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 properties, 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 2010, 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 required that the use by the City of New York of pesticides with active ingredients that EPA and the State of California consider potential carcinogens or reproductive hazards, respectively be discontinued. 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 the Health Department 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 and the local law has encouraged agencies to make pesticide use reduction an ongoing pursuit. The Health Department’s 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. The Health Department 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 2010

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 2010, nine 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. A list of waivers issued in 2010 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 increasing electronic reporting of pesticide use data, the challenges agencies are facing on the prevention and control of 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 the Health Department to enable it 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 Health Department with major enhancements completed in August 2008, has been used by agencies to facilitate this process. Data continues to be imported into NYCPURS from other electronic use systems and agencies are able to 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 2010, the Department issued, in accordance with Local Law 54 of 2007, the third 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. In 2010 all agencies reporting submitted electronic data. The Department will continue to provide guidance to agencies and their contractors for electronic submission of pesticide use data.

**Improved Rat Management**

**The Health Department’s Bronx and Manhattan Rat Initiative**

In December 2007, a pilot program for the assessment and remediation of neighborhood rat activity was launched in the Bronx by the Bureau of Pest Control Services (PCS). In January of 2010, we expanded the Rat Initiative into Manhattan. 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. In 2010, we completed a fourth round of indexing inspections in the Bronx and the first round of indexing inspections in Manhattan with a total of about 79,000 inspections.

The Department offered a Building Superintendent’s Academy on Rodent Management in Manhattan in the early Spring of 2010. The Department now offers free training in both the Bronx and Manhattan on a monthly basis. Eleven (11) classes were held in the Bronx and 10 in Manhattan. In addition, in December of 2010, the Department offered its first ever Rodent Prevention Training specifically for the residents of Chinatown, translated into Chinese as well as one translated into Spanish.

In 2010 PCS evaluated the use of a new stainless steel mesh to prevent rat burrowing in tree pits, green streets and landscaped areas. All three trials demonstrated high efficacy in excluding rats from park and landscapes and reducing the need for the use of rodenticides. This mesh was recently tested for sealing rat burrow systems occurring in sidewalks and curbs and performed well. The Department will evaluate how to expand the use of the mesh in future control activities.

**MTA Subway Evaluation**

MTA is working with the Health Department to evaluate and address factors that contribute to the presence of rats within a subway station. During 2009, every subway station and line within lower Manhattan (from Chambers Street heading south) was evaluated for conditions conducive to rats.

**Department of Sanitation (DSNY)**

In 2009, staff of DSNY Lot Cleaning Division were trained to evaluate and ameliorate conditions to rats in vacant lots. DSNY now employs a checklist of criteria and situations to evaluate rodent activity.
Department of Parks and Recreation (DPR) Rodent IPM Training Program

In 2010, DPR gardeners and pest management staff participated in a Park Rodent IPM Training Program via the three day NYC Rodent Control Academy. DPR and the Health Department continue to collaborate on enhanced rat management in New York City parks. The two agencies work together to monitor, bait, remediate conditions conducive to rats, evaluate risks to non-target park wildlife (hawks and owls) and continue to install steel rat-resistant trash cans in Bronx and Manhattan parks that large populations of rats.

Rat Information Portal

The Rat Information Portal (RIP) (http://nyc.gov/rats) continues to provide 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 and recently added new sections on managing rodents in grocery stores and other food-service establishments.

Bed Bug Prevention and Control

Bed Bug Projects

In response to the resurgence of bed bugs, the city continues to expand its efforts to address this issue. The New York City Council provided funds to the Department of Health to advance the city’s efforts in the following ways:

- Training for Department of Housing Preservation and Development (HPD) and the New York City Housing Authority (NYCHA) to provide training in detecting bed bug infestations and their prevention and control
- Clarifying to building owners their responsibility to remediate bed bugs and inspect areas around ones found to have bed bugs.
- Developing a variety of guidance documents to enable residents, businesses and institutions to anticipate, discover and rapidly and safety respond to the presence of bed bugs.
- Creating a bed bug web portal which will provide easily accessible sources of information about bed bugs to the public and links to other useful sites.

Outreach and Education

The Health Department as part of this city-wide effort has produced and circulated over 150,000 fact sheets on identifying and responding to bed bugs. In 2009, a more detailed guide, “Preventing and Getting Rid of Bed Bugs Safely” was completed that was modeled after two successful guides on the prevention of rats, and the safe control of mice and cockroaches in homes. This guide has become the corner stone of the City’s bed bug outreach efforts and to date over 100,000 copies have been distributed. It is now available in English, Spanish, Chinese, Russian, Korean, Haitian Creole and Italian. Several municipalities throughout the country have adopted and used this guide in their outreach and education efforts.
HPD through its outreach and education program offers an e-Learning class about bedbugs, which can be taken at any time on any computer with internet access. The interactive class discusses what bedbugs are, explores myths about bedbugs and provides some information about identifying and eradicating bedbugs.

**Integrated Pest Management Protocols**

The New York City Housing Authority (NYCHA) has implemented IPM protocols to control bed bugs infestations in city housing. Similarly, the Department of Homeless Services (DHS) implemented IPM protocols to help prevent the spread of bed bugs in its shelters and group homes. Shelter operators and their maintenance staff continue to receive training on the appropriate IPM response to bed bugs.

**Improved Weed Control**

In 2007 the Department of Parks and Recreation (DPR) began a series of field trials to test alternative methods of weed control which included methods of both pre- and post-emergent control. Several types of products have been tested, including organic-based sprays, various heat treatments, and a new initiative continuing through the coming years of using weed-suppressive perennial plants. Results of these trials showed that while there is no alternative product comparable to existing conventional chemicals for weed control - especially pre-emergents - a comprehensive approach including a combination of methods can go a long way in weed management. The DPR has begun to compile a document of a comprehensive IPM weed management strategy.

**Environmental Health Tracking Portal**

In 2010 the Environmental Public Health Tracking Portal ([www.nyc.gov/health/tracking](http://www.nyc.gov/health/tracking)) added data on the prevalence of bed bugs in the homes of New York City residents. The portal allows the public to explore neighborhood-level data and create reports, tables, charts and maps of the prevalence of cockroaches or bed bugs in the home, mice or rats inside or outside the home, personal use of pesticides and the frequency with which a pest control professionals visit the home. The portal also summarizes use of “best practice” pesticides by state-certified applicators, in addition to the use of other pesticide products.