

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) set 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 was 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 2008, is being submitted in fulfillment of that requirement. In it, we describe compliance with LL37 requirements and describe the evolving pest control practices of many agencies.

BACKGROUND

Local law 37 required 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. There are exemptions of certain pesticides from prohibition due to their low potential for exposure or harm, or their public health necessity. A waiver procedure was established that allowed DOHMH to grant further individual exemptions from the prohibitions under certain conditions. Posting notices to building occupants twenty-four hours prior to pesticide applications was required as well as new, more detailed record keeping and reporting provisions. LL37 launched city agencies on a critical review of infestation, pest management and pesticide use on city-owned and leased properties. LL37 made a number of major reforms to citywide pest control practices and has thus far 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.

IPM ACTIVITIES IN 2008 OF THE DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LL37 Waiver Review Committee

The Waiver Review Committee is tasked with evaluating City agency requests for waivers 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 2008, seven new waivers were granted. DOHMH continues to grant a blanket waiver for baits and gels containing the prohibited active ingredients fipronil and hydramethylnon. A list of waivers issued in 2008 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 chaired by BESP 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. The PMC assesses ways to reduce pesticide exposures and to better communicate with employees and the general public about safe and effective pest control. Two PMC meetings were held in 2008.

The April 16, 2008 meeting focused on a review of the pesticide application data submitted by the agencies for calendar year 2007, implementing electronic reporting and using the citywide pest control contract. The October 24, 2008 meeting focused on the health code revisions for pest management and how agencies might be impacted, new import and reporting features of NYCPURS – the web-based tool to assist with reporting requirements, and agencies' constraints in contracting for pest management services. Dr. Jody L. Gangloff-Kaufmann from Cornell Cooperative Extension presented on the lifecycle and management of bed bugs.

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 for pesticides used in the previous calendar year. DOHMH created a web-based electronic pesticide application reporting system, called the New York City Pesticide Use Reporting System (NYCPURS) to facilitate this process. In August 2008 DOHMH completed and launched enhancements to the system that permit data to be imported into NYCPURS from other electronic use systems and allow agencies to generate additional managerial reports in order to better streamline their resources and track pesticide use activities.

DOHMH promotes the use of NYCPURS and offers training in its use. Over 130 representatives from city agencies and their contractors have attended NYCPURS training. In August 2007, DOHMH began awarding 2.5 NYS Department of Environmental Conservation licensure credits to New York State certified applicators for completing the training that contribute to their annual training requirements.

Report on Pesticides Used by New York City Agencies

In May 2008, the Department issued, in accordance with Local Law 54 of 2007, the first ever report quantifying municipal agency pesticide use. In 2006, just three agencies provided data in an electronic format that enabled data to be summarized. By 2007, eleven agencies reported electronic data and more agencies are expected to report electronically in 2008. DOHMH will continue to provide guidance to agencies for electronic submission of pesticide use data.

Rodent Academy

The Rodent Control Academy was established in 2005 by DOHMH's Bureau of Pest Control Services (PCS) under a grant from the Centers for Disease Control and Prevention (CDC) to provide progressive training for managing rodent populations. The Academy's training is based on new research and the principles of Integrated Pest Management (IPM). After focusing on training of City-employed pest management staff for its first three years, the academy began in 2008, to train licensed commercial pest control companies that service New York City. In its inaugural year, nearly 100 professionals employed by 55 companies have graduated from the Rodent Academy.

New Rat Control Initiative in the Bronx

A pilot program was launched in the Bronx by the DOHMH Bureau of Pest Control Services (PCS). Using a rapid inspection approach, called "rodent indexing", the Department proactively inspects every property in entire neighborhoods, no longer waiting for complaints to initiate its activity. Since the program began, the PCS has conducted more than 66,000 inspections in the Bronx. Private property owners in the Bronx now receive detailed and clear reports of inspection results as well as a detailed guide to preventing rats, and on rules and practices governing the use of rodenticides. When owners fail to improve conditions, DOHMH pest management professionals apply bait up to four times on the failing property.

Public properties are notified through the city's Rodent Task Force and through a city letter sent to the failing agency notifying them of their inspection results. In difficult cases, or on properties that involve multiple agencies, the Rodent Task Force collaborates to address the conditions. The Bronx initiative program also includes increased efforts to educate owners and other community members.

Rat Information Portal

The Rat Information Portal (RIP) (http://nyc.gov/rats), launched in November 2008, provides access to detailed information about rat infestations. RIP offers extensive information that can be used by tenants, property owners, pest management professionals, community representatives and elected officials. In addition, RIP provides rat inspection, clean-up and baiting data and mapping capabilities to support community involvement in rat control and prevention

Pesticide-Related Health Effects Surveillance.

DOHMH 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. Coinciding with this publication, the New York State Department of Environmental Conservation agreed to move quickly to restrict the use of bug bombs to professionals, and prohibit their sale to the general public.

Ongoing Contact with the U.S. Environmental Protection Agency on Urban Pesticide Concerns

DOHMH was asked by the US EPA to join its Pesticide Dialogue Committee to share its perspective on pesticide use in cities. This Committee provides a forum for a diverse group of stakeholders to provide feedback to the pesticide program on various pesticide regulatory, policy and program implementation issues.

Health Code Revisions

On December 16, 2008, the New York City Board of Health voted to repeal and reenact with substantial revisions Article 151 ("Rodents, Insects and Other Pests") of the NYC Health Code. Article 151, renamed "Pest Prevention and Management" now requires property owners to adopt integrated pest management techniques in the routine management and control of pests. This focus on integrated pest management incorporates a hierarchy of actions to prevent and eliminate pests, including structural alterations and repairs, and the elimination of conditions conducive to pest infestations. Article 151 now enables the Department to mandate the preparation of pest management plans and their content. Article 151 now prohibits "pesticide only" pest management where conditions exist that are conducive to the presence of pests.

SIGNIFICANT IPM-PROMOTING ACTIVITIES BY OTHER CITY AGENCIES IN 2008

Department of Homeless Services

The Department of Homeless Services (DHS) manages homeless shelters and dormitory facilities across the City. Pest management services, which primarily address rodent cockroach, water bugs and bed bugs problems, are provided by the DCAS citywide contract. Pesticides used on its facilities continued to be monitored for LL37 compliance and staff training continued in IPM to achieve a broader goal of pesticide use reduction. DHS worked closely with Cornell University Cooperative Extension and DOHMH in developing protocols for bed bug prevention and control. In Spring 2008, Cornell published "Guidelines for Prevention and Management of Bed Bugs in Shelters and Group Living Facilities." The document, which has broad applicability to large residential, clinical and social service treatment centers, as well as multi-dwelling housing, can be downloaded at http://www.nysipm.cornell.edu/publications/bb_guidelines/default.asp

Department of Parks and Recreation

New York City has 28,000 acres of parks, playgrounds, athletic fields, natural areas, recreational facilities, comfort stations, beaches, historic buildings, and parkways maintained by the Department of Parks and Recreation (DPR). Most pesticides applied by DPR are for weed control. In 2008 DPR began a series of field trials to test alternative methods of weed control. These field trials include methods of both pre- and post-emergent control. Two types of products were tested; three plant-extract based sprays, and two mechanical methods using heat. Results of these trials are helping to shape further investigations in 2009, and have strengthened the emphasis on comprehensive management practices for weed control.

Department of Sanitation

The Department of Sanitation of New York City (DSNY) manages garages, office buildings, transfer stations, and various publicly-owned lots throughout the city. DSNY began in 2008 advising DOHMH on a study it is conducting with New York University on opportunities to expand the use of roll-off trash compactors (ROTC) to help reduce curbside waste, a known contributor to neighborhood presence of rats. ROTCs are self-contained devices that hold and compact waste in a closed environment to reduce odor, eliminate leakage, and reduce curbside availability of waste that rats feed on. The study will produce recommendations for a policy document for public and private owners on how to assess whether their properties are appropriate for the adoption of roll-off trash compactor technology.

New York City Housing Authority

NYCHA manages 344 housing developments and 181,000 apartments, as well as office space and grounds. NYCHA currently maintains approximately 80 certified pesticide

applicators on staff that perform routine inspections and treatments, carry out specialized intensive IPM interventions, and respond to complaints and requests from other agencies. In 2008, NYCHA, along with DOHMH and Columbia University's Mailman School of Public Health completed an evaluation of its pilot adoption of integrated pest management practice. The study found that IPM, compared to pesticide-only applications is more likely to reduce cockroach populations and reduce tenants' own use of off-the-shelf pesticides.