Nueces Canyon C. I.S.D.

Integrated Pest Management Policy Manual 2012-2013

2012-2013 BOARD ADOPTION OF INTEGRATED PEST MANAGEMENT POLICY MANUAL

<u>Nueces Canyon C. I. S. D.</u> School Board, in an effort to provide a safe and healthy work environment has adopted the Integrated Pest Management Policy Manual as District Policy.

This District prohibits the possession, storing, or application of any kind of pesticide on school premises, or as part of any of the District's activities, by unauthorized personnel.

A pesticide is defined as a substance or mixture of substances intended for destroying, repelling or mitigating any pests. (This includes items like glue boards, fly traps and cans of household insecticides.) A <u>pest</u> is any living thing that exists where it is not wanted. [As defined by the School IPM Regulation]

All Administrators, Principals, Department heads, Managers and Supervisors will familiarize themselves with this manual, especially the section that pertains to their area of responsibility. Each Administrator, Principal, Department Head, Manager and Supervisor will be responsible to ensure that each and every one of their employees' reads and understands the rules pertaining to the Integrated Pest Management Plan and sign an acknowledgement sheet.

Administrators, Principals, Department heads, Managers and Supervisors will insure that any new employee reads, understands, and signs an acknowledgement sheet.

Superintendent:		Member:
Board President:		Member:
Vice President:		Member:
Secretary:		Member:
This	_ Day of	_, 2013

Nueces Canyon C. I. S. D.

2012-2013

IPM Design

Introduction

Our children spend six hours a day for twelve years in school. Parents have a responsibility to work with educators to provide the safest environment in which children can attain an education. Numerous species of insects are present in and around schools. A number of these insects are pest that are harmful to children and disrupt the learning environment in classrooms. As a result, most schools apply pesticides to control pest infestation.

Pests in School

Children react poorly to pests. If a classroom is infested with pests, teachers cannot maintain discipline, and learning is disrupted. Pests have been found to cause allergic reactions in sensitive individuals. They also can transmit life-threatening diseases to humans. Children are especially susceptible to these diseases. Cockroaches, ants, flies, wasps, head lice and rodents are the main pests found in many schools.

Cockroaches, especially the German cockroach, can live and breed by the thousands in classrooms and cafeterias. They can carry germs from filthy surfaces to cafeteria tables and classrooms desks. Cockroaches are the leading cause of asthma in youth. The more children are exposed to cockroaches the more allergic they become.

Pest ants, like the **Pharaoh ant**, build nests in classrooms and cafeterias. Thousands of ants can forage for food in places like dumpsters, cafeteria food disposal areas, and on cafeteria tables and classroom desks. Ants have been shown to be capable of transmitting Staph and Strep in these kinds of environments.

<u>Fire ants</u> build their nests on school grounds. These nests often contain more than 100,000 ants. During recess and physical education classes, or sporting events, children often are stung when they step into the nests while playing. Fierce defenders of their nests, fire ants can inflict scores to hundreds of painful stings to children. Fire ants cause one to two deaths a year in parts of the country where they are numerous.

Many kinds of <u>wasps</u> often build nests under eaves and in playground equipment. Wasps savagely defend their nests often stinging children who play nearby. Bees and Wasps are the leading cause of death by venomous insects in the United States.

<u>Rodents</u> are often found living in and under school buildings. Rats and mice contaminate stored food with their droppings and urine. Rodent droppings and urine may contain Hanta virus, a disease linked to more than 27 recent deaths in the United States, including one in Texas. Rodents can also gnaw through electrical insulation and cause electrical fires.

Parental Concerns

Decreasing educational dollars often result in limited funding for pest management. Therefore, pests often cause disruptions and dangerous situations.

Parents should be concerned about pests in their children's school. Do they know if there are pest infestations that may disrupt class activities? Do they know if the school is free of pests that cause allergies and transmit disease? It is important not to have pests in the school environment.

Traditional Pest Control

Pesticides are used in schools to kill pests. Pesticides are often sprayed on exposed surfaces, like walls, baseboards, and floors of classrooms, offices, and food services areas to kill pests. Also, playgrounds and athletic fields are often sprayed with pesticides.

The compressed air sprayer has been the main tool of the pest control industry for the past 50 years. It is well designed for covering large surfaces with pesticides. These are often exposed surfaces that children may touch.

Pesticides are often applies in schools on a routine, scheduled basis. These applications are made even though no insects may be causing a problem.

Pesticides are often applies by untrained staff. They have little knowledge of the poisons they are applying or safe application techniques.

Effects of Pesticides

We are all concerned about the effects of pesticides on wildlife and endangered species. These concerns about our environment have led to strict regulations on the manufacture and the use of pesticides. We are also worried about pesticides contamination of water, soil, and air.

Pesticides can harm school-aged children. In fact there is little information about the effects pesticides may have on them. But we do know children are generally more susceptible to pesticides than adults. Pesticides often have greater effects on children because of their lower body weight. Their skin may be more permeable to pesticides, and their playful behavior puts them in greater contact with pesticide residue. It is our responsibility to protect children from excessive pesticide exposure in school.

Integrated Pest Management

How do we as parents and educators provide an environment where pests are managed and the use of pesticides minimized? The dilemma is a desire for a pest-free school environment and for no risk of pesticide exposure.

The solution is Integrated Pest Management. IPM is a process that relies on prevention inspection, and communication. With IPM, pesticides are only used to manage pests. After all other non-chemical methods of control have failed.

IPM reduces the use of pesticides by first preventing pest infestations through sanitation and exclusion. Pest populations are monitored to determine were, when, and what kind of controls should be applied. When pests are found, non-chemical methods for pest management are used first. Pesticides are only used, as they are needed, rather than according to a treatment schedule. Least toxic pesticides are selected to minimize hazard. Results are evaluated so that pesticides are not continuously applied in schools.

IPM begins with prevention. We can modify and repair structures to eliminate the resources pest need for survival such as food, water, and shelter. This will eliminate conditions that allow pests to thrive. Prevention offers long-term solutions for problems that in the past required continuous pesticide use.

The success of IPM depends on cooperation of many individuals. Pest management is not the sole responsibility of a pest control operator. Proper maintenance, housekeeping and sanitation of buildings are important for successful long term management.

To reduce pesticide use in schools, it is important to know when pests invade the school and where they are located. Inspections are an important component of IPM, and allow the pest manager to detect infestations early.

Glue traps are the main tool for monitoring pest populations. The traps show the pest control operator what and how many pests are present. If no pests are found, no pesticides should be applied. Monitoring with the use of a magnifier is used to identify different types of the same variety, which could be immune to certain pesticides.

When pests are found, non-chemical methods of managing them are used. These methods can include restricting where food is eaten, moving the dumpster away from the school, repairing and maintaining leaking pipes, and pressure cleaning food service areas, just to name a few.

After all non-chemical methods of managing pests have failed. Pesticides should be applied only to the area(s) of infestation. Most pests, like cockroaches, live in cracks and crevices. Pesticides applied to these areas effectively control the pests and minimize exposure to children. These targeted applications precisely deliver pesticides to the pests. Pesticides should be applies to these areas effectively control the pests and minimize exposure to children. These targeted applications precisely deliver pesticides to the pests. Pesticides should be applied by trained and State Certified personnel knowledgeable in school based functions, pesticide safety, modern application techniques, and integrated pest management procedures. To protect children, select the least hazardous pesticides. Pesticides should be applied to pest harborages so surfaces are not contaminated and chemicals do not come in contact with exposed surfaces.

The main tools for pest management minimize children's exposure to pesticides. Applications should be baits that are applied to pest harborages or contained in child-proof bait trays, dusts that are applied in wall voids or attics, or crack and crevice injections that target the pests where they live. These formulations reduce exposure. Yet provide superior control of many pests.

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NUECES CANYON C. I. S. D.

INTEGRATED PEST MANAGEMENT

2012-2013

ACTION PLAN

1. Elementary - Building C

- a. Door sweeps on all six doors to prevent entrance of crickets and other crawling insects.
- 2. HIGH SCHOOL\ ELEMENTARY Garbage Bin Area
 - a. Cement floor to keep mice out. (Completed) 3/22/12
 - b. Screen walls to keep cats & varmints out and garbage in area. (Built metal walls more secure and hides trash, screened top) 10/20/2011

1. HIGH SCHOOL \ ELEMENTARY - Main Buildings

Windows \ Eaves

- a. Caulk between window frames and ground or cement, on north \ west & south walls to keep fire ants out of classrooms. (H.S.) Completed 7/16/2012
- b. Re-screen top building vents to keep bats out of school. (Elementary) Completed 4/20/20012; (High School Library) Completed 5/16/12

GROUNDS

JH/HS

a. Caulk all sewer covers to control Roaches and Fire ants. (H. S.)

Elementary

- b. Shrub bed next to building C; Elem. Campus need to be trimmed away from building
- 3. CAFETERIAS Elementary and High School
 - a. Seal screen doors to keep out flies.
 - b. Install door sweeps to prevent pests from entering building.
 - c. Tighten up plumbing in Rest Rooms, kitchen area sinks and hot water closet to prevent water leaks and more roaches. (Completed 7/16/2012)

- d. Patch all holes and cracks in building to prevent pests from entering (Completed 7/16/2012)
- e. Replace ceiling tile to prevent pest form entering through there. (Completed 9/28/2012)

4. CVAE SHOP BUILDING JH/HS

- a. Seal roof areas with foam to keep out squirrels.
- b. Caulk or foam around walls and cement floor to keep out mice.

5. LIBRARY JH/H.S.

a. Caulk windows to prevent fire ant entry Completed 5/16/2012

6. ISS BUILDING JH/H.S.

- a. Seal outside roof to wall area with foam to stop red wasps from nesting in eaves.
- b. Caulk hole in wall in rest room again to prevent mice from entering. (Completed 8/15/2012)
- **c.** Install door sweep to prevent insects from entering room.

7. H. E. BUILDING JH/HS

- a. Seal storage building at bottom between concrete slab and metal wall to prevent mice and insect entry.
- b. Replace tiles that are broken to prevent insect entry. (Completed) 824/12
- c. Caulk holes in walls to prevent insect entry.

8. MAINTENANCE BUILDING – JH/HS

- a. Caulk around window and floor to prevent insect and mice entry. (Replaced walls whole building) Completed
- b. Replace ceiling tile to prevent insect and mice entry. Completed 20-24/12



NUECES CANYON

Consolidated Independent School District

"The Pride of Nueces Canyon"

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Integrated Pest Management 2012-2013 Thresholds

Ants – (carpenter) 3 per class room, 3 per Clinic, 5 per kitchen, Maintenance & Storage areas: 10 ants per 100 sq ft in two successive monitoring periods Immediate action if ant colony inside or within 25 feet of any building

Ants (common house-infesting) – 5 per classroom, clinic or kitchen, 20 ants per 100 square feet Maintenance and storage areas, Outside Grounds 2 field ant mounds per 250 square feet

Ant (**Fire**) – 5 per classroom, clinic or kitchen, 10 ants per 100 square feet Maintenance and storage areas in two successive monitoring periods, Outside Grounds: Any fire ant mound

Bees/Wasps/Yellow Jackets – 2 per classroom, 5 per maintenance areas, Outdoors none unless children are threatened and to be relocated by qualified beekeepers whenever possible. Handled by a qualified beekeeper whenever possible.

Crickets – 3 per classroom and other public areas, 3 per clinic, 3 per kitchen

Cockroaches (**German**) – 4 per Class room and other public areas, 3 per Clinic and Kitchen, 5 per maintenance areas, 4-10 cockroaches track down infestation, review sanitation, trash handling, clutter, open equipment, check accessible areas; vacuum and otherwise clean room and apply containerized baits/gels for crack and crevice treatment

.**Grain and Flour Pests** – Found in food for human consumption: 1 per package or container

House Flies – 3 per classroom, 2 per clinic, 2 per kitchen, 5 per maintenance areas, outside grounds; 10 flies around any one trashcan or 15 flies around dumpster

Lice – Medical condition/not pest control, notify nurse

Mice – Indoors: any mouse sighting 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 (droppings, tracks, etc.) triggers pest management action. Outdoors: Any active burrows or activity

Spiders – 1 Brown recluse or black Widow in any area call for eradication

Termites – Any swarmers or tubes inside or outside cause for immediate removal

Yellow-jackets/Hornets/Wasps – 1 per Classroom and any public areas if children are threatened.

Wildlife – raccoons, skunks, opossums, snakes, foxes etc. Will remove ASAP

Decision Making Guidelines

- 1. Monitoring
- 2. Visual Inspection
- 3. Trapping
- 4. Thresholds