
Neches ISD Integrated Pest Management Program

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Neches ISD Integrated Pest Management Program

I. Policy Statement

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 Neches 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 Neches 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 Neches 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 Neches 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 considerations 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 Neches 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 shall be designated by the Superintendent. The IPM Coordinator shall be registered with the Texas Department of Agriculture within 90 days of appointment. Administrators 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 for a period of 2 years and will notify the Neches ISD staff and students of upcoming pesticide treatments as required by law. Notices will be posted in designated areas at each site.

Pesticide purchase will be limited to the amount authorized for use in one year. Pesticides 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. Commercial applicators will be certified and comply with the Neches ISD policy.

II. 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.

Neches 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. The exterior pest control will be done in-house by a trained employee using pesticide or herbicide applications in accordance with the law.

The Neches ISD IPM program includes educating all that are involved in the program. This education should include the administrators, teachers and auxiliary staff. Students and parents are initially informed about the IPM Program in the Online Student Handbook, and instructions for further information or notifications are included. Parents without online access are offered a printed copy of the handbook. The Neches ISD School Board approved the prior IPM Program during the regular January meeting in 2011. The current program was updated and approved October 19, 2016.

III. 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

IV. IPM Cycle

- INSPECTION – Inspection of all facilities and grounds will be conducted monthly 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 (tending to promote or assist) 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.
- **ACTION** – Habitat modifications, exclusions, repair, and sanitation efforts will be the first actions considered. The action threshold will be considered before any other actions are considered. The 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.

V. IPM Strategies – General Prevention Methods

A. Indoor IPM Strategies - Prevention

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 Gymnasiums, Hallways, Offices and Classrooms

- Keep indoor plants healthy
- Keep areas dry as possible, remove standing water and damaged/wet materials
- In classrooms, store animal foods in sealed containers and regularly clean cages
- In all areas remove dust and debris
- 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 a sink, locker rooms

- Promptly repair leaks and correct other plumbing problems
- Routinely clean floor drains, strainers and grates
- Keep areas dry
- Store paper products and boxes away from moisture and contact with 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 and boxes away from moisture and contact with floors.

B. Outdoor IPM Strategies - Prevention

Typical Pests: Mice and Rats. Turf Pests such as board-leaf and grassy weeds. Insects such as beetle grubs or sod webworms and turf disease. 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

Ornamental Shrubs and Trees

- Prune branches to improve plants and prevent access by pest to structures
- Periodically inspect plants for evidence of pest or disease

Pesticide/Herbicide Applications: **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 occupants are not present. A sign will be posted 48 hours before the application and remain for the time specified for safe reentry.

- Applications will be applied according to label directions
- Proper protective clothing or equipment will be used

C. Storing Pesticides

- Pesticide and herbicides will be stored in buildings that are locked and inaccessible to all undesigned personnel. The storage area will have adequate ventilation.
- 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.

D. 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.)

E. 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 state law.
- 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 Neches ISD property.
- The following forms will be filed 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 yearly
 - Request/Complaints relating to pest problems
 - Contracts and records dealing with professional pest control services

VI. IPM 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.

Action thresholds are set for key pests and are suited to the campus facilities and location. Setting a zero tolerance for the school district is unattainable and not realistic for IPM. Instead, we have a list of actions that we will take for a specific pest, if found on a monitoring glue board. IPM strategies give the staff guidelines of how to prevent pests and IPM plans should be used to address specific pests within the district.

Neches ISD Pest Thresholds (Action required if exceeded – See IPM PLAN!)

INSECTS			
Type	Location	Action IF OVER	Other Considerations
Ants - Fire & Carpenter	Classroom,Office, Restrooms, Kitch., Food Storage	3 or active trail	Inspect for trail to mound or attraction for full count
	Storage/maint.	5/100ft ²	Over 2 consecutive inspections
	Building perimeter	1 mound	If within 10 feet of building
	Outside grass	2 mounds per sq yd	
	In use sports fields Play areas	0	1 mound – use mound treatment 4-5 mounds – use bait
Ants – Other beneficial	Indoors Outdoors by entrances	5 10	Vacuum or terminate manually. Eliminate food/water attraction.
	Outside	2 mounds per sq yd	Treat with Green Level only if in student zones
Bees, Wasps, Yellow Jackets	Classroom,Office, Restrooms, Kitch., Food Storage	1	
	Maint/storage	3	
	Outside	Only if threat,nest, or >5	If children are at risk of contact. Use Insecticidal soap. Remove nests when children not present.
	Trash Cans	10/10 min.	Empty trash can. Clean. Use a lid.

Cockroaches	Classroom,Office, Restrooms, Kitch., Food Storage	1 monitor 2-10 bait	>10 track down infestation, review sanitation, trash handling, clutter, open equipment. Check inaccessible areas, vacuum, clean room. Apply baits or insecticides as necessary. (pyrethroids recommended)
	Maint. area	3	
	Outside		No action unless infestation
Crickets	Classroom,Office, Restrooms, Kitch., Food Storage	5	Vacuum asap due to smell! Seal entry point!
	Maintenance	10	
Fleas	Indoors	1	
	Outdoors	2	
Flies	Classroom	3	
	Office	2	
	Kitchen	1	
	Maintenance	5	
Lice		NA	Refer to nurse – medical condition
Silverfish	Library, paper storage area	2 / room	
Spiders - Brown Recluse Black Widow	Any	0	Immediate removal
Spiders - other	Classroom,Office, Restrooms, Kitch., Food Storage	1	1 removal 2-5 clean, reassess Infestation – Remove & Treat
	Maint./Unoccupied	3	
	Outdoors	varies	Only if Infestation or causing problems
Termites	Any	0	Professional services for swarms/tubes
Ticks	Exterior student areas	3	Black legged found – treat wood edges

Rodents, Wildlife, & Plants			
Type	Location	Action IF OVER	Other Considerations
Birds	Indoors	0	
	Outdoors	varies	When droppings or nests are an issue
Geckos	Indoors	2	
	Outdoors	varies	Only if causing a conflict with students
Mice/Rats	Indoors or outdoor student areas	0	Sightings, droppings, or tracks requires action
Moles Gophers	Student Activity areas/ Inside Track	3 mounds	
	Sports fields	2 mounds	
Wildlife Mammals Snakes	Any	0	Remove ASAP
Poison Ivy	Student Activity areas	0	Manual removal preferred; wear protective gloves and place inside plastic bag for disposal – do not toss aside or burn
Weeds	Parking lot/Sports	minimal	Baseball/softball infields with dirt only

VII. IPM PLANS – Corrective Measures & Treatment

Neches ISD has developed action steps for particular indoor and outdoor pest problems. These action steps can help educate the staff, teachers, and administrators about these common pests and how they can assist in the prevention of reoccurring problems. Neches ISD will keep an IPM Plan on file that contains facility reports, pesticide applications and complaints.

A. INSECTS

Ants – Fire or Carpenter varieties

1. Inside. Inspect area - if infestation, found use non-chemical methods like:
 - a. Spray soapy water on trails to disperse
 - b. Vacuum ants or terminate manually if at all possible.
 - c. If an immediate threat to people exists, pyrethrum sprays may be applied in emergency situations where fast control is needed.
 - d. Remove food/water source (follow trails to nest and attraction)
 - e. Seal cracks if needed
 - f. Re-check in 3 days. If problem still exists use a crack & crevice gel.

2. Outside. Use bait and mound treatment - Post signs before hand and leave posted until reentry time specified on label. Treatment must be done when no one is going to be present. One fire ant mound near a sidewalk, entrance, play area, or sports field warrants mound treatment. 4-5 mounds justify bait. Use Green Level measures in student zones. However, faster acting toxicant baits such as spinosad, hydramethylnon or indoxacarb can be applied around colonies or mounds that extend under sidewalks or other pavement areas.

3. *No infestation found – Do not use insecticides

4. *Infestation found - Recheck in 3 days if problem still exists, use pesticides

Ants - Other Beneficial types

1. Inside. Inspect area - if infestation, found use non-chemical methods like:
 - a. Spray soapy water on trails to disperse
 - b. Vacuum ants or terminate manually
 - c. Remove food/water source (follow trails to nest and attraction)
 - d. Seal cracks if needed
 - e. Re-check in 3 days. If problem still exists use a crack & crevice gel.

2. Outside. Use bait and mound treatment - Post signs before hand and leave posted until reentry time specified on label. Treatment must be done when no one is going to be present.
3. *No infestation found – Do not use insecticides
4. *Infestation found - Recheck in 3 days if problem still exists, use pesticides.

Bees, Wasps, Yellow Jackets

1. Inside – immediate removal
2. Outside - Use insecticidal soap on insects and remove nest immediately.
3. Keep lids shut on dumpsters and trash cans. Empty cans to remove attractant.
4. Keep all drink containers picked up
5. Infestation found - post 48 hour notice before treatment

Cockroach Infestation* - Workrooms, classrooms, teacher's lounges, etc.

1. Inspect area – identify type of roach if present - if infestation is found, first use non-chemical treatments:
 - a. Eliminate open food source – store in plastic containers
 - b. Eliminate water source
 - c. Eliminate clutter and vacuum/clean room
2. Check custodial closets:
 - a. Mop buckets emptied nightly
 - b. Hang mops up after each use
 - c. Repair water leaks - dry area completely
3. *No infestation found – DO NOT APPLY INSECTICIDES.
4. *Infestation found – Determine if thresholds warrant emergency treatment. Use boric acid in dry crack and crevice areas. Recheck area in 3 days, use pesticides if problem still exists. Bait stations in areas not accessible to children. Bait gels or similar in other inaccessible areas where roaches hide. German – use growth regulators and pyrethroids. American and Smoky Brown use pyrethroids as a last resort in classrooms but as a recommended pesticide in kitchens and storage areas.

Crickets - *natural infestation cycle common. Expect 3-10 days of high numbers.

1. Vacuum crickets that enter buildings.
2. Find and eliminate harborage outdoors such as weedy ornamental beds, wood piles, rock piles and moist, secluded areas.
3. Seal cracks around the outside foundation wall.
4. Install tight-fitting door sweeps at the base and perimeter of all exterior doors.

Fleas

1. Disinfect, vacuum, and shampoo carpet. Repeat vacuuming for 10 days.
2. Remove stuffed animals and stored clothing.
3. If infestation continues, consider light sticky traps, search for presence of rodent carriers, or human transport on clothing or bags.

Flies

1. Aggressively clean the infestation zone and surrounding areas.
2. Place trash cans away from building entrances and place dumpsters 50 ft away.
3. Properly clean and maintain exterior drains in trash handling areas including indoor floor drains to avoid accumulation of organic matter and liquid.
4. Flies can develop in soil soaked with water used to clean garbage cans and dumpsters. Check these areas regularly. If you see maggots, scrape them up along with the soil and dispose of everything in a plastic bag sealed tightly.
5. Use a flyswatter, fly paper, or fly strips to avoid sprays.

Silverfish

1. Fabric and stacked paper products should not be stored for long periods nor directly on floors.
2. Spilled food must be cleared away.
3. Reduce water availability by repairing leaks and seepage.

4. Outdoors, mulch should not be placed touching the building perimeter.
5. In the case of a severe infestation, household formulations of boric acid may be helpful. Eradicating these insects can be difficult as they often reside between wall partitions, in insulation materials and in other protected places.

Spiders – Poisonous: Brown Recluse & Black Widow

1. Avoid bites, do not use bare hands. Spiders are poisonous, and a single bite can be harmful to adults and especially children. Terminate spiders manually.
2. Remove webs, egg sacks. Be aware of possible small offspring! Only clean if spiders have been removed in order to avoid spider bites.

Spiders Other - Beneficial insect; tolerate if possible (added to plan 06-01-2011)

1. To reduce numbers, remove hiding places
2. Knock down webs with broom or hard spray of water
3. Remove and destroy egg sacks or spiders when found
4. Caulk and seal cracks
5. Clean both interior and exterior walls well to reduce habitat. Use caution while cleaning. Only clean if spiders have been removed in order to avoid spider bites. All spiders are poisonous, and a single bite can be harmful to adults and especially children.
6. Contact IPM coordinators: Lynwood Cook 903-618-0750 or Shain Emerine 903 570 5231
7. Infestation found - post 48 hour notice before treatment.

Termites - Call IPM Coordinator immediately.

Ticks – Examine tick carefully. If black legged or above threshold, treat edges of woods and fields near student areas as a perimeter defense.

B. Rodents, Wildlife, & Plants

Birds – Remove nests and droppings from student zones and buildings. If birds continue to roost or nest in undesirable locations, alter perch locations to deter their presence.

Geckos

1. Clean cracks, crevices, and corners. Droppings are elongated and brownish, and frequently tipped with white.
2. Gecko management should focus on excluding the lizards from the structure. Check and replace weather stripping around doors and windows where needed. Use sealant to close cracks and crevices around soffits and plumbing or electrical penetrations. Geckos commonly use poorly sealed gaps around the home exterior as hiding places during the day. It is important to eliminate as many of these harborages as practical by sealing with silicon caulks or expanding foam sealers.
3. Geckos can be beneficial in helping to reduce insect numbers. They can be captured indoors and released back outside.
4. If threshold is repeatedly exceeded, and exclusion efforts have been unsuccessful, glue boards should be placed near lights and windows or outdoors surfaces where geckos prefer to congregate.

Mice/Rat Infestation*

1. Interior. Inspect area - if infestation, use non-chemical treatments such as:
 - a. Sanitation
 - b. Empty trash regularly
 - c. Eliminate clutter
 - d. Remove food and water sources- store food in plastic
2. Exterior. Inspect area - if infestation, found use non-chemical treatments such as:
 - a. Remove food and water sources
 - b. Patch holes in building
 - c. Replace missing or damaged door sweeps and weather stripping
 - d. Seal open piping-electrical and plumbing
 - e. Keep doors shut
 - f. Keep grass cut low, trees and shrubs trimmed away from building
 - g. Keep dumpster plugged and closed at all times
 - h. Keep trash picked up (all)
3. *No infestation found – Do not use rodenticides
4. *Infestation found - Recheck in 3 days if problem still exists, use bait stations

Mole/Gopher - Baseball & softball fields, playgrounds, mounds close to buildings

1. Keep mounds raked down wait and see if they are still active.
2. Baseball and softball fields must be free from a bad infestation.
3. Must treat before they ruin the landscape
4. Infestation found - Call IPM Coordinators: Lynwood Cook 903-618-0750 or Shain Emerine 903-570-5231.

Wildlife - Raccoons, skunks, opossums, snakes, foxes. etc.

1. Call IPM Coordinator: Lynwood Cook 903-618-0750, or Shain Emerine 903 570 5231. If no answer, contact your principal immediately. Please do not call a contractor directly.
2. Keep students and staff away from the area.

Poison Ivy – Manual removal preferred; wear protective gloves and place plants and gloves inside plastic bag for disposal. Do not toss aside or burn plants.

Weeds

1. Inspect area - if present on infields, weed eat, remove with hoe if possible
2. Infestation found –after students and teachers are gone post with sign and treat
3. Parking lots keep weeds down by weed eating, if infestation, treat same as softball infield
4. Around all buildings - weed eat, fence around athletic field - weed eat if we can, if weeds are bad, then use herbicide per label instructions.