

# INTEGRATED PEST MANAGEMENT POLICY SUMMARY CHECKLIST

## SCOPE

The goal of the Integrated Pest Management Plan is to reduce resource consumption, waste generation, pollution, and the use of hazardous materials during pest management while safeguarding the local environment and public health. The Integrated Pest Management Plan applies to all interior spaces in the building and all portions of the site and grounds for the building. This plan will be consulted prior to taking action on pest management in the building or on the building grounds. Pests include plants or animals that are detrimental to the property, a nuisance to building occupants, or unwanted on the building grounds for other reasons.

## RESPONSIBLE PARTY

The building's Property Manager will be responsible for implementing the Integrated Pest Management Plan in coordination with the pest control vendor, tenant contacts, and other appropriate organization personnel and vendors.

## CHECKLIST

- 1. Implement environmental controls such as the manipulation of the environment to reduce the pest's accessibility to food, water, and shelter.
- 2. Implement mechanical controls such as structural changes or destroying a pest or its habitat without the use of chemicals.
- 3. Implement structural controls including the installation of barriers and sealing off cracks or crevices in external walls where insects and rodents may enter.
- 4. Utilize organic compounds such as tree bark or flowers.
- 5. For insects and rodents, use non-chemical baits (such as peanut butter) to trap.
- 6. If all other least toxic methods do not work, implement chemical controls such as pesticides that are used to kill infesting pests.
- 7. Prior to pesticide use, notify all building occupants with no less than 72-hour notice.
- 8. Label all pesticides with precautionary statements such as WARNING or DANGER.

# INTEGRATED PEST MANAGEMENT PLAN

## TABLE OF CONTENTS

1. SCOPE.....	3
2. GOALS.....	3
3. RESPONSIBLE PARTY.....	3
4. PROCEDURES AND STRATEGIES.....	4
5. BEST PRACTICES.....	6
6. PERFORMANCE EVALUATION.....	7
7. REPORTING.....	7
8. GREEN BUILDING CERTIFICATIONS.....	7
9. QUALITY ASSURANCE CONTROL PROCESSES.....	8
10. TIME PERIOD.....	8
11. DEFINITIONS.....	8
12. RESOURCES AND REFERENCES.....	8
13. SAMPLE PESTICIDE APPLICATION LOG.....	8

## 1. SCOPE

The Integrated Pest Management Plan applies to all interior spaces in the building and all portions of the site and grounds for the building. This plan will be consulted prior to taking action on pest management in the building or on the building grounds. Pests include plants or animals that are detrimental to the property, a nuisance to building occupants, or unwanted on the building grounds for other reasons.

## 2. GOALS

Conventional pest control techniques have relied extensively on the use of spray-applied chemicals that contribute to ground and surface water contamination and create the potential for exposure to building occupants and visitors. Integrated pest management programs seek to minimize the spray application of pesticides by focusing on long-term, mechanical and administrative measures to control pests, thereby reducing the use of pesticides and toxicity. This IPM program uses information on the life cycles of pests and their interaction with the environment to eliminate them through the least toxic means possible.

The goals of the Integrated Pest Management Plan are to reduce resource consumption, waste generation, pollution, and the use of hazardous materials during pest management while safeguarding the local environment and public health.

<u>Operational element</u>	<u>Goal</u>	<u>Performance measurement unit</u>
Cases that do not warrant emergency treatment	Prior to applying chemical pesticides or baits, alternative pest control methods will be used in 100% of cases	Number of cases
Cases that do not warrant emergency treatment	If alternative methods fail, least-toxic pesticides will be used prior to resorting to the use of non-least toxic pesticides or baits in 100% of cases	Number of cases
Occupant notification	In 100% of non-least toxic pesticide applications, occupants will receive notification according to the notification procedures described below	Number of cases

For projects pursuing a Green Building Certification, implement Section 8.

## 3. RESPONSIBLE PARTY

The building's Property Manager will be responsible for implementing the Integrated Pest Management Plan on behalf of Clarion Partners in coordination with other appropriate organization personnel and vendors contracted to provide goods and services to Clarion Partners.

<u>Name/Title</u>	<u>Responsibilities</u>
Overall responsible party	<ol style="list-style-type: none"> <li>1. Ensure that this plan is executed</li> <li>2. Ensure that the contracted IPM vendor is fully trained on this plan and adheres to the procedures</li> <li>3. Coordinate site visits by the vendor for regular inspections or as needed for implementation of pest controls</li> <li>4. Oversee work performed by the vendor</li> <li>5. Approve the use of pesticides when they are necessary</li> <li>6. Provide proper notification to occupants when non-least toxic pesticides are applied</li> <li>7. Ensure tenant contracts are aware of the procedures in this plan</li> <li>8. Evaluate performance and making updates to the plan as necessary</li> </ol>
Pest control vendor	<ol style="list-style-type: none"> <li>1. Adhere to the procedures outlined in this plan</li> <li>2. Identify pests during site visits and inspections</li> <li>3. Report the results of site visits and inspections to the overall responsible party</li> </ol>

	<ol style="list-style-type: none"> <li>4. Notify the overall responsible party when pest action thresholds are reached or exceeded</li> <li>5. Obtain approval to approve from the overall responsible party pesticides when necessary</li> </ol>
Tenant contacts	<ol style="list-style-type: none"> <li>1. Report pest issues in respective tenant spaces to the overall responsible party</li> </ol>

The pest control vendor is responsible for adhering to the procedures outlined in this plan and reporting the results of site inspections to the overall responsible party. If at any time integrated and alternative pest control methods fail and chemical pesticides are necessary, the pest control vendor must notify the overall responsible party prior to using the chemical pesticides, and wait for approval from the overall responsible party prior to applying the pesticides.

Each tenant in the building has a designated contact for communications regarding pest control. The tenant contacts are responsible for reporting pest issues in their space to the overall responsible party. When the use of non-least toxic pesticides is necessary, the overall responsible party will notify the tenant contacts, and the tenant contacts are then responsible for notifying the occupants in their space.

#### 4. PROCEDURES AND STRATEGIES

##### Pest Control Strategies

The building interior and exterior will be periodically inspected for the presence of pests and preventive measures will be taken to avoid pests. If any pests are detected, integrated (nonchemical) methods will be implemented as the first control step, including sanitation measures, exclusion measures, and the use of traps.

**Sanitation:** Evaluate potential food and water sources available to pests and take measures to minimize or eliminate these potential sources. Such measures include thoroughly cleaning and maintaining food service areas and break rooms, fixing leaking pipes and faucets, and altering landscape features to eliminate standing water.

**Exclusion:** Seal cracks, crevices, and holes in the building envelope and maintain a plant-free zone immediately adjacent to the building.

**Traps:** For insects and rodents, use non-chemical baits (such as peanut butter) to trap pests. Chemical baits for rodents should never be used indoors. If chemical rodent baits are necessary outdoors, only use solid blocks placed in locked outdoor dispensers. Second-generation (single-feed) rodent baits should not be used.

If integrated pest control measures are unable to resolve the problem, use least toxic pesticides prior to resorting to the use of non-least toxic pesticides. Least toxic pesticides include any pesticide product for which all active ingredients and known inert ingredients meet the least toxic Tier III hazard criteria under the San Francisco Hazard Review Process (<http://sfenvironment.org/article/residents/leasttoxic-pesticides-for-green-buildings>) and the Pesticide Research Institute's Pest Smart List for least-toxic alternatives: <http://pesticideresearch.com/site/pestsmart/>

Products that are not regulated as pesticides by the EPA because they primarily contain low-risk ingredients, such as garlic oil, may also be considered least toxic options, even if they are not listed as Tier 3 by San Francisco. Non-rodent pesticides that exceed the Tier 3 criteria are considered least toxic if they are used in self-contained baits and placed in locations that are inaccessible to occupants. Rodent baits are not considered least toxic under any circumstances.

Non-least toxic pesticides include all chemical rodent baits and any product that meets the Tier 1 or 2 criteria according to the San Francisco Hazard Review Process. Non-least toxic pesticides may only be used under the following circumstances:

1. Alternative, integrated, and least toxic pest control measures have been exhausted and the pest action threshold is still exceeded.

- a. In this situation, notification (according to the procedures below) must be given to building occupants at least 24 hours before the pesticide is applied to the building or grounds.
2. The emergency action threshold has been exceeded.
  - a. In this situation, notification (according to the procedures below) must be given to building occupants no more than 24 hours after the pesticide is applied to the building or grounds

The use of non-least toxic pesticides or rodenticides as pest control in areas requiring frequent treatment on a permanent basis is not an acceptable pest management strategy. Non-least toxic pesticides will not be continuously applied in the building and on the site. Integrated and alternative pest control measures will be resumed once the action threshold specified below for the applicable pest is no longer exceeded.

### Pesticide Application Notification

The overall responsible party will notify the tenant contacts via email of the pesticide application, including the pesticide name, the EPA registration number, the treatment location, and the date of the application. The tenant contacts are then responsible for distributing the notification to the occupants in their space. In addition, the overall responsible party will post a sign at the application site, such that an occupant reading the sign can choose to avoid the application area (for example, if the pesticide is applied in a break room, all entrances to the break room shall have a sign posted).

### Tenant Communication Plan

If pests are observed in a tenant space, it is the responsibility of the tenant to notify the overall responsible party of the pest via email. Within one business day, the overall responsible party will contact the pest control vendor to inspect the situation and determine whether the regular action threshold or the emergency action threshold has been met. The pest control vendor will then take the appropriate actions.

### Action Thresholds

Regular treatment includes the use of first non-chemical controls (sanitation, exclusion, traps using non-chemical baits), followed by the use of least-toxic control methods if the situation is not resolved, and then non-least toxic control methods if the situation is still not resolved.

Emergency treatment includes the use of the most effective control method as a first step, which may be non-least toxic.

Pest Type	Action thresholds
<b>Ants</b>	Regular treatment will be performed if any ants are noted in the building and their presence is confirmed through monitoring.  Emergency treatment may be used if there are ten or more reported cases or complaints of ants within a two-day period.
<b>Other insects</b>	Regular treatment will be performed if nuisance insects are noted in the building and their presence is confirmed through monitoring.  Emergency treatment may be used if there are ten or more reported cases or complaints of nuisance insects within a two-day period.
<b>Cockroaches</b>	Regular treatment will be performed if any cockroaches are noted in the building and their presence is confirmed through monitoring.  Emergency treatment may be used if the presence of cockroaches is confirmed in two different spaces within the building OR if the presence of a large population of cockroaches is confirmed in one space in the building.
<b>Rat, Mouse</b>	Regular treatment will be performed if rats or mice are noted in the building and their presence is confirmed through monitoring.  Emergency treatment may be used if the presence of rats or mice is confirmed in two or more different spaces within the building.

<b>Bed bugs</b>	Emergency treatment may be used if the presence of bed bugs is confirmed in the building.
<b>Other occasional invaders</b>	If the pests pose a threat to occupants' health, emergency treatment may be sought. Otherwise, regular treatment will be performed.

## 5. BEST PRACTICES

These best management practices mitigate the negative environmental impacts that operations and maintenance have on the environment while simultaneously ensuring that the interior/exterior are well-maintained, managed, and provide the optimal environment for building occupants.

Through the Integrated Pest Management Plan, the building ensures that pest management practices support the following key concerns:

- Cost-effective pest control methods
- Greater flexibility through the use of a variety of pest management options
- Control over decision making and problem solving to ensure proactive decisions
- Risk reduction benefits that result from using fewer and lower risk pesticides
- Improved targeting of pesticides applications to ensure chemical applications only when necessary
- Less chance of occupant illnesses, poisonings, and liability lawsuits

**Environmental Controls:** This technique includes the manipulation of the environment to reduce the pest's accessibility to food, water, and shelter.

- Store food in insect proof containers, control water sources and leaking pipes, and collect waste frequently.
- Conduct vegetation inspections for invasive plants, fungi, and landscape features that may harbor pests.
- Regularly prune, check for infection, and eliminate dead material to minimize pest targets, excess debris, pest habitat, and sediment.
- Conduct bi-monthly inspections of the building envelope for proper sanitation, structural repairs, and mechanical and living biological controls.
- When appropriate, design landscaping features to eliminate safe havens for pests and rodents. Keep shrubs and other plants at least 18 inches from the building, and fill that space with small stones or similar substrate.

**Mechanical Controls:** These controls are directed at structural changes or destroying a pest or its habitat without the use of chemicals.

- Conduct monitoring of animal and insect pest populations.
- All rodent trapping devices should be in protected areas and concealed from plain view so as not to be affected by routine cleaning, etc. All trapping devices should be logged in the vendor log.
- For insects, use of trapping devices and vacuums and reduce pesticide sprays to a minimum.
- Remove of nests and/or webs.

**Structural Controls:**

- Install barriers and seals off cracks or crevices in external walls where insects and rodents may enter. Inspect seals around doors and windows.
- Where applicable, monitor and maintain physical barriers to wildlife areas to deter neighboring wildlife from moving into landscaped areas.
- When physical barriers fail, utilize scent, noise, or other alternative repellants to deter neighboring wildlife from moving into landscaped areas.

**Organic Controls:** Controls derived from an organic compound such as tree bark or flowers. These often come in forms of oils and dusts and can be highly effective in pest control.

- Choose organic pesticides and/or safer soaps and castor bean oils when available and appropriate.

Chemical Controls: Refer to pesticides that are used to kill infesting pests.

- When solutions must be applied, use least toxic chemical pesticides and in minimum quantities.
- Only apply chemical pesticides in target areas and apply pesticides specific to relevant species.
- Apply all insecticides as “crack and crevice” treatments only.

Cautionary Labeling for Pesticides

- Law requires that precautionary statements and signal words be used on all pesticide labels. DANGER. WARNING. CAUTION. These statements will include the hazards associated with the ingestion or handling of some pesticides.

## 6. PERFORMANCE EVALUATION

On an annual basis, performance will be evaluated against the goals specified above. If the goals are not being met adjustments will be made to this plan in order to facilitate goal achievement. If adjustments to the action thresholds are necessary, the overall responsible party will work with tenant contacts and the IPM vendor as necessary in order to appropriately adjust the action thresholds.

## 7. REPORTING

The Integrated Pest Management Plan is relevant to several questions on the Global Real Estate Sustainability Benchmark (GRESB) assessment, and the implementation of this plan benefits Clarion Partners' ESG performance.

## 8. GREEN BUILDING CERTIFICATIONS

All projects pursuing a LEED v4.1 and/or Fitwel v2.1 certification shall implement this plan 100% of the time, in its entirety, plus the following:

All pest control activity, including inspections, should be recorded in the IPM tracking tool for buildings pursuing LEED Certification. The following items should be tracked:

- Pest type and name
- Pest population density and monitoring frequency
- Pest action threshold observed
- Prevention measures implemented
- Product applied (name)
- Toxicity of the product (tier level as determined by the San Francisco Hazard Review Process)
- Date and time of product application (if applicable)
- Date and time of occupant notification (if applicable)
- Emergency application? (Y/N). If yes, an explanation of the emergency will be included.

The overall responsible party should record each pest that is reported by tenants in the IPM tracking tool. The pest control vendor will record the applicable items from each site visit in the IPM tracking tool.

Use USGBC approved Integrated Pest Management Tracking Tool to track all pesticide usage for the duration of the LEED application and keep record of all Pesticide Application Notifications.

For Fitwel v2.1 Residential, Workplace and/or Retail certifications, it is recommended that IPM activities be documented based on a four-tiered implementation approach:

1. Identify pests and monitor progress – daily inspection of pest population sites such as waste areas
2. Set actions thresholds – follow application based on non-chemical controls, least-toxic control methods, and non-least toxic control methods (in this order)
3. Prevent – improve sanitation, add barriers to pest entry and movement, and place traps
4. Control – integrate multiple control methods obtained through inspection, monitoring, and reports



This IPM plan must be applied to the entire site. Clarion Partners sites are expected to use pesticides judiciously.

For Fitwel v2.1 Workplace and Retail certification projects, this policy should be included in either relevant leases or a tenant manual.

## 9. QUALITY ASSURANCE CONTROL PROCESSES

This plan was developed for Clarion Partners and implemented in 2014 as a part of the Clarion's ESG Program. It will be reviewed annually and continue indefinitely.

## 10. TIME PERIOD

Effective date: 2014

Updated: 01/2021

## 11. DEFINITIONS

- **Integrated Pest Management:** a method of pest management that protects human health and the surrounding environment, and improves economic returns through the most effective, least-risk option.
- **Least-Risk Pesticide:** a registered pesticide in the Tier III (lowest toxicity) category, using the San Francisco Hazard Ranking System, or a pesticide that meets the requirements in the San Francisco Pesticide Hazard Screening Protocol and is sold as a self-contained bait or as a crack-and-crevice treatment used in areas inaccessible to building occupants. Rodenticides are never considered least-risk pesticides.

## 12. RESOURCES AND REFERENCES

- EPA's Integrated Pest Management in Buildings – reference guide defines IPM, described proper IPM implementation in buildings, and outlines the roles and responsibilities necessary for success: [https://www.epa.gov/sites/production/files/2015-11/documents/ipm\\_in\\_buildings.pdf](https://www.epa.gov/sites/production/files/2015-11/documents/ipm_in_buildings.pdf)
- San Francisco's Department of the Environment (SF Environment) – explains the listings criteria and process and has an updated 2007 reduced-risk pesticide list for screened pesticide active ingredients. [https://sfenvironment.org/sites/default/files/fliers/files/sfe\\_th\\_reducedriskpesticidelist.pdf](https://sfenvironment.org/sites/default/files/fliers/files/sfe_th_reducedriskpesticidelist.pdf)

## 13. SAMPLE PESTICIDE APPLICATION LOG

### INTEGRATED PEST MANAGEMENT TRACKING LOG

PROJECT:

Resource: <http://pesticideresearch.com/site/pestsmart/>

SITE VISIT DATE	RESPONSIBLE PARTY	LOCATION IN BUILDING	ACTIVITY PERFORMED (monitoring / observation, sanitation, application, etc)	OBSERVED PEST TYPE	OBSERVED PEST DENSITY
PRODUCT APPLIED (name and active ingredients)	TOXICITY TIER (Tier 1, 2, or 3 according to <a href="http://pesticideresearch.com/site/pestsmart/">http://pesticideresearch.com/site/pestsmart/</a> )	DATE & TIME OF PRODUCT APPLICATION	DATE & TIME OF OCCUPANT NOTIFICATION (required for Tier 1 or 2 products)	METHOD OF OCCUPANT NOTIFICATION (required for Tier 1 or 2 products)	EMERGENCY APPLICATION? (If yes, describe how the pest emergency threatened occupants or the building)