

# National Manual of Assets and Facilities Management Volume 5, Chapter 16

# **Pest Control Procedure for Schools and Universities**

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#### **Pest Control Procedure for Schools and Universities**

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#### 1.0 PURPOSE

The purpose of this document is to describe Pest Control services that are applicable to educational facilities, and the procedure for delivering such services.

The objective of Pest Control is to prevent the negative impacts caused by pests and vermin that exist in human-controlled environments. To enable effective Pest Control, each school and university shall establish a Pest Control Service Specifications which shall include both planned and reactive services.

#### 2.0 SCOPE

The scope of this document is to outline the requirements for a responsive, environmentally friendly, and high-quality Pest Control service that maintains the safety and wellbeing of facility users and students working and studying within educational facilities.

This procedure describes the responsibilities, scope, process, and methods to control pests within learning environments in compliance with existing best practice, codes, and regulatory requirements. It is intended for use by Facility Management (FM) personnel and those responsible for engaging with Pest Control Service Providers.

#### 3.0 DEFINITIONS

Term	Definition
Application	Applying a product or chemical to manage pests
Bait	A product manufactured with food or other materials that pests consume. They often contain an active ingredient that helps control the pests
Bait Gel	An insecticide product which is formed when active ingredients are mixed with food or an attractant carrier. When the insects eat the bait, they also consume the active ingredient
Bait stations	Bait stations are containers used to house bait for pests such as ants, cockroaches or rodents
Client	A person, group or organization who is receiving the services
Crawling Insects	Insects such as cockroaches have wings but are reluctant flyers, preferring to crawl to find food and shelter. Termites and ants are mainly wingless, so most of their behavior involves crawling. They multiply as a result of reproduction and are temporarily winged during the breeding season
Dusting	Dust powder formula is said to repel snakes from getting into facilities. However, the efficacy of these treatment methods relies on stable weather conditions, because strong winds can affect the distribution of powder
Faults	The existence of any pest on the facility
Flying Insect	Insects are that have evolved wings and flight such as houseflies and mosquitoes
Frequency	The rate of recurrence of the tasks to be performed
General Waste	Waste which is generated from normal domestic duties
Globally Harmonized System (GHS)	A system for the classification and labelling of chemicals
Hazardous waste	Waste such as solvents, flammable liquids, metals, and general laboratory chemicals/materials
Housekeeping	General care, cleanliness, orderliness, and maintenance of the workplace, business, property, site or area
Infestation	A sudden increase in population numbers of a pest species in a given area
Inspection	Physical on-site verification that work is performed, and equipment is maintained, in accordance with applicable standards and procedures
Integrated Pest Management (IPM)	An effective and environmentally sensitive approach to pest management that relies on a combination of common-sense practices. IPM programs uses current, comprehensive information on the life cycles of pests and their interaction with the environment. This information, in combination with



	available Pest Control methods, is used to manage pest damage by the most economical means, and with the least possible hazard to people, property, and the environment
Label	A printed hazard warning notice that identifies the primary and secondary hazards specific to a material and information regarding its handling. A label shall be at least 100mm x 100mm unless otherwise specified
Manual Handling	Relates to a number of activities, such as lifting, lowering, carrying, pushing and pulling. These are major causes of musculoskeletal disorders
Monitoring Program	A planned set of monitoring activities
Normal	Refers to low priority work that is defined as work or service failures that do not present a significant risk and do not affect the health or well-being
Occupational Health	A multidisciplinary field concerned with preventing people from becoming ill as a result of their work
Pest	Insects or small animals that are harmful such as ants, bedbugs, cockroaches, rats, mice, cats, dogs, foxes and snakes
Pest Control	A management exercise for defining harmful pests, and formulating and implementing plans to control harmful pests
Pesticide	A chemical used to destroy insects and other pests such as rodents
Rectification Period	A corrective action, which is a completely safe solution, followed by a permanent/preventative solution, which is planned/scheduled and executed within pre-agreed time-frames
Response Time	The time taken to attend an incident and diagnose the service response
Rodents	Small gnawing mammals (such as rats and mice)
Safety Data Sheet (SDS)	Provides information on a controlled chemical detailing the health effects of exposure and explaining to how to handle the product safely
Stray Animals	'Stray' is a general term given to any domestic animal found roaming freely without human supervision
Urgent	Refers to medium priority work that is defined as a service failure or shortcoming that affects amenities and presents a risk but which does not acutely and seriously affect health or well-being
	Acronyms
BPCA	British Pest Control Association
CAFM	Computer Aided Facilities Management
CIEH	Chartered Institute of Environmental Health
COSHH	Control of Substances Hazardous to Health
EFK	Electronic Fly Killer
EHS	Environment, Health and Safety
EPA	Environmental Protection Agency
FM	Facilities Management
GHS	Globally Harmonized System
HACCP	Hazard Analysis and Critical Control Point
IOSH	Institution of Occupational Safety and Health
IPM	Integrated Pest Management
ISO	International organization for standardization
ISPM	International Standard of Phytosanitary Management
KSA	Kingdom of Saudi Arabia
MEWA	Ministry of Environment, Water and Agriculture
MOMRA	Ministry of Municipal and Rural Affairs
MSDS	Material Safety Data Sheet
NPMA	National Pest Management Association
OSHAD	Occupational Safety & Health Abu Dhabi
PAI	Pest Activity Index
PAT	Portable Appliance Testing
PDA	Personal Digital Assistant



PPE	Personal Protective Equipment
PTW	Permit- to- Work
QHSE	Quality, Health, Safety and Environment
SFDA	Saudi Food and Drug Authority
UAE	United Arab Emirates
UK	United Kingdom
US	United States
UV	Ultraviolet
WPS	Worker Protection Standard

**Table 1: Definitions** 

#### 4.0 REFERENCES

- British Pest Control Association (BPCA) UK standard Advanced Technician in Pest Management
- Chartered Institute of Environmental Health (CIEH) UK standard Public Health
- EPA Do's and Don'ts of Pest Control, List of Pests of Significant Public Health Importance, IPM Principles and Introduction to IPM
- IOSH standard Managing Risk
- ISO 14001:2015 Specifies Requirements for an Environmental Management System
- ISO 9001:2015 Specifies Requirements for a Quality Management System
- National Integrated Pest Management (IPM) Database Pest Management Strategic Plans
- National Pest Management Association (NPMA US standard Pest management products and practices
- Saudi Arabian Ministry of Municipalities and Rural Affairs (MOMRA) The Environmental Health Regulations of KSA municipalities support the pest management industry's commitment to the protection of public health
- Saudi Food and Drug Authority (SFDA) SFDA List of Public Health Pesticides and SFDA Products Classification Guidance
- United States' Environmental Protection Agency (EPA) Healthy School Environments, Mosquitoes and Schools, Termites and Schools, the Basics of School (Integrated Pest Management) IPM

#### 5.0 RESPONSIBILITIES

Role	Description
Facility Manager/Director	<ul> <li>Define national Entity service delivery</li> <li>Provide visible support, review performance, and approve highlevel initiatives and allocate financial resources to meet policy commitments</li> <li>Confirming that this procedure meets the government requirements and regulations in the location of the project facility</li> </ul>
Soft Service Manager	<ul> <li>Effective training delivery of the Soft Service procedure</li> <li>Briefing service partners/stakeholders on the Soft Service procedure</li> <li>Monitoring performance</li> <li>Auditing this procedure</li> </ul>
Pest Control Technician	Carry out Pest Control tasks and activities.
Department/contractor site supervisors	<ul> <li>Support the overall end to end vision and values</li> <li>Assist communication, implementation, and reporting of initiatives (i.e. performance monitoring on behalf of the leadership team)</li> </ul>

**Table 2: Responsibilities** 



#### 6.0 PROCESS

Pest Management in schools, universities, and educational centers is designed to protect the health and safety of students and users and minimize any damage to structures and personal property. It also improves the quality of the educational environment by avoiding the irritation or disruption to work and learning that can be caused by insects, rodents, or other pests.

Pest Control procedures in schools and universities shall provide holistic solutions for pest problems under the Integrated Pest Management (IPM) program, using sophisticated equipment as well as safe and environmentally friendly chemicals.

#### 6.1 Establishing a Policy Statement for Educational Facilities

Each entity operating within the education sector shall implement a Pest Control Policy Statement which:

- Sets the Pest Management Objective for facilities
- Designates Pest Management roles
- Outlines inspection requirements
- Sets action thresholds
- Highlights IPM strategies
- Emphasizes the importance of evaluating results, keeping records and continually improving

#### 6.2 Pest Control Service Standards

Pest Control for schools and universities shall offer safe and effective protection of all parts of the facility including any locations containing important hard copies of documentation. For example, Pest Control within libraries shall be executed in line with standards set by the American Library Association (ALA) and the UK's Chartered Institute of Library and Information Professionals (CILIP).

In accordance with the statutory requirements for Pest Control services, the Pest Control Service Provider shall:

- Manage Pest Control processes and methods of control.
- Establish and undertake a planned Pest Control program which protect facility users, students and the facility environment.
- Provide trained labor, materials, and equipment.
- Develop location wise service plan detailing the Pest Control Service Specifications.
- Provide reports for each visit detailing the work carried out.
- Ensure health and safety procedures are followed.
- Ensure that any chemicals used for Pest Control meet the MEWA's Pest Control requirements.
- Provide Pest Awareness training programs for specific entity personnel.
- Deliver Pest Control services, methods, techniques, and practices compliant with the guidelines, policies and best practice listed within the reference section of this document.

All Pest Control activities, as far as is reasonably practicable, unless in an emergency, shall be executed outside of the operating hours of the educational facility, with enough time for the effects of chemicals to wear off prior to the presence of any staff, students, and pupils.

 Attachment 4 includes an example of an IPM Self-Inspection checklist in Schools & Universities -Post Treatment that should be completed once the work has been undertaken.



The table below indicates the quality standard required to meet in accordance industry best practice:

Element	Quality Standard				
Pest Control	<ul> <li>Pest Control shall be carried out with minimal disruption to facility occupants and facility operation</li> <li>Chemicals used by the Pest Control service shall leave no visible residue on any surfaces, or stains on seats, panels or floors and pose no hazard to health or contamination</li> <li>Chemicals shall not affect facility users who have allergies and should not produce unpleasant odors within the facility</li> </ul>				
Documentation	<ul> <li>Documentation in relation to Pest Control activities shall be managed and maintained as per the frequency outlined within the Pest Control Service Specification</li> <li>Attachment 2 contains an example of a Pest Control Inspection Checklist to support this task</li> </ul>				

**Table 3: Indicative Quality Standard** 

#### 6.3 Target Pests in Schools and University Facilities

The table below describes examples of pests and vermin can be found in educational facilities:

	Target Pests					
Pest	Typically Encountered	Illustration/Photo				
Crawling Insects	Found in sewers, low/medium voltage electrical sockets, near irrigation points, kitchens, stores, and food areas.					
Termites	Found in landscaping, doors and windows and any wood fixture. Termites are common insects, known by many names, including "white ants" or the "silent destroyers". These types of pests can cause a lot of damage to assets.					
Flies	Found in areas containing food and waste.	A A				
Rodents (rats and mice)	Found near and around populated environments (commensal rodents). They are also active in sewer lines, near garbage areas and in burrows on landscaped areas, storage areas, and food facilities.					
Stinging Insects Occasional Invaders, Bees, and Wasps	Although bees can benefit the environment in many ways, it is inconvenient and possibly dangerous to let a beehive thrive near premises.					
Bed Bugs	Found in covered areas.					
Snakes and Scorpions	Found outside and in the desert.					



	Target Pests	
Stray Animals	'Stray' is a general term given to any domestic animal found roaming freely without human supervision. They are found outside near garbage areas and in burrows.	
Birds	Typically found nesting in the cavities of solid structures and on elevated flat surfaces, such as roofs or wide ledges where they are safe from predators. This can cause numerous problems and hazards. For example, bird droppings can cause expensive damage to gutters, pipes and tiles as well as spread disease.	

**Table 4: Pests and Vermin** 

The list below contains further details regarding pests and vermin commonly found within schools and universities. These creatures can be harmful to users and students, and can damage the fabric of the building:

- Silverfish: Silverfish are known for their destructive feeding habits that can cause a serious
  problem in large numbers, damaging books, photographs, paintings, plaster, and other items
  containing starch or cellulose.
- Mosquitoes: Most mosquito species seldom pose a threat to human health. However, several
  species readily attack people and can transmit micro-organisms that cause serious disease. Even
  bites from mosquitoes that do not transmit disease can result in secondary infections, allergic
  reactions, pain, irritation, redness, and itching.





#### 6.4 Pest Activity Index (PAI)

A Pest Activity Index (PAI) is used to determine the level of pest activity, relative to direct or proxy indicators of pest population inside a given area. The PAI is meant to provide a more objective estimation of pest populations and their activity; this index can be used to establish the effectiveness of pest management treatments. Table 5 (below) outlines a typical PAI:

German Roaches	None	0	No living insects, no other signs.		None	0	No droppings, no other signs.	
	Low	1	1 to 5 insects per 10m <sup>2</sup>	Rats	Low	1	Few droppings/foot tracks per	
	Medium	2	6 to 10 insects per 10m²		Medium	2	Significant tracks and droppings or more than 3 baits eaten per 10m <sup>2</sup>	
	High	3	More than 10 insects per 10m <sup>2</sup>		High	3	Physical damage per 10m²	
	None	0	No living insects, no other signs.		None	0	No droppings, no other signs.	
American	Low	1	1 to 5 insects per 10m <sup>2</sup>	Mice	Low	1	Few droppings/foot tracks per 10m <sup>2</sup>	
Roaches	Medium	2	6 to 10 insects per 10m²		Medium	2	Significant tracks and droppings or more than 3 baits eaten per 10m <sup>2</sup>	
	High	3	More than 10 insects per 10m <sup>2</sup>		High	3	Physical damage per 10m <sup>2</sup>	
	None	0	No living insects, no other signs.		None	0	No living insects, no other signs.	
Ants	Low	1	1 nest per 10m²	House flies	Low	1	1 to 5 insects per 10m²	
Ants	Medium	2	2-5 nest per 10m²		Medium	2	6 to 10 insects per 10m <sup>2</sup>	
	High	3	More than 5 nests per 10m²		High	3	More than 10 insects per 10m <sup>2</sup>	
	None	0	No living animal, no other signs.		None	0	No living insects, no other signs.	
Cats	Low	1	1 animal per unit facility	Dadhuar	Low	1	1 to 5 insects per 10m²	
Cats	Medium	2	2 to 3 animal per unit facility	Bedbugs	Medium	2	6 to 10 insects per 10m²	
	High	3	More than 3 animal per unit facility		High	3	More than 10 insects per 10m <sup>2</sup>	
Spiders	None	0	No living insects, no other signs.		None	0	No living insects, no other signs.	
	Low	1	1 to 3 insects per 10 m²	Stinging	Low	1	1 to 5 insects per 10m <sup>2</sup>	
	Medium	2	4 to 8 insects per 10 m <sup>2</sup>	Insects	Medium	2	6 to 10 insects per 10m²	
	High	3	More than 8 insects per 10 m²		High	3	More than 10 insects per 10m <sup>2</sup>	

Table 5: Pest Activity Index

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#### 6.5 Pest Control Methods

In order of preference, the primary methods by which to deliver Pest Control are:

- 1. Sanitation Measures
- 2. Proofing Measures
- 3. Non-chemical Control
- Chemical Control

Figure 1 below offers guidance for the application of these methods.

Sanitation and Pest Proofing shall apply wherever possible. Non-chemical preventative actions constitute more than 50% of Pest Control measures, as these are the safest for educational facility users and the environment.



Figure 1: Application of Pest Control Methods

When it is determined that a pesticide shall be used in order to obtain adequate control, it is necessary to employ the use of formulations and treatment techniques. This minimizes both the amount of pesticides used and any potential exposure to people and the environment.

Figure 2 below describes the process by which Pest Control methods shall be applied:



Figure 2: Pest Control Method Application Process



#### 7.0 PROCEDURE METHODS

This section describes a holistic solution for pest problems under the Integrated Pest Management (IPM) program, using sophisticated equipment, and safe and environmentally friendly chemicals.

#### 7.1 Integrated Pest Management (IPM)

IPM is a preventative, long-term, low toxicity means of controlling pests and has become the recommended practice for learning environments. IPM relies on the following steps:

- 1. Detailed and thorough inspection
- 2. Pest identification
- 3. Sanitation and pest recommendation
- 4. Proofing recommendations (see Attachment 1)
- 5. Application of non-chemical control
- 6. Chemical control measures
- 7. Evaluation of results (see Attachment 3)
- 8. Monitoring

The IPM program comprises of eight steps (see Figure 3).



Figure 3: IPM Program

IPM represents a Smart, Sensible, and Sustainable approach to Pest Control for schools and universities:

- Smart because IPM creates a safer and healthier learning environment by managing pests and reducing human exposure to pests and pesticides
- **Sensible** since practical strategies are used to reduce sources of food, water and shelter for pests in school and university buildings and grounds
- Sustainable because the emphasis is on prevention, which makes it an economically advantageous approach

#### 7.2 Basic Elements of IPM in Schools and University Facilities

Below are several simple measures the facility can consider supporting their IPM and can be included in any Educational Facilities procedures:

- Thorough inspection
- Identification of pests involved
- Awareness training for facility users which involves an in-service seminar for employees to:
  - o Reduce the use of indoor decorative plants



- Do not eat at desks in administrative offices
- o Indoor waste bins shall be maintained regularly
- Keep doors closed
- o Implement good housekeeping
- Keep records i.e. Labels, Safety Data Sheets (SDS), service tickets, and Logbooks
- Evaluation and follow-ups will include:
  - o Ongoing communication and regular meetings with facility users
  - o Periodic inspections

#### 7.3 Routine Inspection Schedule

The schedule is a continuous, integrated program for the control of rodents, pests, and insects to be implemented, managed, and maintained on a scheduled basis. The program shall include the following:

- Carrying out scheduled inspections and treatments, where required, to internal grounds and external areas of facilities.
- Carrying out scheduled Pest Control inspections and treatment outside facility operating hours.
- Carrying out Pest Management Inspections at a frequency suitable for the facility to maintain pest levels below set thresholds. The frequency will take account of factors such as historical data, environment, operating hours, and facility operations. Risk Assessments will also assist in determining the necessary frequency of Pest Management Inspections.

The table below is an example of a routine schedule for inspection and treatment in accordance with industry best practice:

Facility Description	Start Date	Completion Date	Week	Remarks
Building 1	Day/month/year	Day/month/year	1	
Building 2				
Building 3				
Building 4				

**Table 6: Routine Schedule for Inspection and Treatment** 

#### 7.4 Reactive Requests

Reactive Pest Control services shall be available 24 hours per day, 365 days per year in order to address emergency, urgent, and/or routine service requests. Such requests shall be responded to within the response times set out and shall return the affected areas to the required standard within the allotted rectification time.

The table below an example of rectification time for reactive requests in accordance with industry best practice:

Category	Response Time (attendance)	Regular Update (progress update)	Rectification Time (job completion)
Level 1 Emergency	Within 15 minutes (immediate)	1 hour	Maximum 3 Hours
Level 2 Urgent	45 minutes	2 hours	Maximum 10 Hours
Level 3 Normal	8 hours	3 days	7 calendar days
Level 4 Scheduled	24 hours	5 days	10 calendar days

**Table 7: Rectification Timings** 





#### 7.5 Pest Control Service Delivery Methodology

Effective IPM requires an experienced Pest Control professional who will take a holistic approach. Pest Control technicians shall be trained in line with global standards. It is important that the external environment be properly considered, in addition to the facility, as these are the areas where pests will often harbor and breed. Focusing on the facilities alone will not provide adequate control as this is a reactive Pest Control strategy, rather than a pro-active approach of the kind that is in accordance with industry best practice. Reference to the table below:

Pest Control Service Delivery Methodology				
Crawling Insect Control (cockroaches, ants, and other crawling insect pests)	Gel Baiting: This is an advanced formulation of gel, specifically used for cockroaches, which can be applied in small quantities to infested areas. The gel contains an attractant to lure the cockroaches and the active ingredient Fipronil quickly kills them when they feed on it. Cockroaches are cannibalistic so others are killed when they feed on those who have ingested the gel. This is a very safe product and can be used in food preparation/high-risk areas.  Spraying: This should only be used in areas where there is positive proof of pest activity. Spot treatments shall not be conducted near food preparation areas, unless permitted by the pesticide product label. Insecticidal sprays are often useful to flush cockroaches out of cracks and crevices, at which point the gel bait will kill them.			
	Monitoring: The technicians are given thorough training in pest biology so they know where specific pests are likely to harbor and breed. They use this knowledge to select the appropriate positioning for monitoring devices to detect pest activity before it becomes a significant infestation. They are also trained to spot signs of infestation such as fecal matter and tracks/prints. As soon as pest activity is found, the technician will select the most effective and low risk product for that environment and quickly deal with the infestation.			
Flying Insect Control (mosquitoes, flies, and other flying insects)	Spot Treatments: This should only be used in areas where there is positive proof of pest activity. Spot treatments shall not be conducted near food preparation areas, unless permitted by the pesticide product label.  Misting Treatment (indoor): This Pest Control treatment sprays a fine mist of pesticide and is used in confined areas to kill heavy infestations of flies and mosquitoes.			
	Fogging (outdoor): This generates smoke that contains an active ingredient for controlling flying insects across large open spaces. It is carried out when the area is unoccupied.			
	Larviciding: This process is undertaken on stagnant water to kill mosquitoes. It kills the larvae (young mosquitoes). It is more effective to remove the water source but sometimes this is not practical or possible.			
	Electronic Fly Killers (EFKs): EFKs are highly effective indoor monitoring and control device that attract flies using UV light and catch them on the sticky film that comes with the unit.			
Rodent Control (rats	External Rat Baiting Systems: Bait stations will be installed around the perimeter. Anticoagulant rodenticide baits will be placed inside the bait stations. The bait stations are locked to protect humans and other non-target animals from gaining access, and for monitoring as agreed and scheduled.			
and mice)	Glue Boards and Traps: These are used in high risk areas (e.g. food preparation areas) to monitor the level of rodent infestation. If there is a low level of infestation, the sticky traps will also be effective in eliminating the pest population within a confined area.			
Other Vertebrate Pests	Dusting: Dust powder formula is said to repel snakes from getting into facilities. However, the efficacy of these treatment methods relies on stable weather conditions, because strong winds can affect the distribution of powder.			
(snakes)	Snake Monitoring: Snake monitors can be installed in areas where snakes are reportedly present. They are made from extruded plastic with a strong glue on their surface that traps snakes when they crawl into the space. Attractant lures are used in conjunction with the traps.			



Bird Control	Non-chemical: Spikes, laser devices, nets, repellents, and other non-chemical devices to control birds and prevent them from landing and nesting on designated surfaces can be used.
Heat Treatment	Heat treatment: Kills all lifecycle stages of the target pest, eliminating eggs, larvae, and adult insects in one treatment.  The heat eradicates pests such as bed bugs, silverfishes, and cockroaches by denaturing the protein within their bodies and disrupting the waxy layers on the outside of the insect, causing dehydration. The process works by heating a liquid syrup and delivering it through insulated pipes to heat exchangers placed strategically within the treatment area.  Heat probes are used to monitor the heat in all areas of the room which helps ensure the extermination of all pests targeted.  Endotherm heat treatment is also an effective, chemical-free treatment that is approved by the International Standard of Phytosanitary Management (ISPM 15) as a wood treatment.
Stray Animal Control	Non-chemical measures: The use of the most humane and safe ways to control and repel stray animals. The definition of stray animals includes any animal that freely roams the desert, for example camels, wild cats, wild dogs, and so forth.

Table 8: samples of Pest Control Service Delivery Methodology

#### 7.6 Treatment Frequency

The table below provides an examples of treatment frequency that is in accordance with industry best practice:

Frequency	Element	Remarks
Once a month or as required	Classrooms, libraries, labs.	The room user's permission is required before carrying out the service.
Once a month or as required	Inspect and treat canteens and pantries, dining areas, washrooms, garbage rooms/areas, security stations, employee entrances, handling areas and other high-risk areas that are sensitive to pest infestation.	
Once a month	Service units of Professional Tamper Proof Rodent Bait Stations placed in external areas.	
Once a month	Inspect and treat engineering areas, sub-stations technical areas, general stores, fire stations, control towers, workshops, the immediate building apron, car parks and offices.	
Once a month	Carry out technical inspection audits, to include a detailed inspection by a qualified member of staff followed by a detailed report with recommendations on matters such as pest proofing, building maintenance, waste management, housekeeping practices, pest habitat modification, storing practices and electronic fly units. Also review all pest activity over the last month and any actions taken.	
Call out Service	Additional treatments will also be carried out as and when necessary on a call out basis.	Respond as specified in the Reactive Requests section.

**Table 9: Treatment Frequency** 



#### 7.7 Chemicals, Pesticides, and Tools

The following rules shall always be followed while managing pest products:

- Pest Control products shall be stored in a secure location in an area which is suitably ventilated and with suitably specified lighting fixtures, and accessible only to specific FM personnel, and Pest Control Service Providers.
- Pest Control shall employ the use of only those chemicals that have been approved by the Saudi Food and Drug Authority (SFDA) and the entity's Health and Safety Department.
- Pest Control products, and equipment used for Pest Control, shall be fit for purpose and suitably specified such that they are fit for purpose.
- Pesticides used for services shall be low-toxicity and odorless.
- The use of chemicals, including pesticides, shall be strictly controlled and monitored through record keeping – records should be available for random inspection at any time.
- Pest Control chemicals shall feature the manufacturer's label which shall be readable on its original container, in accordance with Globally Harmonized System (GHS) and supporting documents – e.g. MSDS and COSHH shall be available for inspection at any time.

#### 7.8 Facility Cleanliness and Waste Disposal

An appropriate and proactive waste management regime shall be in place to collect and remove hazardous waste from the facility with a minimum of disruption and disturbance to the facility. The process for facility cleanliness and waste disposal shall ensure that:

- It is compliant with MOMRA and MEWA requirements and by-laws.
- The effective transfer of waste materials is made to the designated waste collection points within the facility, where possible.
- The provision of a 24-hour emergency response remove waste and clean areas of contaminants that may attract pest and vermin is available.

#### 7.9 Health, Safety, and Environmental Requirements

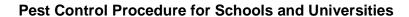
Pest Control Services shall be compliant with relevant health and safety legislation and ensure the health, safety, and welfare of staff that are required to work on Pest Control as part of their role. These requirements shall be followed by those working on Pest Control:

- Health and safety risks shall be understood, evaluated, and controlled by adopting best practice work procedures.
- All processes shall comply with Local Regulations.
- All processes shall be under control and compliant with HS&E legislation.
- Pest Control teams shall receive information and training (in a language and vocabulary the worker understands) about workplace hazards, methods to prevent them, and the international standards that apply in their workplace.
- Appropriate training shall be provided to staff in relation to the handling and movement of chemicals, and equipment, as specified within this document. Evidence this has been done shall be made available at any time, if requested by the client.
- Appropriate PPE shall be worn by FM personnel, Pest Control Service Providers, and those
  working with chemicals or in the area in which Pest Control activities are being carried out.
- Staff shall follow all guidance regarding working in hot temperatures (in excess of 40°C) and high humidity levels (above 65%).
- A detailed Health and Safety Plan shall be prepared covering the following items and it shall develop detailed processes to manage:
  - o Risk Assessments
  - o Safe systems of work
  - o PTW
  - Confined spaces
  - Accident investigation and reporting
  - Control of procedures
  - o Machinery, equipment, tool safety, supply, and handling
  - Work environment

- Manual handling
- PPE 0
- Reports related to sustainability and energy

#### 8.0 ATTACHMENTS

- Attachment 1 IPM Monitoring Report
   Attachment 2 EOM-ZO0-TP-000200 Pest Control Inspection Checklist
   Attachment 3 Pest Control Trend Analysis Report
- 4. Attachment 4 EOM-ZO0-TP-000232 IPM Self-Inspection checklist in Schools & Universities -Post Treatment





#### **Attachment 1 – IPM Monitoring Report**

The following table is an example of an IPM Monitoring report that is in accordance with industry best practice:

IPM Monitoring Report			
Incidence	Focus area	Sanitation and pest proofing recommendations	Evidence
General Openings	Building A - Corridor	It is highly advisable to close all openings, especially at the top of ceilings, to prohibit pest entry and infestation. Preventing pests from having access to the interior of your premises is a good proactive approach.	Attached photos
Sanitation	Building B - Loading area	It is highly recommended that better sanitary practices are implemented on floors and walls near the fire alarm by cleaning all trash birds' droppings, wastes, and food leftovers on a regular basis to avoid pest attraction and infestation.  The foundation of an effective pest management program is good sanitation pest problems can often be eliminated if they are unable to find anything to eat.	
Openings Around Doors and Windows	BuildingC	Openings around the sides of the sliding abor were encountered.     When looking for food, water, and shelter – pests can use small openings around doors and windows to gain access into your building.      It is highly recommended to seal all such openings.	

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#### **Pest Control Procedure for Schools and Universities**

#### Attachment 2 - EOM-ZO0-TP-000200 - Pest Control Inspection Checklist

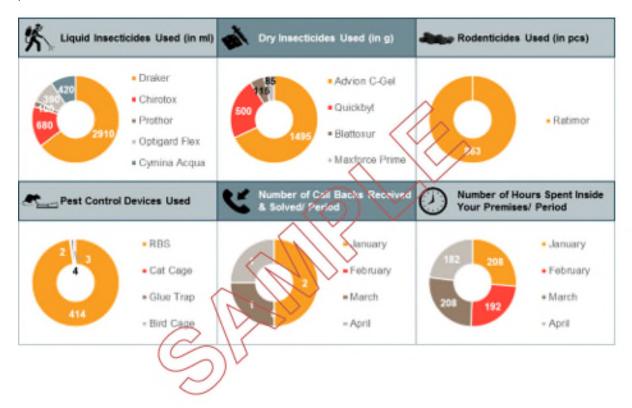
The following table is an example of a Pest Control inspection checklist that is in accordance with industry best practice:

S/N	Items to be verified	Compliance (Yes/No) Comments
HSE	Requirements	
1	Are the Pest Control chemicals approved by SFDA?	
2	Is a detailed register available for the consumption of pesticides on site?	
3	Do they have QHSE department approved SDS and COSHH for all pesticides used at the facility?	
4	Are all Pest Control devices (cylinder tanks/container) labelled with service information?	
5	Is the spillage kit available in case of emergency/spillage?	
6	Has the process for mixing chemicals been verified?	
7	If water contaminated with pesticide is being drained to the sewage network, has this been verified as acceptable?	
8	Have empty cartons/containers have been disposed of properly?	
Stora	ge	
9	Is there separate, well-ventilated store for highly frammable and poisonous pesticides and does the chemical storage have EHS warning signs and is it located away from the staff break room?	
10	Are they storing pesticides correctly (i.e. dry posticides at height and liquid pesticide at the bottom)?	
11	Is there a cleaning/washing facility provided for sanitation?	
12	Is there an emergency plan for the storage area?	
Vehic	ele Condition	
13	Is the vehicle's ownership details and security permit available, including the driver's valid license?	
14	Is there a first aid kit available in the van?	
15	Are the chemicals stored properly?	
16	Has the van been properly cleaned?	
17	Is there any extinguishers and firefighting equipment available?	
18	Are they parking the vehicle in a designated area?	
Staff		
19	Are competent Pest Control technicians being assigned? Have all certificates been submitted and validated?	
20	Is appropriate PPE provided to the employees during work including a cartridge mask?	
21	Has the staff undergone adequate awareness and training programs?	
Activ	ities	
22	Is the Pest Control schedule being followed?	
23	Is the procedure mentioned in their Method Statement being followed?	
24	Are the areas being cleaned after treatment?	
25	Do they give recommendations following treatment?	
	ected by:	Date:



#### Attachment 3 - Pest Control Trend Analysis Report

The following dashboard is an example of a trend analysis report that is in accordance with industry best practice:







## Attachment 4- EOM-ZO0-TP-000232 - IPM Self-Inspection checklist in Schools & Universities (Post Treatment)

IP	M Self-Inspection checklist in Schools &	Universities (Pos	t Treatment)
	Facility / Department: Facility Co or's Name Date:	de:	
Service a	reas under Inspection	Yes/No	Comments
Facility I	nternal Areas (Example)		
1	Walls	Y/N	
2	Floors		
3	Ceilings		
4	Floor Drains		
5	Door & Window frames		
6	Lighting systems		
7	Ventilations		
8	All Facility plant rooms (e.g. ELV, Pump, Generator)	$\wedge$	
9	Fittings & Fixtures		
10	All Furniture		
11	Other areas		
Sports, L	aboratories and Conference rooms	//	
12	Equipment and surrounding areas	Î	
13	Sink and washing areas		
14	Waste water outlets and waste pipe connectors		
15	Other areas		
Staff Roo	oms Common Rooms and Visitor areas		
16	Counter and surface areas, chairs, tables, drawers and chests	5	
17	Garbage bins		
18	Spaces around the appliances and equipment		
19	Other areas		
Restaura	int, Kitchen and Pantry areas		
20	Dish wash area		
21	Garbage and Thrash area		
22	Tray return area		
23	Below the cooking platform hidden areas		
24	Storage areas for pots/pans/plates		