Sample IPM program

(Please review and place your district and personnel responsible in the correct spots. Remember this is a guidance document, these are recommended suggestions that can be tailored to you specific school district or business.)

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 **Blank 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 **Blank 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 **Blank 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 Blank 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 **Blank 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 **Blank 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 **Blank 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.

Blank ISD will contract with a commercial pest control company(s) to meet the needs of the facility. 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. (*If pest control practices are conducted in house, this paragraph should reflect that.*)

The **Blank 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

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.

Schools generally must develop their own thresholds.

Threshold levels developed for a home or restaurant may be inappropriate for a school. Likewise, thresholds developed for high-visibility/ high-maintenance landscapes will differ from those for medium- or low- maintenance landscapes. Research-determined thresholds are available for only a few pests, in part because humans, and managers, differ substantially in their tolerance of pest presence or damage. It's useful to set your own thresholds for common pests in your school district, especially for key pests. Setting a zero tolerance for your school district is unattainable and not realistic for IPM. Instead, you can list what actions you would take for a specific pest like German cockroaches if you find one on a monitoring glue board. IPM strategies should give your staff guidelines of how to prevent pests and IPM plans should be how you will address specific pests within you district.

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 Duct (s).
• 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: Dinning Hall, Kitchen, Teacher's Lounge, Vending Machine areas and Food Storage Rooms
• Store food in containers that are inaccessible to pest
• 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 board-leaf and grassy weeds. Insects such as beetle grubs or sod webworms and turf disease.

Ornamental pest 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
This section needs to be as specific as possible. Sample IPM plans have been developed and are found within this document. Pick the most common pests your district has experienced for the last two to three years. Develop action steps for how you would react to that particular pest problem indoors and outdoors. These action steps can help you educate your staff, teachers, and administrators about these common pests and how they can assist in the prevention of reoccurring problems

Pest Control Practices for Food Establishments

A formalized preventive pest control program should be maintained in the retail food establishment or food processing plant by in-house or contracted services. The food establishment should maintain written procedures outlining the requirements of the program to reduce the potential for product contamination from pest activity or the use of materials and/or procedures designed to control pest activity. Pest control activities should be conducted in total compliance with the regulatory requirements of the agency controlling such procedures. In addition, specific programs and procedures should include as a minimum:

1. Pesticide applications made within and/or around the exterior of the retail food establishment **shall** be undertaken by a licensed pest control contractor or properly licensed or trained in-house employee, where such licensing provisions are required by government codes. In the absence of such regulatory requirements, applicators **shall** demonstrate they have received proper training in the proper and safe use of pest control materials by attendance at a recognized seminar or have documented training and be under the supervision of a licensed applicator, where required by government codes. Pesticides designated for "Restricted Use" **shall** only be used by trained, licensed pest control applicators, where a license is required by government codes.

2. The retail food establishment serviced by in-house personnel (licensed or trained pesticide applicator or applicators) **shall**:
a. Maintain a file of sample labels and Material Safety Data Sheets (MSDS) information for each pesticide used and **shall** maintain pesticide usage records as well as records on maintenance of the safety and protective equipment used.
b. Maintain and enforce written procedures for the application of all pesticides.
c. Maintain accurate records of application of pesticides as outlined in section 3.d. below.

3. Retail food establishments serviced by a contracted licensed pest control company **shall** maintain the following:
A contract describing the specific services to be rendered, including materials to be used, methods, precautions, and Material Safety Data Sheets (MSDS) required by government regulations.
Sample labels for all pesticides used. Sample labels **shall** be kept on file for the time specified by regulatory codes.
Accurate and complete service records describing current levels of pest activity and recommendations for additional efforts needed to correct conditions allowing a potential for pest activity.
Accurate documentation of all pesticide applications, including rodenticides made in or around the facility. Documentation **shall** be maintained in accordance with government regulations and must document, at a minimum:
• Materials applied
• Target organism
• Amount applied
• Specific area where pesticide was applied
• Method of application
• Rate of application or dosage
• Date and time treated
• Applicator's signature

A copy of the current liability insurance and evidence of a current applicator's license, where a license is required. All retail food establishments **shall** establish effective preventive programs for the elimination of pest activity. The effectiveness of the programs **shall** be measured by the lack of observation of pest activity and evidence. Specific procedures include but are not limited to:

1. If necessary, outside bait stations for the control of rats and mice. Bait stations **shall** meet tamper resistance standards and be properly positioned, anchored in place, locked, and properly labeled in compliance with regulatory requirements. The bait stations **shall** be installed around the exterior perimeter of the retail food establishment at 50-100 foot intervals, where allowed by local ordinance. Properly maintained mechanical rodent control devices may also be used, where allowed by government regulations.

Lids to the bait stations **shall** be locked with devices supplied by or recommended by the manufacturer. The use of reusable plastic ties or other easily cut or tampered with materials **shall not** be used. Baits used **shall** be rodenticide or monitoring (nontoxic) feeding blocks meeting relevant legislation or the appropriate regulatory agency. Service conducted on the monitoring devices **shall** be in line with levels of rodent activity in the stations. However, all stations **shall** be inspected and serviced no less than once per month. Each service and the results of the service **shall** be documented for each station or device and maintained on file.

Internal measures **shall** comply with government regulations. Unless prohibited by regulatory requirements, internal control programs **shall** consist of the use of mechanical traps, extended trigger traps, or glue boards, but **shall not** include feeding stations of any kind.

Internal devices used for routine monitoring purposes should be positioned at 20-40 foot intervals along exterior perimeter walls. In any area where there is a potential for rodent activity, such as raw material storage areas within a facility, rodent control devices should be installed along interior walls. The contractor or retail food establishment personnel **shall** inspect and clean the devices at least once a week.

2. Maps or schematics showing the locations of the rodent control devices **shall** be maintained and kept current.

3. A record of the service and cleaning of each rodent control device **shall** be maintained in each pest-monitoring device. The service documentation **shall** include the findings from the device inspections.

4. Rodent burrows, rodent runs, and any conditions attracting rodents or other pests both inside and outside the retail food establishment **shall** be eliminated.

5. Electric flying insect monitors should be used as needed to identify flying insect entry into the facility. Units **shall** be installed so insects are not attracted from outside the retail food establishment. Units **shall not** be placed within 10 feet of exposed product in a preparation or storage area. All units should be listed on the Master Cleaning Schedule for cleanout on a weekly schedule during peak insect season. These should be cleaned monthly during off-peak season. Installation and use **shall** follow all local regulations.

6. Birds **shall** be controlled by exclusion: netting, screening, mechanical traps or avicides, if legal and practical. The use of avicides **shall not be** permitted inside the retail food establishment.

7. All pesticide containers and application equipment **shall** be properly labeled to identify the contents. Insecticides or herbicides each require separate equipment for application. All equipment used for pesticide application **shall** be properly maintained in serviceable condition.

8. Pesticides stored in a retail food establishment **shall** be stored in a locked enclosure, preferably in an outside building away from preparation areas. Easily understandable labeling warning of the contents and limiting access **shall** be posted on the exterior entrances to this enclosure. The storage enclosure **shall** be adequate in size and construction and well ventilated. The enclosure **shall** contain the necessary materials to control spills or leakage and to avoid injury to personnel.

9. Disposal of pesticides, pesticide containers, and pesticide residues **shall** be done in a manner that meets all regulatory guidelines and must be consistent with the instructions included on the label for the material.

10. Pest monitoring devices and appropriate integrated pest management strategies should be properly used to provide ongoing monitoring for pest activity and to design an effective control program to eliminate pests and the potential pest activity.

SAMPLE IPM ACTION THRESHOLDS

Ants (common house-infesting)

Classrooms and other public areas: 5 ants per room
Infirmary: 5 ants per room
Kitchen: 5 ants per room
Maintenance and storage areas: 20 ants per 100 square feet in two successive monitoring periods
Outside grounds: 2 field ant mounds per 250 square feet

Ants (Carpenter)

Classrooms and other public areas: 3 ants per room
Infirmary: 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 and Public Areas: 3 bees
Maintenance areas: 10 bees
Outdoors: No Action unless children are threatened and to be relocated by qualified beekeepers whenever possible. Handled by a qualified beekeeper 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:

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

Rats

Indoors: Any rat sighting or evidence of rats (such as droppings, tracks) triggers pest management action
Outdoors: Any active burrows or activity

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