



**John Shea**  
Chief Executive Officer  
Division of School Facilities

**William Estelle**  
Executive Director  
Division of School Facilities

**Ken Mahadeo**  
Director of Maintenance  
Division of School Facilities

**Kimberley Coke**  
Water Treatment Manager  
Division of School Facilities

# STANDING WATER MANAGEMENT PLAN

---

*New York City Department of Education – Division of School Facilities*

# STANDING WATER MANAGEMENT PLAN

---

The procedures in this Plan are designed for the Department of Education – Division of School Facilities (DOE-DSF) staff to address issues associated with standing water for preventative measures against diseases that can spread by mosquitoes and other insects. The preventative measures are to identify, inspect, exterminate, repair affected areas and remove standing water within 72 hours after rainfall or other means that can lead to water retention. DOE-DSF Custodial Engineers will ensure that the procedures are adhered to in order to achieve objectives of efficiency and effectiveness in operations, and compliance with applicable regulatory authorities, laws, and regulations.

***The actions to be considered are:***

- 1. Identifying areas where water may collect (ponding)***
- 2. Routinely inspecting exterior surroundings and roof-tops to prevent the growth of mosquitoes and other insects***
- 3. Removing any standing water 48-72 hours after rainfall***
- 4. Exterminating affected area(s) for prevention of mosquito habitation and breeding***
- 5. Performing the necessary repairs around buildings that are managed by the DOE-DSF to prevent reoccurrences of standing water.***

## **STANDING WATER MANAGEMENT PLAN**

***Purpose:*** Custodial Engineers are responsible for the removal of any standing water to eliminate the breeding of mosquitoes. These procedures will assist in the reduction and/or prevention of the spread of vector borne diseases around buildings that are operated by DOE-DSF ensuring the well-being of all students, staff, and the general population.

***Objectives:*** To provide guidance to reduce the mosquito population by removing standing water within 48-72 hours after rainfall; exterminating where needed; and improving infrastructure to the affected areas.

***Requirement:*** DOE-DSF Custodial Engineers must keep a copy of this Plan on site, and are responsible for being familiar and complying with all of the standing water procedures.

***Jurisdictional Authority: § Section 151.03: Elimination of standing water.***

*Title 24: Department of Health and Mental Hygiene > New York City Health Code > Title IV: Environmental Sanitation > Part B: Control of Environment > Article 151: Rodents, Insects and Other Pests*

[http://library.amlegal.com/nxt/gateway.dll/New%20York/rules/therulesofthecityofnewyork?f=templates\\$fn=default.htm\\$3.0\\$vid=amlegal:newyork\\_ny](http://library.amlegal.com/nxt/gateway.dll/New%20York/rules/therulesofthecityofnewyork?f=templates$fn=default.htm$3.0$vid=amlegal:newyork_ny)

- a) Persons in control of premises other than a wetland regulated by Federal, State or Local Law shall keep such premises free of accumulations of standing water

- b) Except for a wetland regulated by Federal, State or Local Law, the Department may order the person(s) in control of any property including, but not limited to, a sunken lot, property below grade, excavation or any other place where standing water may collect, to fill in or drain such property or to employ other methods to prevent conditions conducive to the breeding or harborage of mosquitoes and other pests in a manner consistent with federal, state and local law.

### **DOE-DSF BUILDING CUSTODIAL ENGINEER RESPONSIBILITIES**

#### ***Inspection of Standing Water:***

1. DOE-DSF Custodial Engineers must inspect for standing water **72 hours** after excessive rain or severe thunderstorms, hurricanes or natural events on roof-tops and exterior building surroundings; such events often clog roof drains (Attachment A).
2. DOE-DSF Custodial Engineers must **immediately** inspect for standing water after tickertape parades, as such events often clog roof drains.
3. DOE-DSF Custodial Engineers must complete a **monthly** roof-top inspection to ensure there is no standing water (Attachment A).
4. DOE-DSF Custodial Engineers must complete a **monthly** exterior perimeter inspection to ensure there is no standing water (Attachment A).
5. DOE-DSF Custodial Engineers must identify all reoccurrences of standing water to their Deputy Director of Facilities (DDF).

#### ***Standing Water Corrective Actions:***

1. If DOE-DSF Custodial Engineers confirm standing water on the roof-top, the strainer must be cleaned to ensure the drain is either clogged or not clogged. Once verified that the drain is clogged, a work order must be submitted and a call be made to the respective DDF immediately to snake and repair the drain.
2. DOE-DSF Custodial Engineers will contact DOE Pest Control to exterminate the affected area with Mosquito Dunk® Larvicides to prevent larvae breeding.
3. DOE-DSF Custodial Engineers must level out uneven portions of the sidewalk or submit a work request to repair if beyond the scope or their ability. Cold Patch® can be used to repair potholes or cracks on school grounds.
4. Once DOE-DSF Custodial Engineers confirm standing water, they must immediately remove the standing water with either a push broom, squeegee broom, wet vacuum or a sump pump.
5. DOE-DSF Custodial Engineers must remove any debris where water can stagnate.

6. Call 311 if a neighboring property or storm drains have standing water and leads to an increase in mosquitoes or other insects.

***Conditions Requiring Further Assistance:***

Should the DOE-DSF Custodial Engineer encounter difficulty with the removal of standing water; the source of water be difficult to identify; or there appears to be multiple sources; they must reach out to the appropriate DOE-DSF Office staff or the appropriate Shops department to help with the water removal requirements as outlined in this Standing Water Management Plan. Verify if a repair is needed and **submit a work request** to get it completed. The DOE-DSF Custodial Engineers must contact their DDF to expedite repairs.

For reasons listed below the Custodial Engineer will contact their corresponding contact person in **Table 1** for assistance that are beyond the scope of Custodial staff.

1. **Physically removing the water:** The volume of the water require more time than the building staff can accommodate.
2. **Water that accumulates from mechanical equipment:** Most air conditioning equipment involves moving water at one point or another. If the custodial engineer observes a continual leak of water from cooling towers, air conditioners, pumps, etc.
3. **Water that is trapped in potholes, concrete sidewalks, curbs:** This may require construction work to eliminate the low spot that traps the water.

**Table 1. Emergency Contact Information.**

DOE Pest Control	Mike Siciliano <a href="mailto:IPM@schools.nyc.gov">IPM@schools.nyc.gov</a> 718-349-4586
<b><i><u>Borough</u></i></b>	<b><i><u>Contact Person and Phone Number</u></i></b>
Brooklyn	Brooklyn North Sev Napolitano 718-349-5473  Brooklyn South & Staten Island Doug Scannapieco 718-390-1599
Bronx	Mark Delmonico 718-741-3596
Manhattan	Jim Diffley 718-349-5498
Staten Island	Doug Scannapieco 718-390-1599
Queens	Greg Bauer 718-610-0342

# GLOSSARY

**Definitions:** Following is a list of terms and definitions which will be used in the process.

<b>DOE-DSF Custodial Engineers:</b>	Manages the daily operations of their respective building(s) and serves as the single point of contact for all facilities related concerns and issues.
<b>Larvae:</b>	The immature stage of mosquito development
<b>Larvicide:</b>	An insecticide that is specifically targeted against the larval life stage of an insect. (alternatively larvacide)
<b>Mosquito Dunk® Larvicides:</b>	Made with <i>Bt-israelensis</i> (Bt-i), a highly specific biological pesticide, a bacteria toxic only to mosquito larvae that lasts 30 days and treats 100 square feet of surface water. Will NOT harm people, pets, wildlife or fish.
<b>Standing Water:</b>	A pool of water of any size that does not flow. It can occur after excessive rains, severe storms, from hurricanes or other natural events but can also be caused by human induced methods such as an old bucket or abandoned swimming pool. (alternatively stagnant)
<b>Vector:</b>	Refers to an organism (an insect or a tick in most cases) capable of carrying and transmitting a disease-causing agent from one host to another. The most important vectors with respect to disease transmission are mosquitoes and ticks.
<b>Zika Virus:</b>	A member of the Flaviviridae family and is transmitted to humans by mosquitoes. It is related to other pathogenic vector borne flaviviruses including dengue, West-Nile and Japanese encephalitis <b>viruses</b> , but produces a comparatively mild disease in humans.

# ATTACHMENT A:

---

Attachment A – Inspection Log



# ATTACHMENT B: COSH PALM CARD

**PREVENTION OF VECTOR-BORNE DISEASES FOR CITY WORKERS**

**A vector is an insect or tick capable of carrying and transmitting a disease-causing agent from one host to another.**

**Mosquito-Borne Diseases**  
West Nile virus  
Zika virus  
Chikungunya  
Dengue

**Tick-Borne Diseases**  
Lyme Disease  
Rocky Mountain Spotted Fever  
Anaplasmosis  
Babesiosis

**Signs and symptoms generally associated with the above diseases include but are not limited to general malaise, fever, rash, joint pain, headache and body aches.**

Notify your supervisor and seek medical consultation immediately, if you experience signs and symptoms.  
Follow your agency's injury and illness procedures.

**NYC** Citywide Administrative Services Citywide Occupational Safety and Health

**Safe work practices for city workers who work in areas where mosquitoes and ticks live and breed such as wooded areas, marshes, overgrown right of way areas; or whose work tasks may cause them to have increased contact with mosquitoes and ticks such as performing grounds maintenance or mosquito control activities.**

Agency facilities or grounds personnel should inspect property and grounds regularly to eliminate standing water.

Remove standing water e.g. tires, buckets, cans, bottles, and barrels.

**Clothing**

Wear appropriate light weight and light-colored clothing that covers exposed skin such as, long pants, long socks.

Tuck pant legs into light-colored socks to prevent ticks from attaching.

Upon leaving the outdoor work area, inspect yourself thoroughly preferably with the help of a buddy:

- Remove any ticks that may have attached to your clothing and skin with a fine-tipped tweezers
- Be sure to check your scalp, neck, behind ears, etc.

**Insect Repellent Use**

Use insect repellent containing EPA-registered active ingredients, such as DEET and Picaridin.

The more active ingredient a repellent contains, the longer time it can protect you from mosquito bites, so choose a repellent that will provide protection for the amount of time spent outdoors.

When applying insect repellent:

- Always follow the manufacturers' directions on the label
- Don't apply to skin under clothing
- Don't apply to cuts, wounds, or irritated skin
- Don't apply aerosol or pump products directly onto the face and instead spray into hands and then rub onto face avoiding eyes and mouth
- After leaving the outdoor area, wash treated skin and hands with soap and water especially before eating and drinking

**Sunscreen Use**

Minimize exposure to the sun by using sunscreen:

- Outdoor workers may need to use sunscreen in conjunction with insect repellent; avoid products that combine sunscreen and repellent
- Apply sunscreen first and then apply the repellent

**FOR QUESTIONS, CONTACT THE  
COSH HOTLINE: 212-386-6251  
COSH WEBSITE: WWW.NYC.GOV/COSH**