

## 4107 Integrated Pest Management (IPM) Plan

### 1. Policy Statement

- a. Maeser Prep is committed to providing safe, clean, and healthy buildings for our students, staff and the community. To this end and in accordance with Utah Admin. Code R392-200-7 (12) See Appendix A, it is the policy of Maeser Prep to manage pests in and around the school in a manner that protects human health, maintains the integrity of school buildings and grounds, and preserves the environment.
- b. Karl G Maeser Preparatory Academy is committed to the sustainable management of pests through the use of Integrated Pest Management (IPM) that focuses on eliminating pest access to food, water and shelter in and around our schools. This is accomplished through the use of reduced risk pest control methods with a preference for non-chemical control measures. Sanitation, pest exclusion and habitat modification are essential to successful long-term pest mitigation. Facilities will be regularly cleaned and repaired in order to prevent pest infestations. All facilities and grounds will be maintained to be free of trash, debris and clutter. Ornamental plants, turf, and desirable grasses will be managed in a manner that limits animal, plant and microbial pest attraction.
- c. While pesticides may be used to remediate infestations of pests such as insects and rodents that may be found in the facility and its surrounding grounds, every effort will be made to manage pests using non-chemical methods first, but, when needed, least-toxic pesticides may be used to help bring pests to below threshold levels. We believe that through education of our School personnel Karl G Maeser Preparatory Academy can limit the unnecessary use of chemical pesticides minimizing their impact to people and the environment.

### 2. Definition of Integrated Pest Management:

- a. Integrated Pest Management (IPM) is an ecologically based management strategy that provides long-term solutions to pest problems with minimum impact on human health and the environment. IPM is heavily reliant upon monitoring for possible pests, pest prevention through education of faculty and staff, improved sanitation and mechanical means such as pest-proofing buildings.

### 3. Oversight and Management:

- a. The Administrative Team and Facilities Manager/IPM Coordinator actively manage the IPM program by providing guidance, education, and support on program procedures and processes. They are the key advisor to the School and are responsible for: development and management of appropriate plans, pest control contract oversight, training on pesticide safety and IPM principles and practices to the school staff, records management, and providing guidance and recommendations on current regulations, procedures and products used in managing pest populations.
- b. The Facilities Manager/IPM Site Manager is responsible for the IPM program on the school/facility level, manages the day-to-day activities of the IPM program, keeps all IPM site records, and reports to the Administrative Team.

### 4. Pesticide Safety and IPM Plan:

- a. The Administrative Team and Facilities Manager/IPM Coordinators will revise the IPM Plan as needed. The plan will address and detail the components of the

School Policy, list approved low hazard/toxicity products and methods by pest, and discuss the decision-making process for any pest mitigation effort, to include methods for monitoring, reporting pest sightings, action levels for the use of pesticides and a list of all environmentally sensitive areas that may be impacted by the Schools pest management activities. Pests will be listed in order of medical or health risk importance to assist in prioritizing pest mitigation efforts based on risk to students, staff and the community. The Administrative Team and Facilities Manager/ IPM Coordinators, in coordination with the designated School nurse, will develop and include appropriate action steps in the program plan for each pest of community health importance deemed a probable risk e.g. head lice, bed bugs, fire ants, etc.

- b. Wherever possible a non-chemical method of eliminating pests will be used first. Those methods may include:
    - i. Education of faculty, staff, students, parents, vendors, contractors, etc.
    - ii. Identification and removal or repair of conditions that are conducive to pests.
    - iii. Structural repair and sealing.
    - iv. Improved sanitation.
    - v. Removal of clutter or harborage.
    - vi. Elimination of food sources.
    - vii. Exclusionary measures to protect doors, windows and any other opening to the outside against the entrance of insects, rodents, and other animals.
    - viii. A no-action alternative shall also be considered in cases where the pest has no community health or property damage significance e.g. ladybugs, praying mantis, etc.
    - ix. If it is determined that more action is required, either the properly trained Facilities Manager/IPM Coordinators may apply a School approved control chemical or the School approved Pest Management Professional (PMP) will be notified.
- 5. Pesticide Use:**
- a. When reasonable non-chemical approaches do not provide adequate control, products that pose the least risk to people and the environment will be selected, and then only used when and where pests are present, or expected to be present, as determined by monitoring and action thresholds and approved by the Facilities Manager. Pesticide applications will not be made on a routine or regularly scheduled basis. The use of pesticides with acute toxicity categories 1 through 3 (1 being acutely toxic, 5 being least toxic) should be avoided. In documented emergency situations where the presence of a pest immediately threatens the health or safety of students, staff, or members of the community using the facilities, the Facilities Manger may consider the use of pesticide products that do not fit the above criteria.
- 6. Approved Chemical List:**
- a. A list of approved chemicals will be maintained at the school and must be readily available for inspection. All Safety Data Sheets (SDS) will be maintained by the Facilities Manager/IPM Coordinators and copies located in every IPM Site Manager's IPM Binder.

7. Certified Pesticide Applicators:
  - a. Only Utah certified pesticide applicators and Pest Management Professional (PMP) trained in Integrated Pest Management would apply pesticides with acute toxicity categories 1 through 3 at Karl G Maeser Preparatory Academy.
  - b. Under no circumstances should students, teachers or other non-approved school staff store or use pesticides. Absolutely no outside (unapproved chemicals) should ever be stored or used at Karl G Maeser Preparatory Academy. Unapproved faculty and staff that store pesticides can have those products taken from them. The following personnel are the only ones who are authorized to apply any pest control chemical in schools with acute toxicity categories 4 through 5 or with the signal words 'Warning' and 'Danger':
    - i. 1. Facilities Manager/IPM Coordinators. 2. The School approved Pest Management Professional (PMP).
8. Pest Management Professional (PMP):
  - a. The Facilities Manager/ IPM Coordinators or IPM Site Manager using non-chemical techniques will manage most pest issues. Occasionally, certain pest situations will occur where a Pest Management Professional (PMP) must be contracted to handle the pest issue. Karl G Maeser Preparatory Academy will create a contract that will meet the requirements of the District's IPM policy and plan.
9. Any PMP working with Karl G Maeser Preparatory Academy shall:
  - a. Be made aware of Karl G Maeser Preparatory Academy's IPM Plan and program.
  - b. Will make accommodations in-line with Karl G Maeser Preparatory Academy's school IPM Policy and plan.
  - c. Will not apply pesticide without consulting with the Facilities Manager/ IPM Coordinators prior to any/all pesticide application.
  - d. Will not make routine, time or calendar-based pesticide applications.
  - e. Will avoid the use of broadcast applications in favor of spot treatments, when/where needed.
  - f. Will set procedures for timely response to pest sightings.
  - g. Will only apply pesticides that the Facilities Manager/ IPM Coordinators and the PMP have agreed upon in advance and that are listed in the Approved Pesticides List found in the IPM Site Manager's IPM Binder.
  - h. Will provide Safety Data Sheet (SDS) documents to the Facilities Manager/ IPM Coordinators of any product the company wants to apply (requires prior approval before application).
  - i. Will keep detailed records of pesticide use, and will give a copy of those records to the Facilities Manager/IPM Coordinators for their records.
  - j. Will not use any pesticide classified as acutely toxic (category 1) by the EPA without prior approval.
  - k. Will not use any pesticide unless all ingredients in the product have been evaluated by the EPA and found to include no possible, probable, known, or likely human carcinogens; no reproductive toxicants; no known, probable or suspected endocrine disruptors; and no nervous system toxicants (either cholinesterase inhibitors or listed as neurotoxins by the Toxics Release

Inventory). A pesticide will not be used if the facility does not have information on its ingredients, including inert ingredients.

- l. All ingredients in pesticides used by the facility shall have a soil half-life of 30 days or less.
  - m. Properly applied gel bait or tamper-resistant containerized bait can be an exempted application if it represents the least hazardous treatment option.
  - n. Will give specific recommendations to correct Pest Conducive Conditions (PCCs).
  - o. Will facilitate proper posting and notification of all pesticide applications with the IPM Site Manager.
  - p. Will promote the appropriate least-hazardous methods to correct pest problems.
  - q. All applicators should be properly licensed and supervised by knowledgeable, highly trained personnel.
- 10. Notification:**
- a. It is the general practice of Maeser Prep to provide at least 24-48 hour prior notice of pesticide application via posting in the main office of each location except when pests pose an immediate concern to students, staff or guests. For emergency applications where an imminent threat to health exists students, staff, and parents/guardians will be notified within 24 hours after the pesticide application.
  - b. Turf/grounds notification of application of pesticides/herbicides will also be posted in the main office.
- 11. Posting:**
- a. Pesticide application sites will be posted with highly visible signage during and at least 24-48 hours after all pesticide applications. Postings will be labeled with the date of application, pest treated for, pesticide used, applicator name, certification number of applicator, phone number of applicator/company, and date/time reentry is authorized if required. For emergency applications where an imminent threat to health exists postings must be placed as soon as practical, with a preference to no later than the start of the pesticide application.
- 12. Exclusion:**
- a. Pesticides will not be applied when persons, other than pesticide applicators, are present or are expected to be present. All persons other than the pesticide applicators will be excluded from the treated site for at least eight (8) hours after the completion of any pesticide application, or as prescribed by the pesticide label, whichever is longer.
- 13. Exemptions:**
- a. This policy does not apply to the following exempted uses of products:
    - i. The use of insecticide or rodenticide baits in pre-manufactured, tamper-resistant containers such as bait blocks, but these must be labeled with all other posting requirements on the exterior of each container. Such containers should be limited to areas inaccessible to children.
    - ii. Insecticide baits in gel or paste form placed in cracks and crevices inaccessible to children.
    - iii. Germicides, disinfectants, bactericides, sanitizing agents, water purifiers and chemicals used in normal cleaning activities.
- 14. Record Keeping:**

- a. Records will be maintained by the IPM Site Manager of all monitoring and mitigation efforts, to include all in-house and contracted pesticide applications, and copies of the pesticide applicators' certifications for at least three (3) years after the date of the activity. Records documenting the use of all pesticide applications will include the applicator's name, the product name, the product's EPA registration number, quantity used, date and time of application, location of application, application method, and the targeted pest. These records must be readily available for inspection. The Facilities Manager/ IPM Coordinators will also maintain records of training given to staff, continued education training taken, and exterior agency audits on environmental health, sanitation, and safety as they pertain to pesticide safety and pest mitigation for at least three (3) years from the date given or published and must be readily available for inspection.

**15. Education & Training:**

- a. Maeser Prep will train all School personnel on IPM and depending on their responsibility adjust the training for each employee group e.g. the IPM Site Manager will receive different training than kitchen staff. Training of personnel is critical to the success Maeser Prep IPM program. Staff, students, and the community will be educated about pest problems associated with school settings, the components of IPM, the School Policy, their roles in achieving pest-free schools, and procedures.
- b. Facilities Manager/IPM Coordinators will provide all training curriculum.
- c. Custodians and IPM Site Managers will be tested to demonstrate they have a minimum level of IPM proficiency and receive a minimum of two (2) hours of IPM training annually.
- d. Facilities Maintenance personnel should be trained a minimum of one (1) hour annually on the components of IPM and how their efforts at sealing the building envelope and repairing water leaks impact pest infestations. This training will include, but not limited to, the following topics:
  - i. Responsible for recognizing and correcting conditions that may lead to pest problems, such as water leaks, potential pest entryways, plants too close to buildings etc. It is essential that all grounds and maintenance staff be adequately trained to recognize and prevent pest problems, and follow IPM principles.
  - ii. Should report pest issues to IPM Site Manager whenever pests or signs of pest activity are discovered in the school building, or are a problem on facility grounds.
  - iii. Manage specific pest issue(s) as directed by the Facilities Manager/ IPM Coordinators.
  - iv. Grounds staff will be trained in accepted horticultural practices grounded in IPM.
- e. Teachers and Administrative staff should be trained a minimum of one (1) hour annually on the components of IPM and how their efforts for clutter removal and general classroom/office sanitation impact pest infestations. This training will include, but not limited to, the following topics:
  - i. Be familiar with the signs and symptoms of pesticide poisoning.

- ii. Should understand the importance of good sanitation and proper food storage.
  - iii. Will not touch, move, or disturb sticky traps or other pest monitoring devices.
  - iv. Be aware of any children or staff with asthma or chemical sensitivities.
  - v. Serve as a resource for IPM information for school staff, children, and parents.
  - vi. Keep an inventory of students with hypersensitivities to honey bees, etc.
  - vii. Submit a Pest Sighting Report whenever pests are detected in their facility.
- f. Students should be provided direct and supplemental education/information on the Schools's IPM program, and how they contribute to success of the program. This will include, but not limited to, the following topics:
- i. Avoid leaving food or clutter in lockers, classrooms, and common areas and avoid eating food or drinking soft drinks in areas other than areas designated for food consumption.
  - ii. Shall not use pesticides, but will submit a Pest Sighting Report if they find any evidence of pest activity.
  - iii. Will not touch, move, or disturb sticky traps or other pest monitoring devices.
- g. All Personnel should be trained on how to identify and report pest problems and conditions that lead to pest infestations. This training will include, but not limited to, the following topics:
- i. Shall not use pesticides, but will submit a Pest Sighting Report if they find any evidence of pest activity.
  - ii. Will not touch, move, or disturb sticky traps or other pest monitoring devices.
- h. When we all learn to think "pests" as we go about our daily tasks, we will deny pests' access to food, water and shelter, and make our schools unattractive to pests.

**16. Pest Identification:**

- a. When a potential pest problem is identified by a school employee, student, member of the community, via the use of pest monitors, or via the Pest Reporting website, it will be up to the IPM Site Manager to identify the pest and determine the most effective means of managing the situation. Pest identification will be done with the help of literature, the School approved pest control professional, Custodial Services website or through USU Extension Services.

**17. Pest Monitoring Procedures:**

- a. Pest monitoring will be accomplished on a regularly scheduled basis in known Pest Vulnerable Areas (PVAs) and additionally on an as-needed basis as possible pest problems are identified. Monitoring will also be accomplished when evidence of pests are observed e.g. droppings, webs and nests. As needed, rodents will be trapped in a manner that does not allow them to leave the area. Arthropods (insects, spiders) will be trapped in approved capture glue traps to determine population. Areas such as kitchens, vending areas, faculty rooms, locker rooms and custodial areas etc. will have ongoing monitoring.

- b. Additional pest monitors may be used for different types of pests and in different situations (e.g. sticky monitors, glue traps, mechanical mouse traps, outside rodent bait stations, rodent bait stations with non-toxic bait blocks for monitoring, insect pheromone traps, flying insect traps, light traps and visual inspections).
- c. Number of pest monitors depends on building size, number of PVAs, pest issues, pest type etc. but generally Elementary Schools 5 – 10: Middle Schools 10 – 15: High Schools 15 – 25.

**18. Pest Reporting:**

- a. Pest reporting on a school level will be accomplished via the complainant notifying either the school level IPM Site Managers or submit a Pest Sighting Report. The IPM Site Manager will then determine, based on their training, the best course of action. If the pest sighting is determined to be a localized problem (ants, flies, etc.) the IPM Site Manager may determine that a physical or sanitation change is sufficient to solve the problem. If not, a small, one- time application of a School approved insecticide may be needed. Emergency pest issues may require a phone call to the Facilities Manager/ IPM Coordinators' office. In that case, the Facilities Manager/ IPM Coordinators, will then determine the best course of action to manage the problem.

**19. Inspections:**

- a. IPM inspection of all pest monitoring stations will be conducted monthly by the IPM Site Manager at Karl G Maeser Preparatory Academy and a detailed IPM inspection of all facilities will be conducted semi-annually by the Facilities Manager/ IPM Coordinators. Inspections will include the entire building and grounds, paying particular attention to Pest Vulnerable Areas (PVAs) such as kitchens, cafeterias, kindergarten rooms, art supply rooms, custodial supply rooms, school stores, vending areas and storage areas. The Facilities Manager/ IPM Coordinators will work closely with the IPM Site Manager and Administration to correct any issues. Additional, follow up inspections will be conducted as needed until all pest issues are stabilized or resolved.

**20. Action Thresholds:**

- a. An Action Threshold is the point at which an IPM technician takes action to reduce a pest's numbers. Action Thresholds for Karl G Maeser Preparatory Academy are based on five factors: economics, health and safety concerns, aesthetic concerns, community opinion and legal liability. Action Thresholds can be difficult to determine and sometimes require close monitoring to determine if a threshold has been met.
- b. The five determining factors are:
  - i. Economics
    - 1. In high numbers, carpenter bees can seriously damage unfinished wood decking and trim. It can be expensive to protect this wood from carpenter bee attacks by treating and sealing it. But it can be far more expensive to have to replace that wood after carpenter bees have damaged it.
  - ii. Health and Safety Concerns
    - 1. Action thresholds are set low when health or safety is at stake.
  - iii. Aesthetic Concerns

1. Aesthetic damage occurs when the appearance of something is degraded. Examples include bird droppings on sidewalks, defoliation or flower damage to landscape plants, and disease spots in lawns.
- iv. Community Opinion
  1. Certain pests are seen as more disgusting, scarier, or otherwise worse than other pests. Most people are less willing to tolerate a cockroach than a cricket, a mouse than a pigeon. Providing information about pests and beneficial organisms, and the risks and benefits of control can sometimes modify a person's tolerance of a particular pest.
- v. Legal Concerns
  1. Pests in commercial and institutional kitchens are regulated under state and county health codes. There is little tolerance for cockroaches, ants, mice, and other pests anywhere food is stored, prepared, or served, so action thresholds are typically low. Safety and building standards, rather than IPM considerations, may determine when action is necessary to control termites, rats, flies, and other pests in schools. During community health emergencies, government agencies may legally mandate control of certain pests, such as raccoons or skunks during rabies outbreaks, or mosquitoes during encephalitis outbreaks.
- c. Karl G Maeser Preparatory Academy Action Threshold Examples, Not an Inclusive List.
  - i. Classrooms, offices and other community areas: 5 ants per area Kitchens, cafeteria and other indoor eating areas: 2 ants per area Maintenance and storage areas: 5 ants per area or 100 sq. ft. Outside grounds: 2 field ant mounds per sq. yard
  - ii. Indoors: Any bat sighting indoor requires IPM action Outdoors: Any noticeable activity, hanging under eaves, or droppings If bats are noticed flying near school but not roosting they should be monitored to determine numbers and any roosting activity.
  - iii. Indoor areas: 1 bee per area Outside grounds: No action necessary unless hive is present or threatening Trash can / dumpster areas: 1 bee per area; Indoor areas: 1 yellow jacket or hornet per area; Outside grounds: 1 yellow jacket or hornet if individuals are being threatened.
  - iv. Trash can / dumpster areas: 10 yellow jacket or hornets per 10 minutes
  - v. IPM action necessary if nests are present near student activity areas
  - vi. Classrooms, offices and other community areas: 2 cockroaches per area Kitchens, cafeteria and other indoor eating areas: 1 cockroach per area Maintenance and storage areas: 5 cockroaches per area Outside grounds: No action necessary unless noticeable infestation
  - vii. If 2-10 cockroaches per room, apply cockroach bait. If 10 or more, track down infestations, review sanitation, trash handling, clutter, etc., open equipment, and check inaccessible areas, vacuum and otherwise clean room and apply baits or other insecticides as necessary.



- viii. Classrooms, offices and other community areas: 3 crickets per area  
Kitchens, cafeteria and other indoor eating areas: 2 crickets per area  
Maintenance and storage areas: 10 crickets per area Outside grounds: No action unless causing problems
- ix. Classrooms, offices and other community areas: 3 flies per area Kitchens, cafeteria and other indoor eating areas: 1 fly per area
- x. Maintenance and storage areas: 5 flies per area Outside grounds: No action unless causing problems Trash can / dumpster areas: 10 flies per area
- xi. Indoors: Any mouse sighting or evidence of mice droppings etc. Outdoors: Any noticeable burrows or activity in student areas
- xii. Roof ledges: 10 per building for three consecutive inspections Any area: Nests obstructing gutters or equipment Sidewalks / entranceways: Whenever droppings accumulate more than 1”
- xiii. Indoors: Any rat sighting or evidence of rat droppings etc. Outdoors: Any active burrows or activity
- xiv. Library and wherever books, paper, files are stored: 1 per area Other indoor areas: 2 per area
- xv. Classrooms, offices and other community areas: 1 spider per area  
Kitchens, cafeteria and other indoor eating areas: 1 spider per area  
Hallways: 2 spiders per area Maintenance and storage areas: 3 spiders per area Outside grounds: Only if in large numbers or causing problems
- xvi. IPM action necessary if a black widow is suspected in any area
- xvii. Outdoor student activity areas: 1 tick, any species
- xviii. Outdoor wooded and other areas of low student activity: keep grass and weeds trimmed. If any blacklegged ticks found, treat wood edges. For other species, take action if moderate to heavy populations.

**21. Head Lice Policy:**

- a. Pesticide applications to the facility for head lice are ineffective, and thus are prohibited by this policy. An informational fact sheet on head lice will be provided for staff, teachers, and parents. Non-chemical control options (combs, etc.) are indicated in the literature. For further head lice information see: <http://www.extension.org/pages/20989/ipm-action-plan-for-head-lice#.VMZjnkvi4ds>

**22. Bed Bug Policy:**

- a. Bed Bugs do not generally survive well in a school environment. If bed bugs are suspected in a school this would trigger IPM action immediately. School staff can dramatically decrease the chance of an infestation by eliminating clutter. The most important action school personnel can take is to eliminate clutter that provides harborage for bed bugs and makes inspection, monitoring, simple bed bug removal or any other treatment option difficult. Do not jump to conclusions! Know the difference between an introduction and an infestation. Sighting a few bed bugs does not indicate infestation but rather an introduction. Infestation is defined as having the entire lifecycle pest present from eggs to adult.

**23. Commitments:**

- a. This policy covers all indoor and outdoor areas used by students, staff and the community. Karl G Maeser Preparatory Academy recognizes that pest management is best accomplished through partnership and the use of multiple control tactics. Therefore, we are committed to accepting the advice of Pest Management Professionals (PMP) and conducting ongoing maintenance, inspections, monitoring and remediation in a timely manner.
- b. Karl G Maeser Preparatory Academy will designate a building IPM Site Manager. That person, under the direction of the Facilities Manager/ IPM Coordinators, is responsible for all designated IPM activities in each facility. Questions from parents and staff about IPM and this policy should contact the Director of Facilities Manager/ IPM Coordinators.

**24. Appendix A: Utah Administrative Code R392-200 7(12) Pest Management.**

- (a) The governing body shall minimize in school buildings or on school grounds the presence of pests that are vectors for disease, carry allergens that are likely to affect individuals with allergies or respiratory problems, or may sting or bite causing mild to serious reactions in some individuals.
- (b) The governing body shall adopt integrated pest management (IPM) practices and principles to prevent unacceptable levels of pest activity with the least possible hazard to people, property, and the environment.
- (c) The governing body shall have a written integrated pest management plan written by the governing body or provided by the contracted pest management contractor whether IPM is implemented as an internal process or contracted to a pest management professional. The plan shall include sections that cover the following topics: an IPM policy statement; IPM implementation and education; pest identification, monitoring procedures, reporting and control practices; approved pesticides; procedures for pesticide use; a policy for the notification of students, parents, and staff; and applicator requirements. Guidance for an IPM plan can be found in publications of the IPM Institute of North America. The Department or the Local Health Officer may require changes in a school's IPM plan if the plan neglects or causes a threat to the health or safety of the occupants of a school.
- (d) The governing body shall use non-chemical management methods whenever possible to provide the desired control. The governing body shall use a full range of control alternatives including: identification and removal or repair of conditions that are conducive to pests; structural repair and sealing; improved sanitation; removal of clutter or harborage; elimination of food sources; exclusionary measures to protect doors, windows and any other opening to the outside against the entrance of insects, rodents, and other animals. A no-action alternative shall also be considered in cases where the pest has no public health or property damage significance.
- (e) If the governing body chooses to not use a contracted pest control contractor, school personnel who apply pesticides shall follow the Utah Dept. of Agriculture pesticide regulation R68-7. The applicator shall apply all products according to the pesticide label directions.

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