# IPM PLAN

# SLU Integrated Pest Management Plan

#### Abstract

The Integrated Pest Management (IPM) Plan covers prevention and control of pests in buildings and associated grounds owned by SLU. Updated February 15th, 2022

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# ST. LAWRENCE UNIVERSITY INTEGRATED PEST MANAGEMENT PLAN

### **SECTION 1: Scope**

St. Lawrence University (SLU) first adopted an integrated pest management (IPM) program in 1993, through a recommendation by the Campus Safety Committee to the President. The Integrated Pest Management (IPM) Plan covers prevention and control of pests in buildings and associated grounds owned by SLU.

The Plan addresses environmental best practices for:

- Grounds integrated pest management Ornamental and Turf
- Indoor integrated pest management Structural/Buildings

# **SECTION 2: Goals**

Pests can pose significant problems to people, property, and the environment. Pesticides pose additional risks. By reducing reliance on pesticides and incorporating low-risk control options, Integrated Pest Management (IPM) reduces both pests and pesticide risks. It is therefore the policy of SLU to incorporate IPM procedures for controlling pests.

Pest management objectives:

- Maintain a safe and sustainable campus environment.
- Protect human health by suppressing pests that threaten public health and safety.
- Reduce exposure of humans to pesticides.
- Reduce or prevent pest damage to school properties.
- Reduce environmental pollution.
- Reduce the costs of pest management.
- Prevent pests from spreading beyond campus property.
- Enhance the quality of life for students, staff, and others using school property.
- Comply with state and federal codes and laws.
- Minimize the institutional risk and liability related to pest management.

When chemical applications are needed, all pesticides used by must be registered with the U. S. Environmental Protection Agency, and the New York State Department of Environmental Conservation. Chemical control methods shall not be applied unless visual inspections or monitoring devices indicate the presence of pests in a specific area. Preventive chemical control treatments in areas where there is potential for insects or rodents will be evaluated on a case-by-case basis. When the application of chemical control products is necessary, the contractor shall employ the least hazardous materials, most precise application techniques and the minimum quantity of pesticide necessary to achieve control.

# **SECTION 3: Description of Program**

IPM is a process for achieving long-term, environmentally sound pest suppression and prevention through the use of a wide variety of technological and management practices. Control strategies in an IPM program include:

- Routine monitoring for presence of pests.
- Structural and procedural modifications to reduce food, water, harborage and access used by pests.
- Non-pesticide technologies such as trapping and monitoring devices.
- Coordination among all facilities management programs that have a bearing on the pest control effort.
- As a last resort, pesticide compounds, formulations and application methods that present the lowest potential hazard to humans and the environment.
- Evaluating the effectiveness of pesticide application.

# **SECTION 4: Responsible Parties**

Bob Hance, (Facilities Operations), Melissa Miller, (Facilities Operations); Bruce Streeter (Facilities Operations; Ryan Strate (Facilities Operations); Marcus Sherburne, (Facilities Operations); with support from (vacant) Director of Sustainability and Suna Stone, (Chemical Hygiene/Environmental Compliance Officer), are responsible for developing and implementing the IPM Plan. Marcus Sherburne also develops the annual IPM Plan for Grounds.

Contracts with pest and landscape management vendors shall include language describing their role in the University's Plan. Contractors involved with various elements of the Plan shall carry out their tasks according to their contracts, and report all relevant activities to the Responsible Parties.

The Safety Committee will review proposed IPM plans for buildings and grounds annually and is responsible for approving the use of pesticides as outlined in those plans.

IPM strategies for the entire property include actions performed by the following contractors:

- Lincoln Pest Control (Structural pest control in campus buildings)
- TTS Tree Service (Trees and shrubs)
- Laurentian Properties LLC/St. Lawrence Golf & Country Club (Ornamental and Turf)

### **SECTION 5: IPM Plan Review**

The responsible parties shall periodically evaluate the success of the Plan. This evaluation includes producing and providing a report on an annual basis to the Safety Committee. Annual reports shall include an evaluation of the performance, safety, cost and environmental/public health benefits achieved as a result of its implementation.

# SECTION 6: Occupant and Custodial Reporting System

The Facilities Operations Managers, with support from the director of sustainability (vacant) and Chemical Hygiene/Environmental Compliance Officer will educate and encourage all occupants, cleaners and custodians regarding the proper protocol when addressing any pests in or around the buildings on our main campus. Individuals will be advised to submit a work order whenever evidence exists of a pest infestation. Work orders can be submitted online at: <u>https://www.stlawu.edu/facilities/work-orders</u> or by calling Jennifer Link at (315) 229-5601.

The work order will be processed and attended to within a week for non-emergency situations. Lincoln Pest Control is on campus monthly to check on buildings and attend to concerns. For emergency situations such as bed bug infestations, rodents or bats in buildings, response will be within 24 hours of the initial report.

# **SECTION 7: Least-Toxic Pesticides**

Least-toxic pesticides are defined by the City of San Francisco's Hazard Tier 3 criteria (least hazardous). The Guide to San Francisco's Reduced Risk Pesticide List outlines a strategy for assessing the risk of pesticides.

https://sfenvironment.org/sites/default/files/fliers/files/sfe\_th\_guide\_to\_reduced\_risk\_pesticide\_l istposted.pdf

Least-toxic pesticide status also applies to any pesticide product, other than rodent bait, that is applied in a self-contained, enclosed bait station placed in an inaccessible location, or applied in a gel that is neither visible nor accessible.

The Chemical Hygiene/Environmental Compliance Officer will review all products to verify they meet least-toxic status.

# SECTION 8: Grounds IPM Strategies and Practices for Ornamentals and Turf

The Grounds Manager will select native, disease and pest resistant species. St. Lawrence personnel then manage outdoor plantings through hand-weeding and raking, organic mulch application, and application of pesticides only on a needed basis. Pesticides will not be applied for solely cosmetic reasons. Contractors and Grounds staff will follow best practices for judicious trimming and thinning trees and shrubs to maintain plant health. The Director of Grounds will follow a turf management plan to maintain good soil health to promote healthy and safe lawns, turf athletic fields, shrubs and trees.

#### 8.1 Summary of IPM (non chemical) practices:

- Select plant species appropriate to the hardiness zone and site.
- Avoid mono-culture practices by promoting plant diversity with native species.
- Cut lawns no shorter than 3 inches and manage thatch.
- Fertilize and irrigate lawns/shrubs/trees as needed.

- Avoid physical damage from string trimmers and mower decks.
- Mulch and compost when possible.
- Prune and thin as needed.
- Use horticultural oil, surfactants and biological controls whenever possible.
- Target pesticide use only at problem areas.
- Do not apply herbicides/pesticides (H/P) prophylactically.
- Apply pesticides during "off hours" or "low-use" times (e.g., Fri evening, vacations, etc.)
- Inspect lawns/shrubs/trees regularly.
- Get advice when needed maintain continued training.
- Emphasize safety and record keeping.

When the above measures are inadequate to accomplish the goal of a well maintained campus grounds, the use of herbicides/pesticides may be permitted according to the regulations and plans approved by the University Safety Committee

#### 8.2 Grounds Annual IPM Plan

Prior to February 1 of each calendar year, the Director of Facilities Operations will develop a written program of turf/plant maintenance and submit the plan to the Safety Committee for approval. The Director may delegate this task to the Assistant Director of Grounds & Campus Support.

The plan shall include, but not necessarily be limited to, the following points:

- a. A list (or table) of weed/pest problems to be considered for chemical treatment and the reason(s) for consideration.
- b. The H/P product(s) to be used, target date of use, method of application, wind/weather constraints, and personnel protection equipment (PPE, e.g., gloves, eye protection, garments) needed for each.
- c. The prospective use of outside contractors. SLU will require written agreements with all outside contractors and, as an integral part of the specifications, will specify that the contractor will adhere to all applicable laws related to the application of the products utilized, as well as to relevant University guidelines. Outside contractor is defined as any person(s) or company(s) not employed by SLU.
- d. The need for having "repeat" or "ad hoc" applications. No unplanned or emergency applications of products will take place without the prior approval of at minimum an ad hoc group of Safety Committee members. If the application proposed is a repeat application due to an unsuccessful result, the plan must indicate the reason for the initial applications failure and the measures taken to ensure that the repeat application will be successful.
- e. The approach for assuring that every effort is being made to reduce applications to minimal levels. For each weed/pest indicated on the proposed plan, explain what non-H/P alternatives were considered and the reasons for not choosing the alternatives.

- f. Providing evidence that personnel involved with the application of materials and management/oversight of the IPM program are appropriately trained or certified.
- g. A review of results from the previous year's plan including:
  - The application data form of each material application as an addendum. Application data will be logged using Appendix A, "Grounds Pesticide Application Form."
  - A running 5-year history, including a coded campus map, of H/P applications so that the Safety Committee can assess the overall and long-range effectiveness of the Grounds IPM program.

#### 8.3 Use of licensed applicator

All use of herbicides and pesticides on ornamentals and turf will be performed by a licensed pesticide applicator under the business registration of Laurentian Properties LLC/St. Lawrence Golf & Country Club.

#### 8.4 Notification of pesticide application to turf and ornamentals

The grounds manager will publicize, at least 5 days in advance, of the scheduled application(s) for any given **week** to all community constituents. This will be done through published campus electronic media including the employee, facstaff, and student listservs.

Announcements of the weekly applications will list:

- a. The name and type of chemical to be used.
- b. The timeframe of application as specifically as possible.
- c. Purpose of the application. (e.g., Trimec herbicide will be applied between 7:00 AM and 2:30 PM, weather permitting, to control broadleaf weeds.)
- d. The location(s) of the intended application (e.g., "roundup herbicide will be applied on mulched areas, fence lines, curbs, sidewalks, and parking lots." Or, "Trimec herbicide will be applied to grass lawns around, Payson, Piskor, and Carnegie Halls and on lawns along Park Street"). This description should be specific enough such that community members who are concerned with potential health effects of the product(s) used can avoid the area of application.
- e. Any applicable comments in terms of limited public use and hazard (risk). (e.g., "Some persons may be sensitive to direct skin contact with this product.") This section of the announcement should close with the statement "The areas of application will be marked with warning signs. Please do not enter these posted areas".
- f. The announcement will conclude with the statement:

Any problems and/or concerns from community members should be reported to one of the following:

- Director of Environmental Health and Safety (5303)
- Director of Facilities Operations (5632)
- Director of Security and Safety (5609).

The Safety Data Sheet(s) for all applied products are available for examination at the Environmental Health and Safety office or may be viewed at <u>https://www.stlawu.edu/environmental-health-and-safety/material-safety-data-sheets-msds</u>.

#### 8.5 Storage of pesticides

Pesticides for use on turf and ornamentals will not be stored on campus or in SLU-owned buildings. They will be stored by the Licensed Pesticide Applicator.

#### 8.6 Disposal of unused pesticides

Lincoln Pest Control will dispose of unused pesticides in compliance with Federal, State and Local laws.

#### 8.7 Recordkeeping

Facilities Operations shall record all pertinent data concerning the application of the covered product using forms developed by the Safety Committee. Copies of the data will be kept on file by both the Environmental Health and Safety Office and Facilities Operations. MSDS sheets for all materials approved for use under this program will also be kept on file by both offices.

The Director of Facilities Operations will prepare an annual report summarizing the previous year's applications and results and submit to the Safety Committee prior to February 1. Training records and copies of the Pesticide Applicator licenses for each applicator will be stored in the office of the Grounds Manager at Facilities Operations.

### **SECTION 9: Indoor Integrated Pest Management**

#### 9.1 Insect and Rodent Control IPM Best Practices

#### Insect Control

- Emphasis on non-chemical methods: The Contractor shall use non-pesticide methods of control wherever possible, for example- use of portable vacuum for initial clean-outs of cockroach infestations, winged ants and termites or spider control, and use of trapping devices for indoor fly control.
- Monitoring: Sticky traps shall be used to guide and evaluate indoor insect control efforts wherever necessary.

- Insecticide bait formulations: Bait formulations shall be used for cockroach and ant control where appropriate.
- Bed Bugs infestation will require immediate treatment. Melissa Miller will confirm bed bugs are present and be on location to discuss with contractor.

Rodent Control

- Indoor trapping: Rodent control inside occupied buildings shall be accomplished with trapping devices only. All such devices shall be concealed and in protected areas so as not to be disturbed. Trapping devices shall be checked at least once a week. The Contractor or designated personnel/occupant will be responsible for disposing of all trapped rodents or rodent carcasses in an appropriate manner.
- Sticky traps will not be used for rodent control.
- Outdoor use of bait boxes: All bait boxes shall be placed out of general view where they will not be disturbed by school operations. The lids of the boxes shall be securely locked or fastened shut. All bait boxes shall be attached or anchored to the floor, wall, or other immovable surface so that the box cannot be picked up or moved. Bait shall always be placed in the baffle protected feeding chamber of the box. All bait boxes shall be labeled on the inside with the Contractor's business name and address. The Contractor's employee shall date the box at the time of installation and after each servicing.

#### 9.2 Plan of Work

Lincoln Pest Control has submitted a Pest Control Plan of Work to Melissa Miller and David Geleta. The Responsible Parties and Lincoln Pest Control will review and negotiate the Plan of Work annually before any pest management services begin.

Melissa Miller, David Geleta and Suna Stone will review all practices and products prior to annual contract renewal to identify opportunities for improvement and expansion of environmentally-friendly practices.

#### 9.3 Monthly Building Monitoring and Treatment Program

Access to building space will be obtained through each of the Facilities Managers. Facilities Managers and Lincoln Pest Control have identified problem areas and any equipment, structural features or practices that are contributing to pest infestations. Lincoln Pest Control will inspect the locations noted in the Work Plan each month and shall describe site specific solutions for eliminating pest access, food, water and harborage. They will monitor the facilities using sticky traps to determine any existing arthropod pest problems. Dining Services food preparation and food service locations, in each building's trash rooms, kitchens, break rooms and additional areas where there have been active infestations, pest evidence or conducive conditions. Monitoring locations will be recorded in the Pest Sighting/Pesticide Application logbook. Logbooks will be established for each building and kept in Melissa Miller's Facilities Operations office. If pests are detected, the Contractor will select non-chemical methods where possible (traps for mice, vacuuming up flying ants etc.) and document in the log which method was used or which pesticide was used.

Lincoln Pest Control shall provide Melissa Miller and David Geleta current labels and Material Safety Data Sheets (MSDS) for all pesticide products to be used. In addition, the brand names shall be provided for all application equipment, rodent bait boxes, monitoring and trapping devices, and any other control equipment that may be used to provide service.

A sample Building Monitoring and Treatment Log is provided in Appendix B.

#### 9.4 Documentation

Lincoln Pest Control shall provide photocopies of the company Pest Control License and dated Pesticide Applicator Certificates for every employee who will be performing on-site services under this contract.

#### 9.5 Emergency Conditions

In the event of an emergency, pesticides may be applied on the grounds without complying with the earlier stipulations for use of integrated and least-toxic methods.

A bed bug infestation is considered an emergency situation because of the health and disruptive nature of the problem. The contractor is required to respond within a 24-hour period, seven (7) days a week, to treat areas with bed bugs.

On occasion, the contractor may also be requested to perform corrective or emergency service(s) that are beyond the routine requests. The contractor shall respond to these exceptional circumstances and begin the necessary work within one working day after receipt of the request.

#### 9.6 Universal Notification

St. Lawrence University has adopted a universal notification system if a pesticide, other than a least-toxic pesticide as defined above, must be applied on site. This strategy requires the university and its vendors to notify building occupants at least 72 hours in advance of a pesticide application under normal circumstances and no more than 24 hours after an emergency application through posted signs or other means of reaching 100 percent of occupants. This notification system enables occupants and staff, and especially high-risk occupants such as children, pregnant women and the elderly, to modify their plans based on pesticide use at the building.

Notification must include the following:

- Pesticide product name
- Active ingredient
- Product label signal word (e.g., "caution", "danger")
- Time and location of application

• Contact information for persons seeking more information

#### 9.7 Storage of Pesticides

A one-month supply of approved pesticides listed in the Work Plan may be stored in the Central Warehouse, for use by Lincoln Pest Control. No other pesticides may be stored on campus. They must be stored in a locked cabinet and are not to be used by SLU staff.

#### 9.8 Disposal of unused pesticides

Lincoln Pest Control will dispose of unused pesticides in compliance with Federal, State and Local laws.

#### 9.9 Recordkeeping

Recordkeeping is required to demonstrate ongoing compliance with the IPM plan. All applications of pesticides (including least-toxic options) shall be logged.

The contractor shall be responsible for maintaining a pest control logbook for each building. These records shall be kept on site by Facilities Manager and maintained on each visit by the contractor. The logbook shall contain the following items:

- a. Pest Control Plan of Work: A copy of the Pest Control Plan of Work, including the labels and MSDS sheets and service schedule.
- b. Work request and inspection forms: Work request and inspection forms from SLU's Facilities Operations managers will be used to advise the contractor of routine service requests and to document the performance of all work, including emergency work. All work shall be documented in the logbook then signed and dated by the contractor.
- c. Monthly service report: The Contractor will submit a monthly report of the areas serviced to the Pest Sighting/Pesticide Application logbook. The contractor will record any pest evidence detected by the monitoring program and the action taken. All chemical applications must be recorded on the monthly plan and in response to a documented pest problem.
- d. Application information for each building must include the information below (APPENDIX C):
  - Universal Notification to Occupants
  - Pesticide Application Date and Time
  - Application Manager
  - Location
  - Target Pest
  - Pesticide Trade Name
  - Pesticide Active Ingredient
  - EPA Registration Number
  - Least-toxic status (Y/N)

# **APPENDIX A: Grounds Pesticide Application Report**

Pesticide/Herbicide Use Record				
Date of application T	ime of application			
Location of application				
Product Common Name		Form =	liquid, solid,	aerosol
Product Chemical Name				-
Total amount used Ra	te of application			
Total area covered				
Safety equipment used				-
Weather/wind				
Persons (firm) doing application				
Supervisors signature				
Result(s) of application:				
Date of inspection	Inspected by			
Comments:				

Use a highlighter to indicate the area(s) of material application. Use a separate data sheet and map for each material applied.

# APPENDIX B: Monthly Building Monitoring and Treatment Form

LINCOLN PEST CONTROL			
St. Lawrence University Monthly Monitoring and Treatment			
Building	Pest(s)	Service (if traps, number of animals caught.)	Recommendations (more frequent trash removal, caulk gaps, etc.)
Lee Hall			
Rebert Hall			
Whitman Hall			
Dean Eaton			
Sykes			
Student Center			
Sykes kitchen			
Heating Plant			
Cryderman Hall			
Augsbury			
Bookstore			
Priest			
Reiff			
11 Maple St.			
78 Park St.			
72 Park St.			
70 Park St.			
62 Park St.			

58 Park St.		
54 Park St.		
52 Park St.		
50 Park St.		
48 Park St.		
Hulett		
Jencks		
Pub 56		
21 Romoda Drive		
Gaines		
Appleton		
Riding Arena and Stables		
17 College St.		
A-House		
B- House		
5 University Ave		
3 University Ave.		
53 Park St.		
1 Lincoln St.		
Waddington Boat House		
Brush Gallery and Collection		

APPENDIX C: Building Pesticide Application Report

# **Contractor Pest Control Application Record**

Date of Application:			
Time of Application:			
Location of Application:			
Product Chemical Name:		_/EPA Reg. #:	
Total Amount Used:			
Rates of Application:			
Total Areas Covered:			
Safety Equipment Used:			
Person/Firm Doing Application:			
Signature:			
Least-Toxic Status Yes	No		
Comments:			