

~ Era ISD ~ IPM program

Introduction

Structural and landscape pests can pose a significant problem to people, property and the environment. Pesticides and herbicides can also pose risks to people, property, and the environment. It is therefore the Policy of **Era ISD** to incorporate Integrated Pest Management (IPM) procedures for control of structural and landscape pests.

Pests are populations of living organisms (animals, plants, microorganisms) that can interfere with the day-to-day operations of the **Era ISD** campuses. Strategies for managing pest populations will be influenced by the pest species and whether that species poses a threat to the students, staff, property, and/ or the environment. Pest management plans will be developed for the **Era ISD** and will include pest management measures.

Pests will be managed to reduce any potential human health hazards to protect against a significant threat to public safety, to prevent damage to Era ISD structure or property, and to enhance the quality of life for students and staff.

The choice of using chemical pesticides will be based on a review of all other known options and a determination that these options are not acceptable or feasible. Cost or staffing consideration alone will not be adequate justification for use of chemical control agents. Selected non-chemical pest management methods will be implemented, whenever possible to provide the desired control. It is the policy of **Era ISD** to utilize IPM principles to manage pest populations adequately. The full range of alternatives, including no action will be considered. When it is determined that a pesticide or herbicide must be used in order to meet the pest management goals, the least hazardous material will be chosen.

The IPM Coordinator, Administrator, and staff will be educated about the potential school pest problems and the IPM policies and procedures to be used to achieve the desired pest management objectives.

The IPM Coordinator will maintain records of pesticide and herbicide use and will notify the **Era ISD** staff and students of upcoming pesticide treatments. Notices will be posted in designated areas at each site.

Pesticide purchase will be limited to the amount authorized for use in one year. Pesticide will be stored and disposed in accordance with the label directions and state regulations. Pesticides will be stored in an appropriate secure site not accessible to students or unauthorized personnel.

Pesticide applicators will be educated and trained in the principles and practices of integrated pest management and use of pesticides. They will follow regulations and label precautions. Applicators will be certified and comply with the **Era ISD** policy.

IPM Management

The IPM Coordinator will be trained through a Texas Structural Pest Control Service approved IPM Coordinator training course. The IPM Coordinator will design a pest management system and maintain IPM Policies. The IPM Coordinator is the person who observes and evaluates the site or directs others to do so and decides what needs to be done to achieve the site management objectives.

Era ISD will contract with a commercial pest control company(s) to meet some of the needs of the facility. Some of the school needs will be met by certified noncommercial applicators employed by **Era ISD**. The contractors will make detailed site-specific recommendations for structural and procedural modifications to achieve pest suppression. The contractor shall provide evidence of sufficient expertise in pest control and IPM principles and practices.

The **Era ISD** IPM program includes educating all that is involved in the program. This education should include the administrators, teachers and auxiliary staff.

Pest Management Objectives

- Manage pests that may occur on campus to prevent interference with the learning environment of the students
- Preserve the integrity of the buildings and structure
- Provide the safest playing or athletic surfaces possible

IPM Cycle

- **INSPECTION** – Inspection of all facilities and grounds will be conducted monthly basis by district personnel or by pest management contractors. A detailed building inspection of each campus will be conducted annually to determine if the building has any conducive conditions for pests and to develop a list of structural and landscape improvements.
- **IDENTIFICATION** – Accurate identification of pest is a vital part of ensuring that proper control methods will be used. Local resources will be used to help in identification .(*Can explain you would use an entomologist or other means for identification of key pests*)
- **ACTION** – Habitat modifications, exclusions, repair, and sanitation efforts will be the first actions considered. Action threshold will be considered before any other actions are considered. Then action threshold will reflect how many pests can be tolerated for a specific site. The presence of some pests does not in itself necessarily require action.
- **EVALUATION** – If it is determined that further action is needed then there will be a follow up with an appropriate pesticide approved by the IPM Coordinator

Indoor IPM Strategies

Typical Pests: Mice, Rats, Cockroaches, Ants, Flies, Spiders, Termites, and Microorganisms

Entryways: Doorways, Overhead doors, Windows, and Openings around pipes, Electrical fixtures, and Ducts.

- ✓ Keep exterior doors shut when not in use
- ✓ Place weather stripping around doors
- ✓ Caulk and seal openings in walls
- ✓ Keep vegetation at least one foot from the structure

Classrooms/Offices: Including Performance Hall, Gymnasiums, Hallways, Offices and Classrooms

- ✓ Allow food and Beverages only in designated areas
- ✓ Keep indoor plants healthy
- ✓ Keep areas dry as possible by removing standing water and water damaged and wet materials
- ✓ In the all class rooms store animal foods in sealed containers and regularly clean cages
- ✓ In all areas remove dust and debris
- ✓ Routinely clean lockers and desks
- ✓ Frequently vacuum carpeted areas

Food Preparation and Serving Areas: Dining Hall, Kitchen, Teacher's Lounge, Vending Machine areas and Food Storage Rooms

- ✓ Store food in containers that are inaccessible to pests
- ✓ Store waste in containers that are inaccessible to pests
- ✓ Remove all waste at the end of each day
- ✓ Place screens on vents, windows and floor drains.
- ✓ Remove all food debris including crumbs
- ✓ Fix dripping faucets and other water leaks
- ✓ Promptly clean food preparation equipment after use
- ✓ Caulk or paint to seal cracks and crevices

Rooms with Extensive Plumbing: Bathrooms, rooms with sink, locker rooms and crew spaces.

- ✓ Promptly repair leaks and correct other plumbing problems
- ✓ Routinely clean floor drains, strainers and grates
- ✓ Keep areas dry
- ✓ Store paper products or cardboard boxes away from moist areas and direct contact with the floors

Maintenance Areas: Mechanical rooms, Janitorial rooms, etc.

- ✓ Allow eating only in designated eating rooms
- ✓ Clean trash cans regularly
- ✓ Use plastic liners in trashcans
- ✓ Keep areas clean and dry as possible
- ✓ Store paper products or cardboard boxes away from moist areas and direct contact with the floors and walls

Outdoor IPM Strategies

Typical Pest: Mice and Rats; Turf Pest such as broad-leaf and grassy weeds; Insects such as beetle grubs or sod webworms and turf disease; fire ants, wasps and hornets; Ornamental pests such as plant diseases, insects such as trips, aphids, Japanese beetles and bagworms.

Parking Lots, Loading Docks, Refuse Dumpsters

- ✓ Regularly clean trash containers and gutters
- ✓ Regularly remove all waste and paper debris
- ✓ Secure lids on trash containers
- ✓ Repair cracks in pavement and sidewalks
- ✓ Provide adequate drainage

Turf: Lawns, Athletic Fields and Playgrounds

- ✓ Select turf types best adapted for the area
- ✓ Adjust mowing height to grass type
- ✓ Vary mowing patterns to reduce soil compaction
- ✓ Do not over or under water turf water in the "A.M."
- ✓ Provide good drainage
- ✓ Periodically inspect turf for evidence of pest or diseases
- ✓ Have soil analyzed to determine fertilizer requirements
- ✓ Time fertilizer applications on an appropriate time
- ✓ Aerate soil periodically

Ornamental Shrubs and Trees

- ✓ Apply fertilizer to annual and perennials during active growing season
- ✓ Apply fertilizer to trees and shrubs early in the growth season or during the dormant season
- ✓ Prune branches to improve plants and prevent access by pest to structures
- ✓ Periodically inspect plants for evidence of pest or disease
- ✓ Remove susceptible plants if a plant disease recurs and requires too many resources to keep healthy
- ✓ Select replacement plants from among the disease resistant types

Pesticide/Herbicide Applications (*The IPM coordinator must approve applications*)**

- ✓ An appropriate application uses the least toxic and most effective pesticide or herbicide
- ✓ Applications should be applied by qualified applicators
- ✓ Applications will be applied when occupant are not expected to be present for at least 12 hours. A sign will be posted 48 hours before the application.
- ✓ Applications will be applied according to label directions
- ✓ Proper protective clothing or equipment will be used when applying chemicals.

- ✓ Areas will be properly vented after application

Storing Pesticides

- ✓ Pesticide and herbicides will be stored off site or in buildings that are locked and inaccessible to all undesignated personnel.
- ✓ The storage area will have adequate ventilation.
- ✓ Pesticide and herbicides will be stored in separate locations.
- ✓ Storage facilities will be such that the risk of flooding and contaminating the environment will be minimal.
- ✓ The storage area will be free of ignition sources
- ✓ All pesticide and herbicides will be stored in their original containers with secure lids.
- ✓ If pesticide and herbicides are stored in occupied buildings precautions will be taken to ensure that the air in the storage space has no chance of mixing with the air in the central ventilation system. Containers will be inspected routinely for leaks.

Posting and Notification

- ✓ State law requires schools to notify students and staff of impending pesticide applications 48 hours in advance.
- ✓ Notices will be posted in the areas to be treated. (Please consult state regulations for current posting notifications.)

Evaluation and Recordkeeping

- ✓ Recordkeeping allows the IPM Coordinator to evaluate the IPM Program.
- ✓ A pest management log will be maintained for the district and kept in the office of the IPM Coordinator. It will include pesticide use records that meet the requirements of the Texas Department of Agriculture.
- ✓ Copies of the Integrated Pest Management Plan will be kept in the Superintendent's Office and the IPM Coordinator's Office.
- ✓ A copy of the EPA-registered label and the current MSDS for each pesticide and herbicide product used on school property.

The Following forms will be filled in the IPM Coordinator's Office:

- Approval for Yellow and Red List Products
- Emergency Treatment Request
- Registration Notification Documentation
- Pest Management Log
- Incidental Use Letters
- Documentation of Training
- An IPM facility inspection document will be completed on each school campus at least every other year or more frequently based on campus age and pest problems.
- Request/Complaints relating to pest problems
- Contracts and records dealing with professional pest control services

IPM Plans for common pest problems

IPM plans have been developed and are found within this document for the most common pests in Era ISD.

THRESHOLDS

A threshold is the boundary between a tolerable and an intolerable level of a pest. The higher the threshold, the more pests can be tolerated. Some level of pest presence, except in the cases of a few serious health or quarantined pests, can usually be tolerated. Thresholds can be multi-leveled and used to trigger different types of management actions, including actions other than pesticides. Acceptable thresholds for **Era ISD** will be monitored regularly, and are listed at the end of this plan.

ERA ISD – IPM ACTION THRESHOLDS

Ants (common house-infesting)

Classrooms and other public areas	5 ants per room
Nurse's Office	5 ants per room
Kitchen	5 ants per room
Maintenance and storage areas	20 ants per 100 sq ft in 2 successive monitoring periods
Outside Grounds	2 field ant mounds per 250 square feet

Ants (Carpenter)

Classrooms and other public areas	3 ants per room
Nurse's Office	3 ants per room
Kitchen	5 ants per room

*Immediate action if ant colony inside or within 25 feet of any building

Ants (Fire)

Classroom and other public areas	3 ants per room
Infirmary	3 ants per room
Kitchen	3 ants per room
Maintenance and Storage areas	10 ants per 100 square feet in two successive monitoring periods.
Outside Grounds	Any fire ant mound

Bees (Honey)

Classrooms, Infirmary, Kitchen, Public Areas	3 bees
Maintenance areas	10 bees
Outdoors	No action unless children are threatened and to be relocated by qualified beekeepers whenever possible.

Cockroaches (German)

Classrooms and other public areas	4 per room
**4-10 cockroaches track down infestations, review sanitation, trash handling, clutter, open equipment, check accessible areas; vacuum and otherwise clean room and apply containerized baits or baits/gels for crack and crevice treatment	
Infirmary	3 cockroaches per room
Kitchen	3 cockroaches per room
Maintenance areas	5 cockroaches per room

Grain and Flour pests

Found in food for human consumption:	1 per package or container
Pet food:	1 if escaping from packaging

House Flies

Classrooms and other public areas	5 flies per room
Infirmary	2 flies per room
Kitchen	2 flies per room
Maintenance areas	8 flies per room
Outside grounds	10 flies around any one trashcan or 20 flies around a dumpster

Mice / Rats

Indoors	Any mouse sightings or evidence of mice (droppings, tracks, etc) triggers pest management action
Outdoors	Any noticeable burrows or activity in student areas

Yellow-jackets/Hornets

Classrooms and public areas:	1 yellow jacket or hornet and any area if children are threatened.
Outdoors:	Action necessary if nests are present in or near student activity area.
Trash can or dumpster:	10 in 10 minutes at trash can or dumpster