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(Former OP31013)

EBBAD
EBBAD-E-1
EBBAD-E-2

Integrated Pest Management Procedures

Purpose

The St. James-Assiniboia School Division Integrated Pest Management Operating Procedure is designed to protect public health and the environment by using pesticides on a discriminatory basis as described in policy ECBC. Infestation prevention will reduce the need to use chemicals and therefore reduce the risk of accidental poisoning and environmental contamination.

Scope

This operating procedure applies to all staff that including, but not limited to building administrators, teachers, students, caretakers, cleaners, the supervisor of facilities and maintenance, the assistant supervisor of facilities and maintenance and groundskeepers.

Strategies for the following are included:

Indoor sites

Outdoor sites

Action Thresholds

Clean-up procedure

Rodent disposal procedure

Rodenticide placement strategy

Request for rodent abatement form

Integrated Pest Management Strategies for Indoor Sites	Responsibilities			
	Principal Staff Students	Caretaker Cleaner	Grounds keeper	Facilities and Maintenance Department
Typical Pests:				
<i>Mice, rats, cockroaches, ants, flies, wasps, hornets, yellow jackets, spiders, microorganisms, termites, carpenter ants, and other wood-destroying insects. Although beneficial as predators, wasps, hornets, yellow jackets, and spiders can be troublesome.</i>				
Entryways:				
(door-ways, overhead doors, windows, holes in exterior walls, openings around pipes, electrical fixtures, or ducts):				
· Keep doors shut when not in use.				
· Place weather stripping on doors.				
· Caulk and seal openings in walls.				
· Install or repair screens.				
· Install air curtains.				
· Keep vegetation, shrubs, and wood mulch at least 1 foot away from structures.				
Rooms				
(classrooms, daycare facilities, labs, offices, auditoriums, gymnasiums, and hallways):				
· Allow food and beverages only in designated areas.				
· If indoor plants are present, keep them healthy. When small insect infestations appear, remove them manually.				
· Keep areas as dry as possible by removing standing water and water damaged or wet materials				
· In the science lab, store animal foods in tightly sealed containers and regularly clean cages. In all areas, remove dust and debris.				
· Routinely clean lockers and desks (monthly)				
· Frequently vacuum carpeted areas.				

	Principal Staff Students	Caretaker Cleaner	Grounds keeper	Facilities and Maintenance Department
Food Preparation and Serving Areas				
(dining room, main kitchen, teachers' lounge, home economics kitchen, snack area, vending machines, and food storage rooms):				
· Store food and waste in containers that are inaccessible to pests. Containers must have tight lids and be made of plastic, glass, or metal. Waste should be removed at the end of each day.				
· Place screens on vents, windows, and floor drains to prevent cockroaches and other pests from using unscreened ducts or vents as pathways.				
· Create inhospitable living conditions for pests by reducing availability of food and water--remove food debris, sweep up all crumbs, fix dripping faucets and leaks, and dry out wet areas.				
· Improve cleaning practices, including promptly cleaning food preparation equipment after use and removing grease accumulation from vents, ovens, and stoves. Use caulk or paint to seal cracks and crevices.				
· Mechanical traps, including glueboards, used in rodent control must be checked daily. Dispose of killed or trapped rodents within 24 hours. Note: Place traps in areas inaccessible to children.				
Rooms and Areas With Extensive Plumbing				
(bathrooms, rooms with sinks, locker rooms, dishwasher rooms, home economics classrooms, science laboratories, swimming pools, and greenhouses):				
· Promptly repair leaks and correct other plumbing problems to deny pests access to water.				
· Routinely clean floor drains, strainers, and grates. Seal pipe chases.				
· Keep areas dry. Avoid conditions that allow formation of condensation. Areas that never dry out are conducive to molds and fungi. Increasing ventilation may be necessary.				
· Store paper products or cardboard boxes away from moist areas and direct contact with the floor or the walls. This practice also allows for ease in inspection.				
Maintenance Areas				
(boiler room, mechanical room, janitorial-housekeeping areas, and pipechases):				
· After use, promptly clean mops and mop buckets; dry mop buckets and hang mops vertically on rack above floor drain.				
· Allow eating only in designated eating areas.				
· Clean trash cans regularly, use plastic liners in trash cans, and use secure lids.				
· Keep areas clean and as dry as possible, and remove debris.				

Integrated Pest Management Strategies for Outdoor Sites	Principal Staff Students	Caretaker Cleaner	Grounds keeper	Facilities and Maintenance Department
Typical Pests:				
<i>Mice and rats. Turf pests--broad-leaf and grassy weeds, insects such as beetle grubs or sod webworms, diseases such as brown patch, and vertebrates such as moles. Ornamental plant pests--plant diseases, and insects such as thrips, aphids, Japanese beetles, and bag worms.</i>				
Playgrounds, Parking Lots, Athletic Fields, Loading Docks, and Refuse Dumpsters:				
· Regularly clean trash containers and gutters and remove all waste, especially food and paper debris.				
· Secure lids on trash containers.				
· Remove weeds from cracks in pavement and sidewalks.				
· Provide adequate drainage away from the structure and on the grounds.				
Turf				
(lawns, athletic fields, and playgrounds):				
· Maintain healthy turf by selecting a mixture of turf types (certified seed, sod, or plugs) best adapted for the area.				
· Raise mowing height for turf to enhance its competition with weeds; adjust cutting height of mower, depending on the grass type; sharpen mower blades; and vary mowing patterns to help reduce soil compaction.				
· Provide good drainage, and periodically inspect turf for evidence of pests or diseases.				
· Allow grass clippings to remain in the turf (use a mulching mower or mow often) or compost with other organic material.				
· Have the soil tested to determine pH and fertilizer requirements.				
· Aerate in summer				
· Time fertilizer application appropriately, because excessive fertilizer can cause additional problems, including weed and disease outbreaks. Apply lime if necessary. Use aeration to place soil on top of thatch so that microbes from soil can decompose thatch.				
· Seed over existing turf in fall or early spring.				

Ornamental Shrubs and Trees:	Principal Staff Students	Caretaker Cleaner	Grounds keeper	Facilities and Maintenance Department
· If using a fertilizer, use the correct one at the suitable time, water properly, and reduce compaction.				
· Prune branches to improve plants and prevent access by pests to structures.				
· Remove susceptible plants if a plant disease recurs and requires too many resources, such as time, energy, personnel, or money. Some ornamental plants, trees, and turf are so susceptible to plant diseases that efforts to keep them healthy may be futile.				

Action Thresholds <i>An action threshold is the level at which action is initiated determined by deciding, based on the sensitivities of the building occupants, how many pests can be tolerated. The presence of some pests does not, in itself, necessarily require action. When pest populations exceed threshold limits action must be taken.</i>				
Facility component	Pest species	Management alternatives	Threshold level	Action by:
Fence lines, building perimeters, asphalt tarmac areas, non-grass playing fields (basepaths etc.), parking lots flower beds	Annual and perennial grasses and broadleaf weeds (dandelions, chickweed, clover, creeping Charlie etc.).	1. Cultural - mulching 2. Cultural - mechanical removal 3. Chemical - round-up	1. Weeds exceeding 4 inches in height along fence lines, building perimeters. 2. Visible weeds on non-grass playing fields, in flower and shrub beds and in cracks in asphalt tarmac. 3. Weeds exceeding 2 inches in height in gravel parking lot.	Caretaker
Playstructures	Annual and perennial grasses and broadleaf weeds	1. Cultural - mechanical removal	1. On appearance	Caretaker
Lawn and playground turf	Annual and perennial grasses and broadleaf weeds	1. Cultural - turf enhancement (top dressing, aeration) 2. Cultural - mechanical removal 3. Chemical - 2,4-D only where infestation is sufficient enough to degrade turf quality or where required to control dandelions.	1. Dandelions sufficiently dense to generate complaints from neighbourhood land owners (significant seed transfer)	1.Grounds 2.Caretaker 3.Grounds
Sport playing fields	Annual and perennial grasses and broadleaf weeds	1. Cultural - turf enhancement (top dressing, aeration) 2. Cultural - mechanical removal 3. Chemical - 2,4-D only where infestation is sufficient enough to degrade turf quality or where required to control dandelions.	1. Weeds sufficient to cause obvious loss of turf cover, exposed soil areas 2. Dandelions sufficiently dense to generate complaints from neighbourhood land owners (significant seed transfer)	

Interior Insects	Pest species	Management alternatives	Threshold level	Action by:
	Cluster flies, wharf beetles, cockroaches, lice, houseflies, carpet beetles, mites, silverfish, spiders, ants	1. Preventative - structural repair 2. Preventative - habitat modification 3. Cultural - trapping 4. Chemical - dursban (silverfish, cockroaches), ficam W (cockroaches, ants), propoxur (ants), pyrethris and piperonyl butoxide (flies etc.)	1. First sign of infestation	1.Fac/main 2.Grounds 3.Caretaker 4.Grounds
Exterior insects				
	Cankerworm	1. Cultural - tanglefoot 2. Chemical - dipel, thuricide, malathion	1.First sign of infestation prior to onset of defoliation.	Grounds - keeper
	Spruce budworm	1. Chemical -dipel, thuricide, malathion	1.First sign of infestation	Grounds - keeper
	Aphids	1. Cultural - water blast, physical removal, pruning	1.Quantities creating visible clusters (heavy infestations will cause defoliation).	Grounds - keeper
	Bees, wasps	1. Preventative - structural repair 2. Preventative - habitat modification 3. Cultural - nest removal 4. Chemical - propoxur	1.First sign of infestation	1.Fac/main 2.Grounds 3.Grounds 4.Grounds
Rodents				
	Rats, mice, gophers	A "Request for Rodent Abatement" is submitted to the maintenance shop by building administrator.	1.First sign of infestation	Licensed pesticide applicator and caretaker.

ST. JAMES ASSINIBOIA SCHOOL DIVISION JOB SAFETY ANALYSIS

SAMPLE

<u>Division:</u>	St. James Assiniboia School Division	<u>Analysis By:</u>	Paul Deacon	<u>Date:</u>	Dec/09/2005
<u>Department:</u>	WSH Officer	<u>Supervisor:</u>		<u>Frequency:</u>	Quarterly
<u>Job Title:</u>	All	<u>Approved By:</u>		<u>JSA Number:</u>	44
<u>Job Title:</u>	44 Hanta Virus Clean-up	<u>Job Performed By:</u>			

REQUIRED PERSONAL PROTECTIVE EQUIPMENT: Disposable respirator equipped with a HEPA (P100) quality filter, gloves, goggles

GENERAL NOTES: NOTE: Once outside the body of the rodent the hanta virus likely does not survive for long periods (hours or days). Further studies are being conducted. This JHA is for MINOR CLEAN-UPS ONLY. Notify the building administrator whenever a rodent infestation is noticed. The building administrator will submit a REQUEST FOR RODENT ABATEMENT to the maintenance shop. Only perform this task after being FULLY TRAINED by your supervisor. Clean-up kit includes the following: disposable gloves, goggles, spray bottle with 10% bleach solution or germicidal detergent, garbage bags (2), paper towels, hand wipes, disposable respirator HEPA P100, HEPA filter vacuum. NOTE: a regular vacuum may disperse dust increasing the risk of infection.

JOB SAFETY ANALYSIS:

Step	Description	Hazard	Controls
1	Section off area		
2	Put on the appropriate personal protective equipment.		PPE includes HEPA P100 respirator, goggles, gloves.
3	Mix disinfectant solution (1:10 bleach/water) in spray bottle	Splash	Use a funnel to pour bleach into water. Clean up any spills to protect floor surface
4	Gently spray droppings/rodent nesting materials with bleach solution, ensuring that they are completely soaked.	Dust-Toxic--Infectious Waste	
5	Allow sprayed material to sit for 15 minutes	Bloodborne Pathogens	15 minute soak with 10% bleach destroy Hanta virus.

6	Remove the soaked material carefully, using gloved hands. Vacuum leftover material with a HEPA filter vacuum cleaner.		
7	Place the soaked material into bag # 1 and tie shut. Place bag # 1 into bag # 2. While continuing to wear the glove, remove goggles, disposable respirator mask and disposable clothing and place them into bag # 2. Remove gloves carefully and place them into bag # 2. Seal Bag # 2 and place it in the garbage for disposal.	Dust-Toxic--Infectious Waste	Follow established procedures detailed in step 7
8	Clean hands with hand cleaner.		

AUTHORIZED EMPLOYEE INFORMATION:

ID NUMBER:	LAST NAME:	FIRST NAME:	REMARKS:
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JOB HISTORY INFORMATION:

DATE:	REMARKS:
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Approval Signature: _____ Date: _____

SEE ALSO

EBBAD-E-1 RODENTICIDE PLACEMENT STRATEGY REPORT

EBBAD-E-2 REQUEST FOR RODENT ABATEMENT

ST. JAMES ASSINIBOIA SCHOOL DIVISION JOB SAFETY ANALYSIS

SAMPLE

Division: **St. James Assiniboia School Division** Analysis By: **Paul deacon** Date: **Dec/09/2005**

Department: **WSH Officer** Supervisor: Frequency:

Job Title: **All** Approved By: JSA Number: **46**

Job Title: **46 Rodent disposal procedure** Job Performed By:

REQUIRED PERSONAL PROTECTIVE EQUIPMENT: Disposable gloves, HEPA P-100 respirator, goggles

GENERAL NOTES: Mice may carry the Hanta Virus and may also carry ticks and fleas that can spread disease. Quick action and removal is necessary to prevent the transmission of disease and to avoid the odour of decaying corpses.

JOB SAFETY ANALYSIS:

Step	Description	Hazard	Controls
1	Live mice----Place the entire trap in a bucket of water with the mouse still in the trap. This method will kill it in less than 15 minutes.--	Animal Bite--Bloodborne Pathogens	Wear PPE including gloves, goggles, HEPA P-100 respirator--Do not remove mouse from trap. Leave the trap submerged for at least 20 minutes.--Add enough bleach to the water (1part bleach-9 parts water) to destroy any Bloodborne pathogens.
2	Dead Mice		
3	While wearing PPE use an inverted plastic bag to pick up the dead mouse.		
4	Reverse the bag over the mouse to seal it inside. Place the bag inside a second bag.		

5	Place the bags containing the mouse in a sealed container and place in outdoor garbage bin immediately.	The anticoagulants in rodenticide can kill pets or wildlife that may feed on the disposed carcasses. Anticoagulants are also toxic to humans, so care should be taken to prevent transfer of any poisons via contact when handling dead mice.	Use a sealed container such as an old coffee can. The mouse carcass may also be rolled in newspaper for disposal.
6	Wash gloves, or dispose gloves. Wash hands with soap and water.		

AUTHORIZED EMPLOYEE INFORMATION:

ID NUMBER:	LAST NAME:	FIRST NAME:	REMARKS:
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JOB HISTORY INFORMATION:

DATE:	REMARKS:
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Approval Signature: _____ Date: _____

SEE ALSO**EBBAD-E-1 RODENTICIDE PLACEMENT STRATEGY REPORT****EBBAD-E-2 REQUEST FOR RODENT ABATEMENT**