New Hope Elementary School IPM Plan

Introduction

New Hope Elementary School practices Integrated Pest Management (IPM) to combat pests that negatively affect public health, interrupt school operations, and damage property. This IPM Plan established action thresholds that trigger escalating levels of pest management actions by the school IPM Team.

Objectives of this IPM plan include:

- Monitor pest activity to describe pest population
- Establish action thresholds
- Prescribe duties to IPM team members when action thresholds are met to control detected pest populations
- Describe common control practices for common school pests and mitigating measures for pest vulnerable areas

General IPM Strategies

Integrated Pest Management decisions at New Hope Elementary School consists of the following steps:

1. Prevention: pest management strategies to prevent pests, these include education, exclusion, sanitation, and facility and landscape maintenance
2. Monitoring and inspections detect pests, open conditions, and pest vulnerable areas to determine level of current infestation and predict future infestations. The results of monitoring data will trigger pest management actions.
3. Establish action threshold for each pest based on actual threat potential
4. If preventative measures do not resolve the problem, pesticide products with the lowest potential hazard to health and the environment will be used. The product used will match with the threat level the pest poses.

Tier 1: No Infestations- monitoring phase

0 pests sighted	0-2 Open Conditions	0-5 Pest Vulnerable Areas

Response: representative monitoring throughout facility, monthly inspections, record and review the Logbook and the online portal. Pesticides: none used, non-toxic monitoring only products.

Tier 2: Low infestation

1-4 pests sighted	1-4 Open Conditions	5-10 Pest Vulnerable

Response: representative monitoring throughout facility, increase monitoring in PVA, solve open conditions, monthly inspections, record and review the Logbook and the online portal, provide educational materials to staff members of infested areas

Tier 3: Moderate infestation

4-8 pests sighted	4-8 Open Conditions	4 8 Pest Vulnerable Areas

Response: representative monitoring throughout facility, increase monitoring in PVA, solve open conditions, bimonthly inspections, record and review the Logbook and the online portal, provide educational materials to staff members of infested areas, post educational materials in throughout campus, provide in-house training with onsite IPM team. Use registered non-exempt pesticides if needed. Rely on reduced risk products or application methods

Tier 4: High infestation

8+ Pests sighted	8+ Open Conditions	10+ Pest Vulnerable Areas

Response: representative monitoring throughout facility, increase monitoring in PVA, solve open conditions, bimonthly inspections, record and review the Logbook and the online portal, provide educational materials to staff members of infested areas, post educational materials in throughout campus, provide in-house training with onsite IPM team, use caution + pesticides if the pest pressure warrants such action

Training

All IPM team members will attend California Healthy Schools Act training annually. Educational pest prevention factsheets (available upon request) may be handed out to school staff should pest issues arise in PVA.

AIPM Team (Add to Appendix, Lance will add NMUSD staff)

Ian Clark	AIPM Regional Manager
Austin Harmer	AIPM Service Manager, secondary contact
Ashley Freeman	Technical, training, and HSA compliance lead
Ryan McCathy	Account Manager
Richard Rothenberger	IPM Coordinator
Rachel Swank	Ground Maintenance
Oliva Miller	IPM Technician, primary contact

New Hope Elementary School IPM Team roles and responsibilities

- AIPM
    - Deploy RBS
    - Inspect for pest activity, open conditions, and pest vulnerable areas
    - Service inspections and reports
    - Set up monitoring program, install and service
    - Inspect and report changing conducive conditions
    - Add service reports to Logbook
    - Track and record pest infestations
    - Record and report pesticide use
    - Provide training to IPM staff
    - Pest factsheets, campus awareness
    - Provie pest factsheets to all NMUSD staff when needed
- NMSD IPM team
    - Visually insect and record conducive conditions, pest sightings, and open conditions
    - File Weekly Pest Monitoring Log in Logbook
    - Resolve open conditions
    - Respond to pest management requests and initial sightings

Pesticide use reporting

Pesticide Use Records are submitted to DPR monthly. Reports include school site, date/time, location, product applied, EPA #, and the amount of product applied.

- New Hope Elementary School does not need to report pesticide applications made by Advanced IPM.
- Pesticide use records are kept on the portal for 4 years

HSA Exempt Pesticides

If used, first choice pesticides will be those deemed "EXEMPT" by the California Department of Pesticide Regulation Healthy Schools Act Program. EXEMPT pesticides include products applied and contained in a self-contained bait station, gels and pastes used in crack and crevice treatments, sanitizers, and disinfectants, and 25(b) minimum risk pesticides.

Pesticides not considered least toxic (such as any rodenticides) may still be exempt from reporting since that can be used inside self-contained bait stations. Vitamin D3 (Cholecalciferol) or Difethialone rodenticides may be used at school facilities. Rodent baits will only be used when action thresholds for commensal rodents are met.

If using non-EXEMPT products notification of application is required 5 days prior to application.

Definitions

Pest Vulnerable Area are areas more likely to have pet infestations based on availability of food, harborage, water, and access to structures. All PVA will be monitored by the IPM staff. Open conditions must be reported each time inspected. Unresolved conditions are highly likely to develop pest infestations.

- Cafeteria dining- indoors
- Kitchen: full-service
- Culinary classrooms
- MPR, stages
- Storage
    - Seasonal
    - Teacher prep rooms
    - sports
- Concessions
- Lockers rooms
- Custodial areas

Public Health Pest are pests that cause a direct or indirect negative health consequence having them in close association with humans. Pest management action must be taken if the follow pest are present at the school site.

- All cockroach species
- All commensal rodent species, indoor or outside within 10 feet of all structures

- Indoor ants
- Flies: outdoor filth flies associated with refuse and waste or decay
- Birds roosting or nesting on school structures
- Burrowing rodents in or near 10 feet of structures due to close association with ectoparasites or on sports or playfields where children commonly play
- Stinging or biting insects: Red Imported Fire Ants, brown or black widow spiders, wasps

General Structural Pest are nuisance organisms that are not threats to human health but may cause

- Stored product pest
- Burrowing rodents not infesting sports fields or within 10 feet of structures
- Firebrats, crickets, house spiders
- Wood destroying organisms

Open Conditions

- Report open conditions
    - The New Hope Elementary School IPM team must report all open conditions
    - Open conditions are to be resolved by New Hope Elementary School staff
    - Includes access to structures, facility and landscape deficits, sanitation, and clutter issues

Appendix A: Pest-Specific Strategies

Indoor commensal rodents To prevent problems, commensal rodents will be excluded by maintaining the exterior of our facility to eliminate any gaps or holes 1⁄4" in diameter or larger. Door sweeps will be installed and replaced or repaired as needed. Food will be stored in rodent-proof containers wherever possible, including food consumed at desks and in classrooms. All waste receptacles including cans, carts, compactors, and dumpsters will be maintained in clean condition, have tightly sealing lids and be placed away from building entrances wherever possible to reduce attracting rodents to entryways. Non-cavernous landscaping will be used to reduce potential rodent harborages and burrows. All areas of the facility will be kept clean and clutter-free to reduce potential for harborages with well-maintained inspection aisles in high-risk areas to detect any early activity.

1. Rodent bait boxes installed with trapping devices will be the standard method for indoor rodent control. Such devices will be concealed out of the general view and in protected areas so not to be affected by routine cleaning operations. They shall be installed and maintained in a manner that does not attract non-target species.
2. Rodenticides when warranted will only be placed inside EPA approved Tier 1 tamper-resistant rodent bait station. Stations will be maintained and properly labeled and installed in a manner that prevents attracting non-target organisms. They will be mapped will be checked regularly to detect any rodent activity. Rodenticides will be promptly removed at the conclusion of the infestation.
3. In the event of a problem, the infested area should be clean by school site staff and inspected by AIPM to identify and remove clutter and dispose of any damaged goods. Locate and remove indoor rodent nests.
4. Facility occupants will be informed of any action they need to take to prevent future problems, e.g., cleaning up spilled food or drink more promptly or thoroughly, storing food in sealed containers, repairing leaking, or dripping pipes or faucets, etc.

ANTS

1. Trapping devices is standard method for collecting and monitoring indoor ant problems. They may be prevented by maintaining our facility exterior to prevent vegetation from touching building walls and providing travel routes for ants. Seal gaps where ants might gain entry (e.g., vents, holes near windows, doors near food or trash handling areas). Rain gutters will be maintained in clean condition and proper working order to reduce water sources. Potential water sources (e.g., leaky pipes, condensation) will also be eliminated.
2. When an ant problem persists, the ants will be identified to species to aid in locating nesting sites, preferred food, habits and appropriate baits when necessary.
3. Ants inside buildings may be vacuumed and cleaned up with soapy water, including the areas ants are traversing to eliminate any pheromone recruiting trail, which ants deposit to help other ants find the location of food and water sources. Maintenance will be

informed and the opening(s) providing entry into the building and/or sources of water for ants will be located and repaired.
4. Building and room occupants will be informed of any action they need to take to prevent future problems, e.g., cleaning up spilled food or drink more promptly or thoroughly, storing food in sealed containers, repairing leaking, or dripping pipes or faucets, etc.
5. If the above steps fail to correct the problem, AIPM will inform the IPM Coordinator and discuss additional steps, such as more extensive repairs, changes in the food policy, changes in exterior landscaping to remove ant habitat, or the judicious use of less-toxic pesticide baits or gels, preferably in manufactured tamper-resistant bait stations placed in areas inaccessible to children or other building occupants. Placement and amounts of ant baits and/or gels are recorded to ensure removal once the problem is resolved. Over-application is wiped up immediately to reduce potential for exposure to staff, visitors, and others.

COCKROACHES

1. Cockroach problems will be prevented by inspecting any suspect incoming shipments. We will remove food items to be consumed on premises from cardboard shipping containers prior to storage and place them on shelving, in plastic storage bins, etc.
2. Place cardboard in outdoor recycling or waste containers to prevent any egg cases contained within the cardboard from infesting our facility.
3. Potential harborage in food service and other vulnerable areas will be sealed including cracks and crevices, gaps between wall and wall- mounted equipment, openings around plumbing or electrical penetrations, etc. to reduce hiding places for cockroaches and exposure to cockroach allergens.
4. All drains will be identified, and P-traps continuously filled with water to discourage cockroach entry from the sewer system. Additional species- specific measures will be employed as needed, e.g., dehumidification for Oriental cockroaches.
5. Dated and initialed insect monitors (sticky-coated cardboard traps) will be installed in non-visible areas and mapped on a grid for follow up. All insect monitors will be checked regularly at least until the problem is resolved and no captures occur for an extended period (e.g., one month). In highly vulnerable areas such as food service and waste handling, insect monitors will be maintained on an ongoing basis.
6. Cockroaches will be identified to species to aid in locating harborage, preferred food, habits, and appropriate baits when necessary.
7. Cockroaches and debris may be removed including from harborage with a HEPA-filtered vacuum to reduce populations including egg cases and allergens. Newly identified harborages will be sealed, including the edges of wall-mounted fixtures and problem drains will be identified and addressed.
8. Building and room occupants will be informed of any action they need to take to prevent future problems, e.g., cleaning up spilled food or drink more promptly or thoroughly, storing food in sealed containers, repairing leaking, or dripping pipes or faucets, etc.

9. If reasonable non-chemical measures fail to control the problem, insecticide bait may be applied in the affected area inaccessible, non- visible areas in pre-manufactured bait stations or in gel form. Preferably, a removable device designed to hold gel bait and facilitate easy and complete removal of the bait once the problem is resolved will be used, e.g., “The Crevice.” Old bait will be removed prior to reapplication and over-applications are wiped up immediately. When using baits, high standards of sanitation are necessary to reduce exposure to bait relocated by cockroach activities.

APPROVED PESTICIDE LIST
New Hope Elementary School

Product	Manufacturer	Purpose	EPANumber	Active Ingredients
ADVION COCKROACH GEL BAIT	SYNGENTA CROP PROTECTION, LLC	COCKROACHES	100-1484	Imidacloprid
Advion Ant Gel		Ants	100-1498	Indoxacarb
Advion CR Gel Bait		Cockroach	100-1484	Indoxacarb
Advion Ant Gel	Syngenta	Ants	100-1498	Indoxacarb
Alipine Cockroach Gel Rotation 1	BASF CORPORATION	Cockroach	499-507	Dinotefuran
Alpine Cockroach Gel Bait	BASF CORPORATION	Cockroach	499-507	Dinoefuran, N-methyl-N-nitro-N guanidine
Alpine Pressurized Fly Bait		Fly	499-568	Dinotefuran, N-methly-N'-nitro-N-methlyguanidine
Alpine WSG		General Insect pests	499-561-ZA	Dinotefuran N-methyl-N-(tetrahydro-3-furanyl)methyl guanidine
Bifen I/T		General Insect pests	53883-118	Bifenthrin
Bifin I/T	Control Solutions	General Insect pests		MGK 264, Piperonyl butoxide, Pyrethrins
Demand CS	Syngenta	General insect pests		Zinc phosphide (Zn3P2)
Ditrac all weather Blox		Rodent Bait	12455-80	diphacinone
DITRAC ALL WEATHER CAKE	Bell Laboratories, Inc	Pesticide	12455-5	Hydramethylnon
Essentria All Purpose		General Insect pests	exempt	Rosemary Oil, peppermint oil
Flatline	Liphatech, Inc.	Rodent Bait	7173-308	Diphacinone
GENTROL	CENTRAL GARDEN & PET COMPANY	Insects	89459-84	Piperonyl butoxide, Pyrethrins
InVade Bio Foam		Fly	exempt	Soil derived Bacillus spp, Microbe spores
MaxForce Ant Gel	Bayer	Ants	432-1264	Fipronil
Maxforce Fly Spot Bait	Bayer	Fly	432-1455	Imidacloprid
Maxforce Fly Spot Bait		Fly	432-1455	Imidacloprid
Niban Granualr Bait	Nisus	General Insect Pests	64405-2	Orthoboric Acid
PCQ Pro	Bell Labs	Burrowing rodents		Fipronil
Surekill Guadian	Neogen	Rodent Bait	61282-26	Diphacinone
SureKill Guardian		Rodent Bait	61282-26	Diphacinone
Suspend Polyzone		General Insect pests	432-1514	Deltamethrin
Termidor Foam	BASF CORPORATION	Termites		Deltamethrin