

# An Update on Integrated Pest Management in New York City

Prepared by the NYC Department of Health and Mental Hygiene, Bureau of Environmental Surveillance and Policy

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In May 2005, Local Law 37 (introduced by the New York City Council as Intro 329) was signed into law. Local Law 37 (LL37) sets forth a number of requirements related to the use of pesticides on New York City-owned or leased property, with the overall goal of reducing the City's use of hazardous pesticides and promoting the use of safer and more effective pest control practices, known as Integrated Pest Management (IPM). One of LL37's requirements is that City Agencies submit an IPM Plan in January of each year to the Mayor and New York City Council. This report, for calendar year 2009, is being submitted in fulfillment of this requirement. In it, we describe compliance with LL37 requirements and describe the evolving pest control practices of many agencies.

#### **BACKGROUND**

Local law 37 requires the reduction of pesticides on municipal property through the elimination of pesticides with active ingredients that EPA and the State of California consider potential carcinogens or reproductive hazards, respectively. Certain pesticides are exempted from prohibition due to their low potential for exposure or harm, or their public health necessity. A waiver procedure was established that allows DOHMH to grant further individual exemptions from the prohibitions under certain conditions. Posting notices to building occupants twenty-four hours prior to pesticide applications is required as well as new, more detailed record keeping and reporting provisions. The passage of LL37 launched city agencies on a critical review of pest management and pesticide use on city-owned and leased properties. Since LL37 was instituted, there have been a number of major reforms to citywide pest control practices the local law has encouraged agencies to make pesticide use reduction an ongoing pursuit. The Department of Health and Mental Hygiene's (DOHMH) Bureau of Environmental Surveillance and Policy (BESP) was charged with the implementation of Local Law 37 and continues to provide technical assistance to agencies in complying with this law.

In the past year, agencies have continued to identify new pest management practices that are less chemical-dependent and more preventive in their approach. New York City agencies address a wide variety of pest control issues in a large number of settings – residential units, institutional settings, parks, schools, offices, highway medians, hospitals, and vacant lots. Agencies continue to build pest management strategies around IPM which focuses

primarily on preventing pest infestation through improved sanitation and structural integrity. IPM seeks to use structural and behavioral modification to deny pests the necessities- food, water, means of entry and harborage – that they need to survive. At the same time, "pest-proofing" upgrades the overall structural conditions of housing and workplaces. When physical improvements alone are not enough to address an infestation, IPM also encompasses the judicious use of least hazardous pesticides – such as newer gels and baits, and old standbys like boric acid deployed in new ways. DOHMH will continue to encourage agencies to use pesticides to control infestation only as a last resort and to critically examine all other options prior to engaging in their use.

#### **MAJOR IPM ACTIVITIES IN 2009**

#### **LL37 Waiver Review Committee**

The Waiver Review Committee is tasked with evaluating City agency requests for exemptions from pesticide prohibitions. The committee consists of individuals from across the agency, including licensed exterminators, health educators, environmental epidemiologists, risk assessors, and entomologists. Each person is trained in integrated pest management principles and practices and on the requirements of Local Law 37. In 2009, seven new waivers were granted as well as a blanket waiver again for baits and gels containing the prohibited active ingredients fipronil and hydramethylnon for the coming year. DOHMH will continue to evaluate waiver requests. A list of waivers issued in 2009 is available on our website (http://nyc.gov/health/ll37).

# **Inter-Agency Pest Management Committee**

Local Law 37 established the Pest Management Committee (PMC) as a forum for agencies to share pest management information and strategies and to plan future reductions in pesticide use. The PMC is convened by the Department of Health and is made up of representatives from more than 15 municipal agencies and public authorities. This group serves as the city's pesticide and pest management advisory committee, and meets twice annually. This year, the PMC focused on the revisions to Article 151 of the NYC Health Code, electronic reporting of pesticide use data, bed bugs, and contracting for pest management services. The PMC will continue to assess ways to reduce pesticide exposures and to better communicate with employees and the general public about safe and effective pest control.

### **Pesticide Use Reporting**

Local Law 54 of 2007 requires agencies to report their pesticide use to DOHMH, and for DOHMH to issue a summary report to Council by May of each year for pesticides used in the previous calendar year. The New York City Pesticide Use Reporting System (NYCPURS), created by the DOHMH with major enhancements completed in August 2008, has been used by agencies to facilitate this process. Data can now be imported into NYCPURS from other electronic use systems and agencies can generate additional

managerial reports in order to better streamline their resources and track pesticide use activities through this system.

### Report on Pesticides Used by New York City Agencies

In May 2009, the Department issued, in accordance with Local Law 54 of 2007, the second report quantifying municipal agency pesticide use. In 2006, when we began collecting data, just three agencies reported in an electronic format that enabled data to be summarized. By 2009, all agencies reporting submitted electronic data. DOHMH will continue to provide guidance to agencies for electronic submission of pesticide use data.

# **Improved Rat Management**

## **DOHMH's Bronx Rat Initiative (BRI)**

In December 2007, a pilot program for the assessment and remediation of neighborhood rat activity was launched in the Bronx by the DOHMH Bureau of Pest Control Services (PCS). Using a rapid inspection approach, called "rat indexing", the Department proactively inspects every property in a neighborhood rather than waiting for complaints to initiate its activity. Since the program began, PCS has conducted more than 100,000 indexing inspections in the Bronx and plans to expand indexing into Manhattan in January 2010. The Bronx Rat Initiative became Green Shield Certified in 2010.

DOHMH expanded education and outreach efforts as part of the BRI. Private property owners that fail inspections now receive detailed reports of inspection results as well as a guide to preventing rats on their property. When owners fail to improve conditions, DOHMH pest management professionals apply bait up to four times on the property. Public properties are notified through the city's Rodent Task Force and through a city letter sent to the failing agency that outlines their inspection results. In difficult cases, or on properties that involve multiple agencies, the Rodent Task Force coordinates efforts to address these conditions.

DOHMH funded a free Building Superintendants Academy on Rodent Management through a contract with the Association for Energy Affordability (AEA) in the Bronx. AEA scheduled and delivered four full-day Rat Management trainings from November 2008 through June 2009, that were attended by a total of 171 individuals. Each participant in the class received a free rat-resistant trash can and reference materials. These efforts will continue in the Bronx and be expanded into Manhattan in 2010.

#### **MTA Subway IPM Template**

A new rodent IPM pilot project was launched in 2009 with the MTA in two downtown subway stations. There are plans to expand the project as staff resources allow in 2010. The project serves to evaluate and address factors that contribute to the presence of rats within a subway station (e.g., track litter levels, refuse management and storage, baiting programs, etc.) in order to minimize reliance on the use of rodenticide to control subway rats. During 2009, every subway station and line within lower Manhattan (from Chambers Street heading South) were evaluated for building repair issues, conditions conducive to attracting or harboring rats and site specific control tools and strategies.

### **Department of Sanitation (DSNY)**

In collaboration with the staff of DSNY Lot Cleaning Division, the Health Department addressed rodent IPM issues as they relate to city lots in March of 2009. A specific checklist of criteria and situations to be used by DSNY staff for evaluating possible rodent activity was developed, which meant assessing the lots for IPM actions (reduction of conditions conducive to rats).

#### **Park Rodent IPM Training Program**

In 2009, the Department of Parks and Recreation's (DPR) gardeners and pest management staff participated in a Park Rodent IPM Training Program. DPR and the Health Department collaborated on enhanced rat management in Bronx parks as part of the Bronx Rat Initiative. The two agencies worked together to monitor, bait, remediate conditions conducive to rats and install steel rat-resistant trash cans in many Bronx parks with significant rat populations.

#### **Rat Information Portal**

The Rat Information Portal (RIP) (<a href="http://nyc.gov/rats">http://nyc.gov/rats</a>), provides access to detailed information on rat, management for tenants, property owners, pest management professionals, community organizations and policymakers. The portal also provides rat inspection, clean-up and baiting data and mapping capabilities to support community involvement in rat control and prevention. The Rat Portal is continuously updated with current inspection findings.

#### Pesticide-Related Health Effects Surveillance.

Health Department staff co-authored with the National Institute of Occupational Safety and Health and several states, a report on the health hazards of bug bombs, also known as total release foggers. The report, published in the CDC Morbidity and Mortality Weekly Report on October 17, 2008, analyzed reports to the NYC Poison Control Center of exposures to bug bombs. The Health Department has been encouraging the New York State Department of Environmental Conservation to restrict the use of bug bombs to professionals, and prohibit their sale to the general public. In 2009, the Health Department petitioned the U.S. Environmental Protection Agency to similarly restrict foggers on a nation-wide basis.

# **Bed Bug Control**

#### **Outreach and education**

In response to the resurgence of bed bugs, the city has expanded its efforts to address this issue. As part of this city-wide effort, the Health Department has produced and circulated over 90,000 fact sheets on identifying and responding to bed bugs. In 2009, the Health Department completed a more detailed guide to bed bug control that was modeled after two successful guides on the prevention of rats, and the safe control of mice and cockroaches in homes.

### **Integrated pest management protocols**

The City has also implemented protocols to control bed bugs infestations in city housing. The New York City Housing Authority has trained all of its pest management professionals regarding bed bug control, and follows a protocol that involves working with tenants to prepare their apartments for their visit, applying pesticides on at least two visits where needed, cleaning and vacuuming baseboards and other surfaces, and educating tenants on appropriate replacement or isolation of infested clothing, furniture and bedding.

Similarly, the Department of Homeless Services has implemented a protocol to help prevent the spread of bed bugs in its shelters and homes. Shelter operators and their maintenance staff have been trained on the appropriate response to bed bugs, and reports of bed bugs may result in isolation of clothing and its separate laundering, thorough inspections, client notification and education, and repeated visits by pest management professionals.

## **Environmental Health Tracking Portal**

In December 2009, the NYC Health Department launched a new web-based application called the Environmental Public Health Tracking Portal (<a href="www.nyc.gov/health/tracking">www.nyc.gov/health/tracking</a>). The portal provides access to data and information about the environment and health in NYC and allows the public to explore neighborhood-level data, create reports, tables, charts and maps on a variety of topics including the prevalence of cockroaches in homes, mice or rats inside or outside households, personal use of pesticides and the frequency with which a pest control professional visits homes is available. The portal also summarizes data about the quantity, types and locations of pesticides that are applied by state-certified pesticide applicators.