior of the building
- **MADCR – Massachusetts Department of Conservation and Recreation**
- **Pest** – A pest is any animal, disease, fungus, insect, nematode, rodent, weed or other form of terrestrial or aquatic life form that is injurious to other animals, farms, humans, plants, property, public health, structures, the environment, or interferes with economic activities such as but not limited to agriculture and logging.
 - **Public Nuisance Pests** - plant diseases, insects, and related pests which are declared to be “public nuisances” by the state. They include;
 - Gypsy and brown tail moths, tent caterpillars, cankerworms, oriental hag moths, fall webworms, Japanese beetles, pine loopers, and elm leaf beetles which damage forest and shade tree foliage;
 - Diseases and leaf eating and sucking insects which damage forests and shade trees; and
 - Beetles which spread Dutch Elm Disease.
 - **Turf Pest** – Any organism causing measurable deterioration in the esthetic or functional value of turf, such as, but not limited to diseases, insects, rodents and weeds.
- **Pesticide** - A pesticide is any substance or mixture of substances that is used to destroy, prevent, repel, or mitigate any pest and any substance or mixture of substances used as a plant defoliate, desiccate or growth regulator. A “pesticide” is any product (fungicide, herbicide, insecticide or rodenticide) that has the following on the container:
 - **EPA Registration Number:** a number assigned to the “pesticide” product, such as; EPA registration number 524-445 is Roundup Herbicide.
 - **Signal Words:** Caution (slightly toxic), Warning (moderately toxic), Danger (highly toxic).



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- **Protected Area**
 - Any academic, residential, commercial, school or other building where people gather and the area within a 100-foot radius surrounding these structures, not exceeding the property line.
 - Any developed recreation area open to public accommodation, including any developed public or commercial campground, developed picnic area, developed park and recreation facility, playground, school bus stop, or other area developed for organized recreation.
- **Signal Word** - found on pesticide product labels, and they describe the acute (short-term) toxicity of the formulated pesticide product. The signal word can be either: DANGER, WARNING or CAUTION. Products with the DANGER signal word are the most toxic.

6. Applicability

- The Building and Grounds IPM plan has been developed for all buildings and the grounds at Amherst College, which includes, but is not limited to; all academic, residential and associated facilities, as well as the athletic fields, grounds, the Golf Course and Rental Housing properties. This IPM program has been separated from the Woodside IPM program which is a standalone document specifically written for the Woodside Childcare Facility (School pre-K-12), which is located at 155 Woodside Ave. The IPM focuses on the elimination and reduction of sources of food, water and harborage for pests, both inside and outside of buildings at Amherst College.
- *Outside Contractors* - In accordance with the requirements of this IPM plan, and the above referenced federal and state regulatory mandates from which this plan was derived, outside contractors shall follow the protocols and procedures found here-in.
 - The Building and Grounds IPM plan has been created to eliminate health and safety threats to person(s), property and the environment at Amherst College, created by pests, as defined above.

7. IPM Program Implementation

- Amherst College has developed an IPM Program for both Woodside Childcare, as well as Building and Grounds. The IPM includes all of the following;
 - Creation of IPM policies
 - Identification of IPM Committees and Coordinator
 - Identification of a licensed pest control contractor who will;
 - Assist in maintaining the College IPM program and update the required state IPM plan, annually
 - Follow the IPM contracts and SOG's
 - Complete and monitor the required action, activity and monitoring reports and update the Pest Control Coordinator on all needed modifications.
 - Education and applicable training for all affected departments and personnel
 - Initiate corrective measures to reduce pest related issues and reduce the dependence on pesticides.



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8. General Requirements for IPM

- The use of EPA registered chemical pesticides, including those sold over-the-counter are not permitted for use at Amherst College (exterior or interior) unless it complies with the following IPM protocols.
- Amherst College shall make every attempt to use non-pesticide chemicals, (those that do not have an EPA Registration Number and a “signal word”) when treating a pest problem.
 - Pesticide applicator shall be certified or licensed by the (MADCR) to apply a pesticide
 - No pesticide shall be used in or around an Amherst College building, or to the grounds of the campus unless the presence of the pest has been identified and documented, or there is biological evidence of the pest, and that no other alternative, other than a pesticide can be used to eliminate the pest, as defined in the definition section.
- Amherst College has specific programs in place to further reduce the dependence on pesticides, which include physical separation and housekeeping practices. These programs and procedures can be found on the Amherst College EH&S website, for the following pest concerns; bats, bedbugs, mice and rodents, mosquitos, ticks and the Western Conifer Seed “Stink” bugs
- **Pesticide Applicators**
 - Pesticide applicators include, the Amherst College Pest and Wildlife Management Contractor, licensed Grounds and Landscaping personnel, as well as Custodial, EH&S Grounds and Landscaping staff and Pool Operators using pesticides that are considered exempt.
 - Pesticide applicators / contractors working for Amherst College shall provide the College with the necessary contracts, adequate insurance coverage verification and other associated materials, prior to beginning any work in or around the buildings, or on the grounds.
 - IPM contractors and/or service providers performing landscape renovation or reconstruction projects shall provide the College with appropriate documentation, including, but not limited to plans and specifications for pest-favorable conditions, suggestion for pest-proofing measures and inspection of, and correction for pests.
- **Pesticide Product(s)**
 - Amherst College is required to provide information on, as well as a list of all chemicals, including pesticides that are or maybe used on campus.
 - Chemicals, including cleaners, fertilizers, pesticides etc., can be found on the Amherst College EH&S webpage at the bottom of the site. Click on MSDS Online and select the chemicals by name or site.
 - <https://msdsmanagement.msdsonline.com/c6bf0c1b-58b5-469c-b0e5-43f32588529b/ebinder/?nas=True>
 - For pesticides that might be used in Buildings and Grounds go to Facilities / Building and Grounds / Building and Grounds (IPM)
 - For pesticides that might be used at Woodside Childcare go to Woodside Childcare / Woodside (IPM)
 - Amherst College makes the SDS for every chemical, including those that may be used by Facilities available 24 hours a day, 7 days a week. The SDSs are located online through MSDSONline.com which can be found on the Environmental Health and Safety website.



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- It is the responsibility of EH&S to review pesticide products and their intended application, prior to use.
- All pesticide containers are required to provide the following information on the container(s)
 - Product Name
 - EPA Registration Number, and
 - Common Name of Active Ingredients
- Pesticides shall not be located in any building, or grounds of Amherst College, except;
 - When being applied by a licensed pesticide applicator, or
 - Stored in a locked cabinet with access restricted to a licensed pesticide applicator
 - Pesticides found, stored or used on campus, not under the control of the licensed applicator, such as those purchased by faculty, staff and students shall be removed and disposed of through EH&S.
- **Fertilizers**
 - Fertilizers containing only nitrogen, potassium and phosphorus are not defined as pesticides and are not covered under this regulation. ***However...***
 - Fertilizers that contain herbicides (i.e. weed and feed products), and insecticides are pesticides, which are covered by this regulation.
- **Pesticide Notification(s)** for use of all EPA registered pesticides shall be issued as follows;
 - Notification shall be issued for any applications, informing building occupants.
 - The notifications shall be in writing, such as by e-mail to the Amherst College community and/or Woodside Childcare Director, or their designee.
 - The notification shall include...
 - dates of application and conclusion
 - locations of application
 - product name, type and EPA registration number
 - pesticide fact sheet
 - purpose of application description
 - All notifications of pesticide use shall be provided to affected persons not less than 3 days (72 hours) prior to application of the pesticide(s).
 - This requirement applies to both indoor and outdoor applications.
 - In the event that any pesticide use will continue for an extended period of time, such as a weekly, monthly etc., application, a notification will be made to the Amherst College community and/or Woodside Childcare informing them of same.
 - **Amherst Fire Department Notification**
 - If the pesticide (by itself or in combination with other substances emits or liberates a fume, gas or vapor), the applicator shall notify the fire department, through EH&S in compliance with the requirements of 527 CMR 1, section 10.21 - *Fumigation and Thermal Insecticidal Fogging*
- **Pesticides (Permitted Indoor Use)** by a licensed applicator is limited to the following;
 - Anti-microbial pesticides
 - Rodenticides placed in tamper resistant bait stations (secured to floor, wall etc.), or placed in inaccessible areas to children and the general public.



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- Ready-to-use dusts, gels or powder formulations of insecticide applied in inaccessible areas to children and the general public
- Insecticidal bait placed in tamper resistant bait stations or in areas inaccessible to children or the general public
- Termiticides used only in the presence of an active termite infestation and when non-chemical alternatives have been determined to be ineffective.
- When using indoor pesticides, the Pest and Wildlife Contractor shall;
 - remove all edible products, including beverages and food
 - remove or cover all bedding, clothes, toys etc.
 - remove all pets, their food, water, toys etc.
 - follow all of the manufacturers guidelines for use of the pesticide
- **Pesticides** (Permitted Outdoor Use) by a licensed applicator is limited to the following;
 - Pesticides used in accordance with the Amherst College Building and Grounds IPM plan.
 - Pesticides other than those classified as known, likely or probable human carcinogens by the USEPA or equivalently categorized by the Department.
 - Pesticide products that do not contain inert ingredients categorized as List 1: *Inerts of Toxicological Concern* or any equivalent categorization by the USEPA.
- **Pesticide Application(s) – Indoor**
 - Applicators of pesticides shall take all practical steps necessary to avoid applications with people present in the area(s) being treated.
 - If persons must occupy the room or area to be treated at the time of application, they shall be informed of the procedure.
 - Applications of disinfectants, algacides, antimicrobials, paints, stains, wood preservatives, insecticidal baits placed in tamper-resistant bait stations or in generally inaccessible locations, and applications to wall or floor voids are exempt
 - Foliar applications to, or bordering Amherst College buildings require the applicator to provide the college with a written statement shall include information on the applicable pesticide regulations, techniques that will be used to minimize human exposure, drift precautions that will be taken, and a recommendation that notification be provided to abutters who might be impacted by the application.
 - Rodenticides placed in generally accessible areas of indoor settings must be placed in tamper-resistant bait stations and must be secured in place so as to prevent lifting and/or removal of these bait stations.
 - The applicator must notify Amherst College of all post-application label requirements pertinent to the application.
 - The applicator shall provide pre-notification to any person upon request between seven days and 48 hours prior to any application of pesticides to areas which the individuals occupy or have access.
 - Pre-notification shall be made in writing, with the following information:
 - Name and phone number of the company making the application;
 - Proposed date of application;
 - Locations to be treated; and



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- Names, EPA Registration Numbers, and active ingredients for the pesticide products that may be used.
 - Exception – Pre-notification(s) may be waived for pesticide application(s), if there is an immediate threat to public health or safety
- Rodenticide bait stations shall carry a label which indicates the following:
 - Name and phone number of the company making the application;
 - Date of the application;
 - Name and EPA Registration Number of the pesticide product; and
 - Active ingredients in product.
- Upon completion of each application, the applicator shall provide Amherst College, and, upon request, the building residents and occupants, with the following information:
 - Name and phone number of the pest control company;
 - Name and license number of applicator;
 - Target pests;
 - Names and EPA Registration Numbers of pesticide applied; and
 - Date and approximate time of application.
- Amherst College is required to comply with the state and federal regulatory requirements for pesticides issued by the Massachusetts Department of Environmental Protection and the Federal Environmental Protection Agency.
 - In accordance with federal, state and local regulations, the following are required to comply with all applicable areas of the pesticide regulations;
 - Manufacturers
 - Distributors
 - Transporters
 - Facilities that use pesticides in all areas of their operations, including;
 - athletic fields and associated grounds and lawns
 - pest and rodent abatement
 - Facilities that use pesticides shall comply with the following FIFRA regulatory requirements in the area of worker protection, (OSHA) 29 CFR 1910;
 - Amherst College shall make first aid supplies and other safety equipment available in the areas where pesticides are mixed and stored.
 - Personal protective equipment must be provided to prevent worker illness or injury. When necessary eye, face, foot, hands and respiratory protection shall be provided by the employer.
 - Amherst College must also provide the necessary training to the employees who will be required to apply, handle, store and then dispose of pesticides, and
 - The employer must also provide a decontamination plan for the employees, in case of accidental leak or spill.
 - All pesticides, including fungicides, herbicides, insecticides and rodenticides must be properly handled at all times.



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- Disposal of materials that are considered to be old, outdated or surplus shall be disposed of through EH&S in a manner consistent with the requirements of the federal EPA
- In accordance with the state and federal regulatory requirements for pesticide application, Amherst College shall only permit trained, authorized and certified personnel to apply, handle, store and dispose of pesticides (all inclusive) on campus, both interior and exterior.
- **Non-pesticide applications**
 - If a pest issue has been identified in/or around a building, the following steps are taken:
 - The pest (insect, rodent etc.) is identified,
 - Steps are taken to exclude the pest, such as but not limited to improved housekeeping and/or physical separation.
 - EH&S responds with appropriate non-pesticide botanical applications, and
 - Notifies the pest and wildlife contractor about the steps taken to date, which may or may not include follow-up and additional inspections and/or treatments
- **Public Nuisance Pests (Control and Suppression)**
 - With the exception of Agricultural Applications, all plans to apply pesticides for the control of Public Nuisance Pests shall be subject to the following provisions:
 - No later than March 1st of each year, the Town Superintendent(s) shall forward to the Forest Health Program Director descriptions of all planned aerial and ground Control Programs to be conducted within the municipality for the control and suppression of Public Nuisance Pests between the last day of March of that year and the first day of April of the following year. Such descriptions shall be provided by the Town Superintendent on a standard form provided by the Bureau of Forest Fire Control and Forestry.
 - With the exception of Agricultural Applications, no Wide Area Application of pesticides shall be made for control of Public Nuisance Pests unless the following notification provisions are met:
 - The Applicant must publish a notice of the application in a newspaper of general circulation in the municipality where the application is to take place.
 - The notice must be posted no more than ten days, and no less than two days, prior to the proposed application, and may include alternative dates to be used in the event of improper conditions, provided that no application is made more than ten days after or less than two days after the notice has been published.
 - Notice shall include all of the following information:
 - Purpose of application;
 - Method of application;
 - Area of application;
 - Location where public may review maps delineating area of application;
 - Name and EPA Registration Number of pesticide product to be applied;
 - Approximate time of application;
 - Phone number of a contact person from whom additional information can be obtained; and
 - Locations where marking materials for areas of exclusion will be found



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- No later than ten days prior to the anticipated date of the application, such notice shall be forwarded to the Town Superintendent who shall post the notice in the city/town hall of the municipality where the application is to be made, and other locations as he or she deems appropriate. The town superintendent shall also forward this notice to the Board of Health, Chief Elected Official, as well as to the Pesticide Bureau within the Department, prior to the application.
- Exclusion for Application. Land may be designated for exclusion from applications made for the control of Public Nuisance Pests in accordance with the requirements of 333 CMR 13.

9. Departmental Responsibilities

○ Housekeeping and Pest Prevention

- A majority of pest related problems can be corrected by following appropriate housekeeping practices, separate from, or in combination with EH&S and/or the Pest Management contractor.
 - Problems associated with pests can be controlled by eliminating access, food, harborage or water from the identified pest(s).
 - Inspect for and correct access issues by sealing openings, repairing or replacing screens and fixing door related issues such as self-closures and sweeps
 - Eliminate food sources by properly packaging food items in durable plastic or similar containers.
 - Bags and boxes will not suffice
 - Eliminate standing water whenever and wherever possible, including sinks, puddles, shallow pools etc.
 - Repair clogged drains and leaks to reduce water sources
 - Eliminate all areas of harborage, such as empty boxes, paper and other cluttered areas where pests like to reside.
 - Inspect and properly maintain waste disposal areas such as dumpsters, recycling and waste disposal areas and areas of composting
 - Keep dumpsters and other waste containers closed and in good condition. Fix damage and seal holes to prevent unwanted entry.
 - Dumpsters should be placed far away from buildings, especially building entrances and windows

○ Inspections and Cleaning

- Building maintenance, custodial and dining services staff, as well as EH&S should frequently inspect and properly maintain areas to prevent pest related concerns.
 - Inspect (at least weekly), especially areas where pests can or are found to be problematic and...
 - Modify housekeeping practices (as needed),
 - Clean the affected areas as recommended



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- Report the pest related problems and corrective actions to the Service Center and/or EH&S for referral to the Pest Management Contractor
- **Building and Landscaping Protocols**
 - Pest problems around buildings are usually unknowingly created, and are beyond the control of the pest management contractor. The IPM program must include collaborative efforts to minimize the risk of pest access and associated problems.
 - Bushes and plants placed in close proximity to the building provides shelter for unwanted pests.
 - Recommendation of clearance from ground to foliage is 12”
 - Wood chips and mulch allow for burrowing, harborage etc. for both insects and rodents
 - Minimize use of wood related products against buildings.
 - Consider use of stone or similar product from foundation at least 18 – 24”, at least 6” in depth
 - Trees should not be placed in close proximity to building(s) as branches will allow access by squirrels and other pests.
 - Tree roots can also damage foundations, providing another point of access
 - Tree leaves along a building will also allow for unwanted harborage
 - Vines should not be permitted to climb buildings or trestles as they contribute to both building damage and pest access
 - Do not place plants that shed fruits or seeds against buildings as this also encourages unwanted pest access.
 - Lighting should also be taken into consideration.
 - Lights placed close to a door will attract pests. Consider placement that will allow for adequate lighting at doorways, but will keep insects etc., at more of a distance.
 - Also consider the color of the lighting, as yellow lights are less attractive to insects than are the blue or white lights.
- **Residential Properties**
 - No applications of pesticides shall be made for the control of turf pests on residential properties without the following;
 - the pesticide applicator or their employer shall provide Amherst College with a written statement approved by the MADCR.
 - Upon completion of each application, the applicator shall leave at the residence a written statement containing the following information:
 - The name and license/certification number of the applicator;
 - The names and EPA Registration Numbers of the pesticide products that were applied to the property and for what purpose;
 - Any precautions indicated on the labeling relative to post-application requirements; and
 - The date and time of application.



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- Prior to commencing each application, the applicator shall post a sign or signs, approved by MADCR, on the turf intended for treatment. The applicator must leave such sign(s) posted on the property and shall instruct the customer that signs should neither be removed sooner than 24 hours after the application was made nor left up for more than 72-hours. Signs must be posted at conspicuous points as indicated in the “Pesticide Postings” below.
- **Amherst Golf Club**
 - No application of pesticides shall be made for the control of turf pests on public or private non-residential properties without the following provisions:
 - Prior to application of pesticides to public or private nonresidential turf, or prior to renewal of an existing agreement to apply pesticides to public or private non-residential turf, the applicator shall provide the Golf Professional with information about the applicable fertilizers and pesticides used.
 - If the Golf Professional has concerns or questions about the application of pesticides, they should contact the Office of Environmental Health and Safety at Amherst College.
 - The applicator shall provide the Golf Professional with the opportunity to request prior notification from the applicator for each application made to the golf course.
 - After each application, the applicator shall notify the Golf Professional, property manager, or turf superintendent of the application including the information provided for in 333 CMR 13.06
 - Prior to commencing each application, the applicator shall post a sign or signs, approved by the Department, on the turf intended for treatment. The applicator must leave such sign(s) posted on the property and shall instruct the Golf Professional, property manager, or turf superintendent that signs should neither be removed sooner than 24 hours after the application was made nor left up for more than 72 hours. Signs must be posted at conspicuous points as indicated in the “Pesticide Postings” below.
 - In addition to the requirements referenced above, the following shall apply to the application of pesticides made for the control of turf pests on golf courses:
 - All records of pesticides application made for the control of turf pests on golf courses shall be kept on-site and made available to any individual upon a reasonable request.
 - Records shall include the SDS’s for all chemicals, including pesticides.
 - It is the responsibility of the Golf Professional, or their designee to keep the SDS inventory up-to-date, and provide EH&S with a copy of the SDS for any new or altered/modified product being used.
 - Prior to commencing each application, the applicator shall post signs, approved by the MADCR. The applicator must leave such signs posted on the property and shall instruct the Golf Professional, property manager, or turf superintendent that signs should neither be removed sooner than 24 hours after the application was made nor left up for more than 72 hours.
 - Signs must be posted at the following points:



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- At the location where individuals must register or sign in before use of the turf;
- At the first tee; and
- At the tenth tee, if applications are made to turf that is used to play or access holes ten through 18 of the course.

10. Pesticide Postings

- **Pesticide Postings** (warning signage) for the applications of pesticides shall be;
 - placed near and along the perimeter of the site(s) being treated.
 - the signs shall be placed not more than 200' apart, and
 - at every entrance to the site, including, but not limited to drive(s) and walk(s)
 - be posted between 2 and 24 hours prior to the application
 - be left in place on site for at least 72 hours after application

11. Specialized Pest Management Protocols

- **Mosquito Control and Larvicides**
 - When applicable, if mosquito or mosquito related issues such as, but not limited to Eastern Equine Encephalitis (EEE), West Nile Virus (WNV) are identified, Amherst College will identify problematic areas and mitigate the hazard(s) by;
 - When possible, eliminating the stagnant water sources, and/or
 - Application of a mosquito larvicide, which is class as a category IV exempt pesticide by the US EPA, provided the application of same follows the requirements of the manufacturer and M.G.L., chapter 252
- **Termites** (Subsurface applications of Termiticides)
 - Application of Termiticides shall be done in accordance with the requirements of 333 CMR 13.05, which includes;
 - Certification of Termiticide Applicators, who must be certified by the MADCR in Category 43 – Termite and Structural Pest Control
 - Termiticides shall not be injected beneath concrete slabs or other flooring until intra or sub-slab ducts, electrical services and water lines, including sewers have been determined and made safe.
 - Treatment of areas outside the perimeter of buildings which have basements or crawl spaces which extend below the level of outside grade and which have holes, cracks or voids which may allow infiltration of the pesticides can be made safe by the applicator.
 - The contractor must supply Amherst College with a MADCR approved Consumer Information Bulletin on Termite Applications



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12. IPM Committee, Coordinator, Pest Management Contractor and Board of Health

- **IPM Coordinator – Amherst College**
Richard A. Mears
Environmental Health & Safety
6 East Drive
Amherst College
Amherst, MA 01002
(413) 542-8189 (Office)
(413) 530-8782 (Cell)
(413) 542-2291 (Amherst College Police Department)
- **IPM Committee (Amherst College)**

Carpentry Shop	David White
Chemical Hygiene Officer	Jason Williams
Design & Construction	Aaron Hayden
Dining Services	Douglas LaPlante
Environmental Health & Safety	Richard Mears
Grounds and Landscaping	Kenny Lauzier
Health Services	Shirley Moe
Mechanical Shop	Guy Cote
Pest Management Contractor	Jared DeBettencourt (Minuteman Pest & Wildlife Control)
- **Pest Management Contractor**
Minuteman Pest & Wildlife Control
90 Conz St.
Northampton, MA 01060
(413) 586-1009
(413) 549-1800
- **Amherst Board of Health**
Julie Federman,
Public Health & Community Services Director
Jennifer Brown
Public Health Nurse
(413) 259-3077 (Office)

13. Specific Pests – Amherst College

- **Pests**
Include, but are not limited to; animals, ants, bats, bedbugs, bees, disease(s), fungus, hornets, insects, mice and other rodents, mosquitos, nematodes, ticks, silverfish, spiders, wasps and weeds, including vines or other form of terrestrial or aquatic life form that is injurious to other animals, farms, humans, plants, property, public health, structures, the environment, or interferes with economic activities such as but not limited to agriculture and logging.

Honey Bees

- *No person shall use a pesticide, or other means to eradicate, or otherwise cause harm to “Honey Bees” at Amherst College*



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- *In the event Honey Bees have to be removed from a building, or from the grounds, Amherst College shall enlist assistance of a qualified beekeeper*
- *In addition to the above, no person shall apply pesticides, which bear a warning statement on the label concerning bees, to fruit trees, alfalfa, clover, or trefoil grown as field-crops while in bloom without making reasonable inquiry as to the presence of apiaries on the premises or within a 2.5-mile radius of the application site.*
 - *If apiaries are found to occur within 2.5 miles of the application site, the applicator shall provide 24 hours' pre-notification to owners of the apiaries. Reasonable inquiry shall consist of obtaining a current Apiary list from the MADCR and checking with known agricultural establishments within a 2.5-mile radius of the application site to determine if pollinator hives are on-site.*

- **Building and Grounds Chemicals**

See MSDS Online at https://www.amherst.edu/offices/enviro_health_safety

- **Building and Grounds IPM Logs**

Amherst College Service Center (Facilities, 6 East Drive) – Minuteman Pest Control Log(s)
Amherst College Facilities, Grounds and Landscaping (Facilities, 40 Dickinson St)

14. Massachusetts Department of Agriculture Resources

- 251 Causeway Street, Suite 500
Boston, MA 02114
Phone (617) 626-1700
Fax (617) 626-1850
- **Pesticide Bureau**
 - Massachusetts Department of Agricultural Resources
251 Causeway Street, Suite 500
Boston, MA 02114
[Email the Pesticide Bureau](#)

15. Building and Grounds – Standard Operating Guidelines (SOP)

- **Industrial, Institutional, Structural and Health Related Pest Control**
 - Application of fungicides, herbicides, insecticides, pesticides and rodenticides in the following areas shall be performed by a certified, licensed and fully insured commercial applicator, approved of by the Commonwealth of Massachusetts.
- **Supervision of Non-Certified Amherst College Applicators**
 - Certified applicators whose activities include a supervisory role must demonstrate written and practical knowledge of the federal and state supervisory requirements, including those for labeling of pesticides by non-certified applicators. The availability of a certified applicator must be directly related to the hazards of the situation:
 - In situations where the certified applicator is not required to be physically present "direct supervision" shall include verifiable instruction to the competent person, as follows:
 - Detailed guidance for properly applying pesticides, and
 - Provisions for contacting the certified applicator in the event they are needed.



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- In situations or state restrictions on use require it, physical presence of a certified applicator shall be required when application is made by a non-certified applicator.
- **Acquisition of Fungicides, Herbicides, Insecticides, Pesticides and Rodenticides at Amherst College**
 - In accordance with past practice, our pesticide management plan and the guidelines set forth by EH&S and the IPM Committee, the purchase of bulk or large quantity pesticides, including bug, hornet and wasp sprays shall be managed by EH&S or the Department of Grounds and Landscaping
 - As required, only those individuals who hold a certification for commercial application or those non-certified applicators operating under the direction of a certified applicator will be allowed to obtain fungicides, herbicides, insecticides, pesticides and rodenticides.
 - Amherst College, for reasons of health and safety, as well as liability shall require that only properly trained and certified employees of the college handle these materials. The certification specified above must be sub-category specific for the type of pest to be treated (*i.e. Agricultural, Aquatic, Forest Ornamental, Right-of Way, Seed and Turf*).
- **Storage Facilities**
 - Areas and buildings utilized for the storage and / or mixing of pesticides shall be located such that accidental discharges, leaks, ruptures and spills will not adversely affect water (*i.e. drinking, ground or surface*). In accordance with federal and state regulatory requirements, pesticide storage shall be located...
 - at least 400' away from a private or public drinking water supply
 - at least 200' away from surface water - a greater distance is required in areas of sandy soil or fractured bedrock
- **Pesticide storage areas should be located...**
 - away from direct sunlight
 - in an area that does not a temperature range that is less than 40° F and greater than 100° F
 - inside a building so as to protect it from temperature exposures, water, the possibility of cross contamination and unauthorized access and use.
- Pesticides shall be stored compatibly:
 - Fungicides, herbicides, insecticides, and rodenticides must be physically separated by at least 10' in accordance with state and federal regulatory requirements.
 - In the original container with appropriate label and hazard type, or
 - In a container specifically designed for the material it is to contain, provided the exact (full name) of the pesticide is identified on the label along with the appropriate hazard (*i.e. corrosive, ignitable, reactive, toxic*).
 - Off the ground to prevent water infiltration and cross-contamination
 - Away from fertilizers, food, potable water supplies, seeds, emergency response equipment and personal protective equipment
 - Out of direct sunlight and elevated temperatures
 - For not longer than two (2) years
 - In cabinets, in storage containers or placed upon impermeable shelves (painted wood or steel)
 - In adequate secondary containment in cases of discharge, leak, rupture or spill



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- In areas or buildings that are clearly identified as being used for the storage and mixing of pesticides.
 - signage shall appear on the exterior side of the main entrance door or on the garage doors so as to properly warn incoming emergency response agencies.
 - an Amherst College Safety Information Card shall be used for this purpose and to provide information about the materials within and the personnel responsible for their quantity and placement.
 - an NFPA 704 diamond shall appear on the doors to warn incoming emergency response personnel as outlined above.
- **The Pesticide Storage Area shall also be equipped with:**
 - An Emergency Action Plan. The plan must be made available to all emergency response personnel, before an incident takes place. The plan must include;
 - Facility Layout
 - Fuel Storage Tank Locations
 - Fire Hydrant and Extinguisher Locations
 - Sanitary and Storm Sewer Locations
 - Any nearby wetlands, ponds, rivers and streams
 - Location of Emergency Equipment and Supplies
 - First Aid Kit and Emergency Shower / Eyewash Locations
 - What to do if the Pesticide Storage Facility is involved in flame
 - At least one (1) 10 lb. ABC Fire Extinguisher located outside the area used for the mixing or storage of pesticides.
 - Safety Data Sheets (SDS), which are located on the EH&S website
 - A list of all pesticides in storage. The list should include...
 - the most significant quantities of material that will be on hand at any given time.
 - location of all pesticides and maps to better identify site
 - shall be identified in full names (no abbreviations are permitted) with type of hazard on the container
 - An Amherst College Safety Information Card that is placed upon the doors to the pesticide storage and mixing area for hazard identification and for the purpose of notifying the persons responsible for, or most knowledgeable of the area and storage.
 - Other appropriate signage (i.e. NFPA 704 diamond and No Smoking) shall also be included.
- **Mixing Facilities**
 - It is the policy of Amherst College Facilities to limit the quantity, storage and disposal of pesticides on the campus. Pesticides are most often purchased on an as needed basis.
 - Pesticides used in amounts greater than that of incidental use are ordered and then applied at the time of delivery.
 - Unwanted, outdated or inherently "waste like" materials are disposed of as soon as they are discovered
 - Contact EH&S at 413-542-8189 for proper disposal requirements.



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- Mixing of pesticides and other associated chemicals must be performed under the direction of an Amherst College employee with a current “Commercial Applicators” certification. The mixing facilities shall have the following for health and safety reasons;
 - appropriate, fitted personal protective equipment (PPE), including eye protection
 - adequate ventilation in the storage / mixing area to reduce adverse chemical exposure to the pesticides
 - an accurate calculation of the pesticides, before mixing them into a solution for proper application.
 - adequate lighting sufficient to perform associated work
 - a water spray capability for mixing (when necessary) that is protected by the required backflow prevention device - hoses used for the above purposes must be removed from the sink to prevent accidental cross-contamination of the water supply to the building
- **Restricted Use Pesticides**
 - Amherst College has one (1) restricted use pesticide on campus. The material is a fungicide that is applied by a commercially certified applicator, or a non-certified person working under the direction of a commercially certified applicator. Other pesticides utilized by the college include, but are not limited to;
 - Tupersan
 - Sitron
 - Pesticides containing Chlorothalonil
- **Pesticide Treated Areas**
 - Areas that have been treated with pesticides shall (when applicable) be posted. The signage will indicate "Pesticide Application" - "Keep off the Grass." Also, any drains in the immediate area of pesticide applications shall be covered (i.e. Rubber matted) or otherwise protected to prevent accidental spillage into the environment.
- **Training**
 - All Amherst College employees who do or wish to handle, use and dispose of pesticides on campus must receive training provided by a certified trainer. The trainer must have completed a pesticide safety train-the-trainer program that has been approved by the state DEP or Federal EPA. The training must have been given orally or by using audio-visual means, but there must be a presenter on site to answer any questions. The training must include;
 - Reading Pesticide Labels
 - Knowing the adverse health effects of the materials being used
 - Routes on how the pesticides enter the body
 - Signs and symptoms of Pesticide poisoning
 - Emergency First Aid procedures
 - How to obtain emergency medical care
 - Use of Personal Protective Equipment (PPE)
 - Safety Requirements for handling, storing, using and disposing of pesticides
 - Environmental concerns
 - Warnings about improper use of pesticides and pesticide containers



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- Trainees must be at least 18 years of age. Employees looking for certification as a "Commercial Applicator" must have a minimum of two (2) years relevant experience, hands on or academic. The Department of Public Safety will conduct written examinations, and, when appropriate performance testing to determine applicator competence in the use and handling of pesticides. Both the practical and written portion of the examination will have to be successfully completed before the department will grant certification.
- **Certification or License Renewal**
 - Forms for renewal or re-certification will be mailed to "Commercial Applicators" at least 30 days prior to the due date. Certifications and licenses may be renewed annually for up to three (3) years without re-examinations or retraining provided;
 - conditions of the license have not changed and that the certification did not lapse
 - the Department of Environmental Protection has not introduced or required additional training or examinations for any new pesticide use, handling or disposal procedure, the introduction of newly restricted materials which have new and greater precautionary requirements in their labeling under the direction of the federal EPA.
 - The Department of Environmental Protection has not required rectification, relicensing or additional instruction for the protection of human health and the environment.
 - **Retraining requirements for all "Certified Applicators" must at the end of a three (3) year period be recertified either by;**
 - **Re-examination**, or
 - **Attendance**, within the three (3) year period, at training programs approved by the Department of Environmental Protection, to;
 - Ensure that they continue to meet the requirements of changing technology covering uses for which they are certified.
 - Ensure that they maintain a continuing level of competence and ability to use pesticides safely and properly, and
 - Ensure that they are familiar with changes in local, state and federal regulations.
 - Contact hours, which are needed for rectification, must be obtained every three (3) years prior to expiration of certification. The number of contact hours for each type of certification is as follows;
 - Commercial Certification 12 hours per category
 - Private Certification 12 hours per category
 - Commercial Applicator License 6 hours
 - Each contact hour is equal to 50 minutes of training
 - Subjects that are required to be covered as part of the continuing education plan must include those that are identified in 333 CMR 10.08 (h).
- **Insurance Requirements**
 - Amherst College is required by the Department of Environmental Protection to submit an applicant's application an attestation by an insurance broker certifying that the insurance policy coverage in force and issued on behalf of the College meets or exceeds that



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standards set forth in 333 CMR 10.13, Financial Responsibility. All insurance information kept by the College shall be made available, upon request, to any local, state or federal inspector that may request such information.

- The Facilities Purchasing Agent and the Office of the Facilities Management and Planning shall have copies of the insurance information.
- **Recordkeeping Requirements**
 - All Amherst College certified "Commercial Applicators" are required to keep true and accurate operational records containing at least the following information;
 - Places of Application
 - Dates of Application
 - Brand or registered name of pesticide
 - The EPA registration number of the pesticide
 - The amount of pesticide applied
 - The purpose for which the pesticide was applied
 - Method of Application
 - A list of the certified or licensed employees recognized by the Department of Environmental Protection
 - Accidents or incidents involving pesticide use
 - The amount of liability insurance carried and the name of the insurer
 - Any licenses or injuries caused by or suspected to have been caused by pesticides and reported to the applicator.
 - Annual reports and records may be requested and turned over to the Department of Environmental Protection. Annual submittal of all records is outlined in 333 CMR 10.14.
 - The Department of Environmental Protection shall require Amherst College to immediately report in not more than 48 hours any significant accidents, incidents, injuries or illnesses that may have been caused by the pesticides, as outlined in 333 CMR 10.14.
 - Recordkeeping, as it pertains to the IPM plans must be maintained by the College, Facilities Department (Grounds and Landscaping / Service Center) for a minimum of **3** years

16. IPM Emergency Reporting Procedures

- **Fire / Smoke Condition**
 - For small scale fire and smoke conditions, follow the normal reporting procedures for Amherst College;
 - Close the door to contain the fire or smoke
 - Alert other person(s) in the area
 - Pull the Fire Alarm and Phone Amherst College Police Dept. - (413) 542-2111
 - Evacuate the building and report to your designated "accountability area"
 - Amherst College has taken the position that a fire in a pesticide storage facility that has already become fully involved shall be sacrificed in its entirety - smoke and flame have less of a negative environmental impact than does contamination of the ground water
- **Medical Emergency**
 - Report any illness or injury that requires more than a Band-Aid ® to the Amherst College Police Department at (413) 542-2111



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- In the event of a chemical / pesticide exposure, make sure that the Police Department is aware of the chemical / pesticide, if possible, and what is being done to remove the chemicals from the patient. Ambulance and fire department will be required on scene.
- **Leaks, Spills and Ruptures**
 - In the event of a discharge, leak, rupture or spill involving a pesticide, the primary responsibility of the person who discovers said incident shall immediately:
 - **Notify the Amherst College Campus Police at 413-542-2111**
 - Dispatcher should first dispatch a police officer reminding the officer that this is a known or potential hazardous materials incident.
 - The dispatcher should then (by caller or 1st arriving officer) determine if persons on the scene are either ill or injured. If so, Contact:
 - Amherst Fire Department
 - Request an ambulance
 - After the fire department has been notified for either ambulance or fire, the dispatcher should then call, page or radio the office of Environmental Health & Safety for hazard mitigation.

17. IPM Documentation Reporting Procedures

The Integrated Pest Management Contractor shall report the following to the Amherst College Integrated Pest Management Coordinator:

- Action Plan
 - The Integrated Pest Control Contractor shall provide the Amherst College Integrated Pest Management Coordinator with a plan for the facility treatments. The plan shall be an all-inclusive inspection with identified corrective action for the buildings, the grounds and other applicable areas of Amherst College.
- Activity Report
 - The Integrated Pest Management Contractor shall provide the Amherst College Integrated Pest Management Coordinator with periodic reports of the contractor's activities. The reports shall contain recommendations and areas of corrective action, including date, names of pesticides utilized, licensed or certified applicator(s) and the facilities treated.
- Inspection Report
 - The Integrated Pest Management Contractor could utilize their own comprehensive Inspection Report Forms, and shall provide the College with a copy of this report, as well as the Action and Activity Reports.
- Monitoring Reports
 - Any monitoring Reports shall be forwarded to the Amherst College Integrated Pest Management Coordinator for review, documentation and record-keeping purposes.