



Pesticide Use by New York City Agencies in 2015

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EXECUTIVE SUMMARY

Local Law 54 of 2007 requires the New York City Department of Health and Mental Hygiene (DOHMH) to summarize pesticide use by City agencies annually. New York City agencies account for a small fraction of pesticides used in New York City. New York State receives pesticide use data from all applicators – commercial and private. Comparing New York City agencies' use in 2009 (the last year New York State released its data), local government use accounts for an estimated 2.2% of the total volume of liquid pesticides, and 12.4% of the total pounds of solid pesticides applied within the five boroughs of New York City. In 2015, 37 municipal agencies reported to DOHMH their pesticide use in a format that enabled summarization within and across agencies. This report summarizes pesticides applied by or on behalf of agencies on city owned or leased property.

Key findings include:

- Pesticides were applied a total of 137,245 times by New York City agencies in 2015. Agencies used a total of 5,656 gallons and 97,061 pounds of pesticides. (Table 1)
- Insecticides were the most frequently applied type of pesticide, accounting for nearly 63% of all applications. (Table 1)
- The most heavily used type of pesticide by volume was fungicides, accounting for 46%, while insecticides made up 52% of all pesticides by weight used by city agencies (Table 1). When excluding the DOHMH West Nile Virus (WNV) larviciding program, rodenticides were the most heavily used by weight at 60%.
- In comparison to reporting amounts in 2014, there was a 10% decrease in herbicide use by volume reversing an increase in 2014 (Figure 2). Much of the change was due to a 12.5% decrease in glyphosate products used (Figure 3).
- The Parks Department continued to no longer apply pre-emergent herbicides near roadways and along walkways and perimeters of city parks.
- There was a 43% decrease in insecticides by volume. Most of that decrease was due to a 78% decrease in pyrethroids applied by NYCHA to control bed bugs. (Figure 2 and Figure 6)
- “Best Management Practices” products (Appendix 3) – largely gel and bait insecticides with little potential for human exposure – accounted for 32% of the number of insecticide applications in 2015. When excluding WNV larvicides, the number of these applications reported by weight decreased 1.8% as compared with 2014 (data not shown). Additionally, the total quantity (weight) of these “Best Management Practices” products

used to treat roaches decreased by 48%, mainly due to the use of lower amounts per application. (Figure 4)

- There was a 5% increase in rodenticide amounts used by agencies compared with 2014. The frequency of applications and size of neighborhood rat 'indexing' campaigns can influence year-to-year trends in use. (Figure 1)
- As in previous years roaches were the most commonly targeted pests in 2015, with rats, mice, bed bugs and moquitos making up the top 5 pests by number of total applications. (Table 3)
- The amount of pyrethroids by volume applied to target roaches declined 32% from 2014 to 2015 continuing a recent declining trend after a 43% decrease from 2012 to 2013 (Figure 6)

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I. BACKGROUND

When Local Law 37 was enacted on May 9, 2005, New York City became the largest municipality in the nation to regulate the use of pesticides on city-owned and leased property. Local Law 37 established new requirements regarding pesticide use on property owned or leased by the City, including the prohibition of certain pesticide products, posting of warning notices prior to pesticide use, and the requirement that agencies report their pesticide use on annual basis. With the enactment of Local Law 37 in May 2005, prohibitions from use were phased in for certain pesticides used by agencies or their contractors on City owned and leased properties. By November, 2005, EPA Toxicity Category 1 (signal word “danger”) was prohibited. In May 2006, use of all pesticides classified by the EPA as possible, probable or known human carcinogens was not allowed. And in November 2006, use of all pesticides classified by the State of California’s Office of Environmental Health Hazard Assessment as developmental toxins was also no longer permissible.

Local Law 37 exempted from prohibition several uses and products that posed little or no risk of human exposure, including rodenticides placed in tamper-proof containers or applied directly into rat burrows or inaccessible areas, containerized insect baits, and certain other types of insecticides such as boric acid, silica, and diatomaceous earth. The New York City Department of Health and Mental Hygiene (DOHMH), under Local Law 37 authorization, further waived from prohibition the use of all insecticide gels containing the ingredients fipronil and hydramethylnon due to their effectiveness and low potential for human exposure. In addition, Local Law 37 empowered DOHMH to consider and grant requests for waivers from prohibition on a case-by-case basis. DOHMH maintains a webpage on Local Law 37 at <http://nyc.gov/health/ll37> that includes a list of all waivers granted to agencies.

In October, 2007 New York City enacted Local Law 54 which requires City agencies to report their pesticide use to DOHMH, and for DOHMH to issue a summary report to the City Council and the Mayor. This is the ninth annual summary report and fulfills these requirements. City agencies have made significant improvements since the enactment of Local Law 37 to the quality and delivery of pesticide use data. In 2006, just three agencies provided data in an electronic format that enabled data to be summarized. In 2015, Thirty seven agencies reported electronic data.

II. SOURCES OF PESTICIDE USE DATA

New York City agencies are required to report to DOHMH their pesticide use by February 1 for the preceding calendar year. This report summarizes data received by the Department for pesticides applied during calendar year 2015. All reporting New York City agencies and their contractors provided data to DOHMH in electronic format.

DOHMH launched and hosts an electronic reporting tool, the New York City Pesticide Use Reporting System (NYCPURS) that all agencies, contractors and licensed pest control applicators can register to use. In August 2008, DOHMH launched the import function of NYCPURS permitting importation of data maintained by other electronic systems and since then more agencies and their contractors have used this system.

Source data for each pesticide application includes the product name, Environmental Protection Agency (EPA) registration number, the quantity used (expressed as either weight or volume), the method of application, and the date and location the product was applied. DOHMH utilizes the EPA's pesticide information system to link these data - by registration number - to determine a product's pesticide type and class, toxicity score, and its active ingredients. In addition, we linked these data to the EPA Office of Pesticide Programs' List of Chemicals Evaluated for Carcinogenic Potential and the State of California's List of Chemicals Known to the State to Cause Cancer or Reproductive Toxicity, both available for download at <http://nyc.gov/health/1137>.

III. METHODS AND LIMITATIONS

Data in a variety of electronic formats were imported into a single database, where it was checked for quality, accuracy and validity. Weight and volumetric units were standardized to pounds and gallons, respectively. Products sold in solid form will primarily be reported by weight and liquids primarily by volume. Each record of data was assigned an agency identifier corresponding to the source agency. Data were analyzed using SQL, Excel and Access. We analyzed data by pesticide type and chemical class, and report total numbers, pounds and gallons of applications for New York City, and by agency on whose behalf the pesticides were applied.

Where DOHMH was able to evaluate the completeness of these records, it is reported by agency, below. It is still not possible to fully determine whether each agency was able to report each pesticide application. Many agencies depend upon contractors to maintain records of pesticides applied, and may not be certain that all contractors have fully complied with Local Law 37 reporting requirements. There are some limitations in the data:

- Staff and contractor turnover has led to difficulty maintaining dependable and timely reporting from some agencies.
- Year to year variations in agency pesticide use can be due to a number of factors including but not limited to changes in practice, budgets and the incidence in actual pest problems.

Despite the above mentioned limitations, the data being captured continues to improve over previous years as more agencies and their contractors are using NYCPURS:

- The formats used were more streamlined for 2015 and we were able to capture more information pertaining to the target organisms of the pesticides applied by agencies.
- Reporting errors, especially in reporting the incorrect units, were greatly reduced in 2015 due to greater use of the NYCPURS system with input standardization and consistent formatting.

In 2015, 96% of records were either imported or directly entered into the NYCPURS system. We expect to see further improvements in the data over the next year as more agencies fully adopt electronic recordkeeping, migrating existing electronic or paper systems to the NYCPURS system developed by DOHMH for electronic recordkeeping. Additional information about NYCPURS is available at <http://nyc.gov/health/1137>.

IV. PESTICIDE USE FINDINGS

A. TYPES OF PESTICIDES USED BY AGENCIES

Four main types of pesticides were applied by agencies: rodenticides (products used to kill rodents); insecticides (to kill insects); herbicides (to kill plants) and fungicides (to kill molds and other fungi).

Rodenticides

Most rodenticides act as anticoagulants and all are acutely toxic if ingested in sufficient dosages. Common rodenticide active ingredients are bromodiolone, diphacinone, brodifacoum, zinc phosphide and warfarin. Some common rodenticide products used by agencies in 2015 were: Contrac All-Weather Blox®, Generation Mini Blocks®, Weatherblok Bait with Bitrex® and Difethialone Paste Place Packs®.

In 2015, a total of 31,443 pounds of rodenticides were applied by City agencies, accounting for 32.4% by weight of all pesticides applied, and 60.4% by weight when excluding WNV larvicides. (Table 1)

Insecticides

A total of 1,382 gallons and 50,118 pounds of insecticides were applied by New York City in 2015, accounting for 24.4% by volume, and 51.6% by weight of the total applications. Biological insecticides applied to target mosquito larvae account for 89.9% of insecticides by weight (Table 1). When those products are excluded, 5,078 pounds of insecticides by weight were applied making up 9.8% of solid pesticides applied. Insecticides used by NYC agencies in 2015 were largely comprised of three classes of products; conventional pyrethrins and pyrethroids, organophosphates and carbamates, and “Best Management Practices” products, which either use active ingredients with very low toxicity or involve formulation or application methods that minimize potential exposure and environmental spread.

Pyrethrins, Pyrethroids, and Synergists

Pyrethrins and pyrethroids are less acutely toxic than the organophosphate and carbamate pesticides they have largely replaced. Accidental poisonings from professional applications are very rare, though personal use of aerosol and fogging product formulations have been associated with acute exposures, poisonings and fires. Some pyrethroids may be respiratory allergens for sensitized people, including asthmatics. Though these chemicals have lower acute toxicity, there is some emerging concern over the chronic neurotoxicity of pyrethrins, pyrethroids, and their

synergists. EPA has classified pyrethrins, their synergists, and several pyrethroids as suspected human carcinogens. Pyrethrins and pyrethroids break down relatively quickly when used outdoors, but persist longer when applied indoors.

Common pyrethroid active ingredients are cypermethrin, cyfluthrin, esfenvalerate, and deltamethrin. Pyrethrin and pyrethroid products used by agencies in 2015 include Whitmere Optem ME PT 600®, Steri-Fab®, Demand CS Insecticide®, Tempo SC Insecticide®, Suspend SC Insecticide® and Evercide Esfenvalerate 6.4% CS.

Together, pyrethrins and pyrethroids accounted in 2015 for 62.3% of the total insecticides applied by volume and 6.1% by weight, 59.8% by weight when excluding WNV larvicides. These products made up 62.8% of the total number of insecticide applications. There was a 57.4% decrease in pyrethroids applied by volume in 2015, due to decreased applications by NYCHA to targeting bedbugs with a 78% decrease by volume and a citywide 32% reduction in the volume of pyrethroids applied targeting roaches.

Organophosphates and Carbamates

Organophosphate and carbamate insecticides both function by inhibiting the neurotransmitter cholinesterase. Until EPA banned their use for most indoor applications in 1999 and 2000, organophosphates were the most heavily used class of insecticides. EPA also allowed the registrations for several carbamates to lapse.

The main organophosphate active ingredients used in 2015 were outdoor applications of chlorpyrifos and trichlorfon on certain golf courses. The only carbamate active ingredient used in 2015 was methomyl used in containerized baits. Organophosphate and carbamate products applied by agencies in 2015 include Nufarm Chlorpyrifos SPC 4 Insecticide®, Chlorpyrifos 4E AG®, Dylox 420 SL Turf and Ornamental Insecticide, Stimukil Fly Bait® and Golden Malrin RF-128 Fly Killer®.

Reports submitted by agencies showed that, in 2015, the use of organophosphates and carbamates accounted for just 6.0% of the total insecticides applied by agencies by volume a 52% increase from 2014 levels, and 0.5% by weight, 4.6% by weight excluding WNV larvicides, an 11.4% increase from 2014, with 32% of the amount by weight and 100% of the amount by volume applied by NYC on golf courses. These products remain a very small percentage of the insecticides used by city agencies. These products made up only 0.04% of the total number of insecticide applications.

“Best Management Practices” Insecticides

Several insecticide products have been introduced to the market whose proper use involves little or no potential risks for human exposure but that have been demonstrated to be highly effective at controlling pests. These products include biological pesticides for mosquito control and gels and baits for cockroach and other insect control. These products are the preferred insecticides used by agencies as part of their integrated pest management program and are referred to as “Best Management Practices” Insecticides (BMP). A complete list of these products is listed in Appendix 3.

Common active ingredients for these products include boric acid, silica gel, diatomaceous earth, the bacteria *Bacillus sphaericus* and *Bacillus thuringiensis*, hydramethylnon, fipronil, avermectin, and indoxacarb. Some of the products used by agencies for this reporting year were Maxforce Roach Bait F.05®, Redzone Bait®, Vectobac CG Biological Larvicide Granules®, Vectolex CG Biological Larvicide®, Avert Prescription Treatment TC 93A Bait®, and DuPont Advion Cockroach Gel Bait®.

In 2015 23.8% of the total insecticides applied by volume, and 92.1% by weight, were insecticidal dusts, gels and baits, or biological larvicides. Excluding WNV larvicides, the totals equal 21.7% of insecticide products by weight. These products made up 32% of the total number of insecticide applications, a 12.3% increase compared with 2014.

Herbicides

The herbicides used by New York City agencies in 2015 were used primarily for vegetation control in parks and for the maintenance of highways and street medians. The active ingredients most commonly used in 2015 were glyphosate, dinitroanilines, chlorophenoxyacetic acids and ureas. Herbicides were a major contributor of pesticide use by agencies.

A total of 1,524 gallons and 6,075 pounds were applied, accounting for 27.0% of total volume and 6.3% of total weight, 11.7% when excluding WNV larvaciding, of all pesticides used by agencies in 2015. (Table 1)

Glyphosate

The most heavily used herbicides applied as a liquid by agencies were glyphosates best known as Roundup® products. Glyphosate is a broad-spectrum, non-selective systemic herbicide that can be used throughout the growing season. In early 2015 the International Agency for Research on Cancer (IARC), a branch of the World Health Organization (WHO) changed the classification for glyphosate to a “probable human carcinogen.” Though having little acute toxicity, there has been some growing concern that chronic exposure to glyphosate or to inactive ingredients with which it is commonly formulated could present a risk for the development of certain cancers. There is also some evidence that heavy use of the chemical in warm climates with soil high in certain toxic metals could present significant risk in developing severe kidney damage. Currently no regulatory determination has been made at the federal or state level that would change the prohibition status of these herbicide products under Local Law 37. However, DOHMH encourages the pursuit of alternative weed control methods that would reduce the need for these herbicides. Glyphosate use had increased as agencies phased out the use of other herbicides prohibited under Local Law 37. Though in 2015 52% of applications of herbicide by volume contained glyphosate, a 2.6% decrease from 2014.

Dinitroaniline

Dinitroaniline-based herbicides, which are often combined with fertilizers, are used early in the growing season as pre-emergents. They are of low acute toxicity to people, but several

dinitroanilines are classified by EPA as suspected human carcinogens. Dinitroaniline herbicides break down slowly. Common dinitroaniline active ingredients are pendimethalin, trifluralin, benefin, benfluralin and proflam. Dinitroaniline products used by agencies in 2015 were Tee Time Treflan 5G®, Lebanon Trifluralin G-5 and Alligare Proflam 65 WG Herbicide®. In 2013 the Parks Department chose to no longer use pendimethalin-containing herbicides, after they had in previous years requested a waiver to use this herbicide around cobblestones and concrete surfaces of sidewalks or walkways in areas adjacent to roadways, such as park perimeters or “Greenstreets” or in areas adjacent to roadways with limited access from the public.

Chlorophenoxyacetic/Benzoic Acids

The chlorophenoxyacetic acid herbicides are a family of related chemicals that are often combined in products. EPA classifies one member of this class of pesticides - mecoprop-p – as a suspected carcinogen. Common chlorophenoxyacetic acid active ingredients are 2,4-D, MCPP, mecoprop-p, dicamba and MCPA. Common chlorophenoxyacetic acid products used by agencies in 2014 were Riverdale Vanquish Herbicide® and Lesco Three-Way Bentgrass Selective Herbicide®. In 2015, the only uses of these products were applications along city highways by the DOT and a small number of applications on the city’s golf courses and botanic gardens.

Ureas

Like dinitroaniline herbicides, urea herbicides are of low acute toxicity, but some may pose certain chronic risks. Classification as a possible human carcinogen varies within the group. Diuron, a urea herbicide among the five most heavily used herbicides reported by commercial applicators in the private market in the City in 2009, is classified by the EPA as a likely human carcinogen. Sulfonylureas are of low acute toxicity and have been so classified. All urea herbicides are highly persistent. None of the ureas used by NYC in 2015 is classified by the EPA as a human carcinogen. Common Urea active ingredients are Sulfometuron methyl, metsulfuron-methyl and Halosulfuron-methyl. Common urea products used by NYC agencies in 2015 were Dupont Oust Extra Herbicide®, Dupont Viewpoint Herbicide® and Nufarm Prosedge Selective Herbicide®. In 2015, the only uses of these products were applications along city highways by the DOT and a small number of applications on the city’s golf courses and botanic gardens.

Fungicides

Many of the commonly applied fungicides are classified by EPA as suspected carcinogens. The potential for exposure can exist throughout the growing season because many of these fungicides are also persistent, with half-lives measured in months and years. Degradation does not necessarily reduce the hazard, because some fungicides also have highly toxic breakdown products. Fungicides were most commonly applied by NYC on golf courses, and these applications are exempt from Local Law 37 prohibitions.

The active ingredients of fungicides commonly used in NYC in 2015 were chlorothalonil, thiophanate-methyl, propiconazole, azoxystrobin, iprodione and triadimefon. Common fungicide products applied in 2015 include Daconil Action®, Heritage Fungicide®, Bayleton Flo Turf and Ornamental Fungicide® and Lesco Twosome Fungicide®.

Fungicides make up a smaller portion of the overall pesticide use by agencies, accounting for 46.3% of the total pesticide applied by volume and 9.7% by weight, and 18.1% by weight when Pesticides Use by NYC, 2015

excluding WNV larvicides. (Table 1) Though the total amount of fungicides reported by volume has only increased slightly since 2012, they are now the most heavily used type of pesticide reported by volume after declines in insecticides and herbicides over the past few years. Much of this increase could be due to a shift to a liquid formulation from a solid product. (Figure 1 & 2)

B. SUMMARY OF CITYWIDE PESTICIDE USE

Pesticide use can be measured and compared in a number of ways. Throughout the remainder of this report, we describe the frequency with which pesticides are applied, as well as the quantity of pesticides applied. Quantities for liquid applications are measured as volume in gallons. Quantities for solid applications are measured as weight in pounds. Pesticides were applied a total of 137,245 times by New York City in 2015. The pesticides applied most frequently by New York City were insecticides. Insecticides were the most heavily used in terms of weight and fungicides in terms of volume. In 2015, 89.9% of the insecticides reported by weight were bacterial products designed to kill mosquito larvae in stagnant waters, away from human contact. If we exclude these products, which were used as part of the West Nile Virus control program then 9.8% of the total pesticide by weight would be due to insecticides. The majority of rodenticide applied by the City of New York is placed directly into rat burrows and poses little risk of exposure to the public. Table 1, below, summarizes these findings. All following tables are sorted in order of descending number of applications within each pesticide type listed below.

Table 1. Total Applications Reported Applied by NYC Agencies in 2015, by Pesticide Type

Pesticide Type	Volume		Weight			Times Applied	
	Gallons	% of Total	Pounds	% of Total	% wo WNV	Number	% of Total
Rodenticide	90.64	1.6%	31,442.96	32.4%	60.4%	46,328	33.8%
Insecticide	1,382.00	24.4%	50,117.73	51.6%	9.8%	86,335	62.9%
Herbicide	1,524.33	27.0%	6,074.97	6.3%	11.7%	3,745	2.7%
Fungicide	2,619.57	46.3%	9,418.67	9.7%	18.1%	799	0.6%
Other	39.00	0.7%	6.69	0.0%	0.0%	38	0.0%
Totals:	5,655.54		97,061.02			137,245	

Table 2, below lists the ten most frequently used products used for each pesticide type on New York City owned or leased property in 2015. For each, we list the total volume, weight and number of applications, as well as the active ingredient(s), the EPA toxicity category, whether the product is considered by EPA a known, possible or suspect carcinogen, and whether the product is listed by the State of California as a reproductive or developmental hazard. For this and subsequent product tables, the toxicity category refers to the EPA's assigned label warning to indicate the degree of acute toxicity from oral, dermal and inhalation exposures on a scale from 1 to 4. Toxicity Category 1 indicates pesticides considered highly toxic and whose label requires the signal word, "Danger". Toxicity Category 2 products are considered moderately toxic and product labels carry the word "Warning" Toxicity Category 3 products are considered to be slightly toxic while Toxicity 4 products are considered relatively non-toxic. Both toxicity categories 3 and 4 carry the signal word "Caution" A complete list of products used by New York City by pesticide class is included in Appendix 1 to this report.

Table 2. Ten Most Frequently Applied Pesticide Products by NYC Agencies in 2015 by Type

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Rodenticides								
7173-258	DIFETHIALONE PASTE PLACE PACKS	90.00	5,161.34	17,625	Difethialone	3	NO	NO
12455-69	CONTRAC RODENTICIDE	0.00	15,867.23	11,354	Bromadiolone	3	NO	NO
12455-79	CONTRAC ALL-WEATHER BLOX	0.00	3,282.34	4,547	Bromadiolone	3	NO	NO
12455-133	CONTRAC WITH LUMITRACK	0.00	1,413.06	4,234	Bromadiolone	3	NO	NO
12455-86	CONTRAC RODENTICIDE PLACE PAC	0.09	1,062.69	2,023	Bromadiolone	3	NO	NO
12455-90	FINAL RODENTICIDE	0.00	1,823.06	1,610	Brodifacoum	3	NO	NO
100-1055	WEATHERBLOK BAIT WITH BITREX	0.00	338.14	1,006	Brodifacoum	3	NO	NO
12455-56	DITRAC TRACKING POWDER	0.00	639.26	1,002	Diphacinone	2	NO	NO
7173-297	BROMADIOLONE PASTE 0901	0.00	286.40	628	Bromadiolone	3	NO	NO
56-42	BAIT BLOCK RODENTICIDE WITH PEANUT BUTTER FLAVORIZ	0.02	38.37	369	Diphacinone	3	NO	NO
Insecticides								
432-763	SUSPEND SC	238.25	0.37	23,831	Deltamethrin	3	NO	NO
432-763	SUSPEND SC INSECTICIDE	101.02	2.05	13,022	Deltamethrin	3	NO	NO
432-1483	TEMPRID SC INSECTICIDE	33.59	0.30	7,962	Cyfluthrin, beta; Imidacloprid	3	NO	NO
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.03	119.75	6,087	Indoxacarb	3	NO	NO
73049-429	VECTOMAX FG	0.00	1,650.04	4,994	Bacillus sphaericus; Bacillus thuringiensis, subsp. israelensis, strain AM 65-52	3	NO	NO
499-304	WHITMIRE OPTEM ME PT 600	33.45	0.00	4,494	Cyfluthrin	3	NO	NO
432-1460	MAXFORCE FC ROACH KILLER BAIT GEL F.05	0.02	174.26	3,871	Fipronil	3	YES	NO
432-1259	PRODUCT: RBF5	0.80	174.66	3,335	Fipronil	3	YES	NO
2724-351	ZOECON RF-259 EMULSIFIABLE CONCENTRATE	21.66	0.06	2,779	(7S)-Hydroprene	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
397-13	STERI-FAB	267.82	0.00	2,170	Phenothrin; Isopropyl alcohol; Alkyl (60%C14, 25%C12, 15%C16) dimethylbenzyl ammonium chloride; Didecyl dimethyl ammonium chloride	2	NO	NO
Herbicides								
524-579	ROUNDUP PROMAX	273.16	158.23	1,240	Glyphosate, potassium salt	3	NO	NO
62719-556	ACCORD XRT II	386.54	2.81	580	Glyphosate, dimethylammonium salt	3	NO	NO
62719-527	GARLON 4 ULTRA	101.77	0.00	377	Triclopyr	2	NO	NO
228-397	RIVERDALE VANQUISH HERBICIDE	34.82	0.00	220	Dicamba, diglycolamine salt	3	NO	NO
432-1557	DUPONT OUST EXTRA HERBICIDE	0.00	13.44	193	Sulfometuron methyl; Metsulfuron-methyl	3	NO	NO
432-1580	DUPONT VIEWPOINT HERBICIDE	0.00	28.94	182	Aminocyclopyrachlor; Imazapyr; Metsulfuron-methyl	3	NO	NO
62719-176	PATHFINDER II	105.70	0.00	180	Triclopyr, butoxyethyl ester	3	NO	NO
432-1516	ESPLANADE 200 SC	2.49	0.00	154	Indaziflam	3	NO	NO
62719-324	GLYPRO	58.01	0.00	123	Glyphosate, isopropylamine salt	3	NO	NO
100-937	PRIMO MAXX	16.69	0.00	54	Trinexapac-ethyl	3	NO	NO
Fungicides								
100-1364	DACONIL ACTION	519.55	5.00	85	Acibenzolar-S-methyl; Chlorothalonil	2	YES	NO
100-1093	HERITAGE FUNGICIDE	0.00	134.91	61	Azoxystrobin	3	NO	NO
71065-3	COMPANION LIQUID BIOLOGICAL FUNGICIDE	315.50	0.00	51	Bacillus subtilis GBO3	3	NO	NO
228-630	LESCO TWOSOME FUNGICIDE	120.01	0.00	37	Iprodione; Thiophanate-methyl	3	YES	YES
55260-9	PROPLANT TURF AND ORNAMENTAL FUNGICIDE	83.36	0.00	36	Propamocarb hydrochloride	3	NO	NO
70127-2	NOVOZYMES BIOFUNGICIDE GREEN RELEAF 710-140	101.00	0.00	22	Bacillus licheniformis SB3086; IBA	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
432-1445	BAYLETON FLO TURF AND ORNAMENTAL FUNGICIDE	15.30	0.00	22	Triadimefon	3	YES	YES
50534-202	MANICURE ULTREX TURF & ORNAMENTAL	0.00	857.70	22	Chlorothalonil	1	YES	NO
84059-3	REGALIA PTO BIOFUNGICIDE FOR USE ON TURF AND ORNAMENTALS	46.30	0.00	20	Reynoutria sachalinensis	3	NO	NO
60063-3	LESCO MANICURE ULTRA	0.00	640.00	19	Chlorothalonil	2	YES	NO
Other								
60061-71	PETTIT MARINE PAINT PREMIUM SINGLE SEASON ABLATIVE	23.00	0.00	15	Copper oxide (ous)	2	NO	NO
59807-4	HORMODIN 1	0.00	1.19	10	IBA	3	NO	NO
71096-7	ORTHO BUG-GETA SNAIL & SLUG KILLER 1	0.00	1.50	6	Metaldehyde	3	NO	NO
73049-15	PROGIBB 4% PLANT GROWTH REGULATOR SOLUTION	0.00	0.00	5	Gibberellins	2	NO	NO
1448-212	CHEMICIDE 100-15	16.00	0.00	1	Poly(oxyethylene) (dimethylimino) ethylene (dimethylimino) ethylene dichloride	3	NO	NO
67702-3	NEU1165M SLUG AND SNAIL BAIT	0.00	4.00	1	Iron phosphate	3	NO	NO

C. CHANGES IN PESTICIDE USE

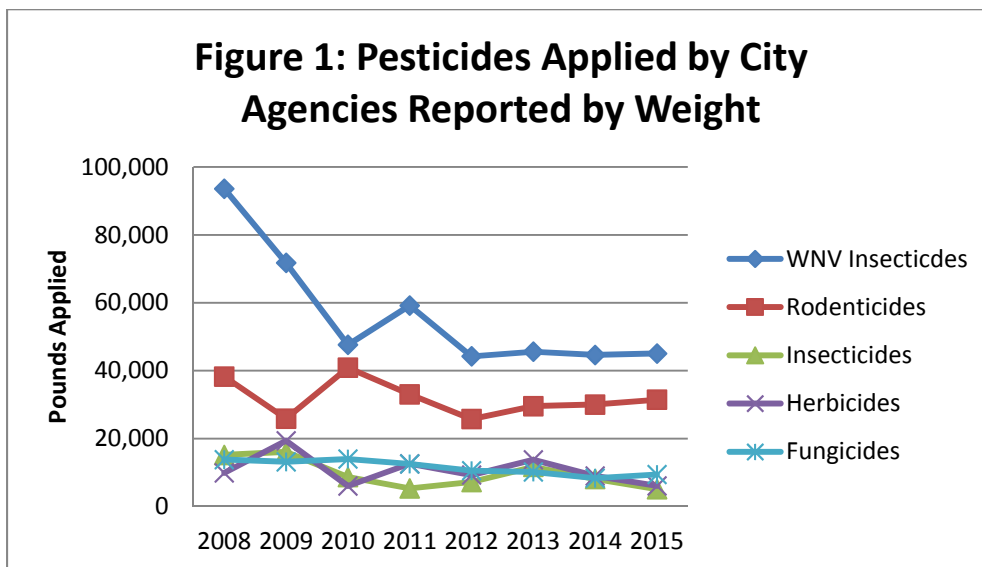
The level of completeness of agency pesticide reporting has improved dramatically over the past nine years. Having a sufficiently complete record of pesticide applications by the City of New York and its contractors has now made it possible for a year to year comparison of trends in pesticide use by city agencies. Some the analyses of these trends have used target pest to stratify the application amounts. A complete listing of application amounts by target pest is listed in Table 3.

Table 3: Complete listing of pesticide applications by New York City Agencies by Target Pest, 2015

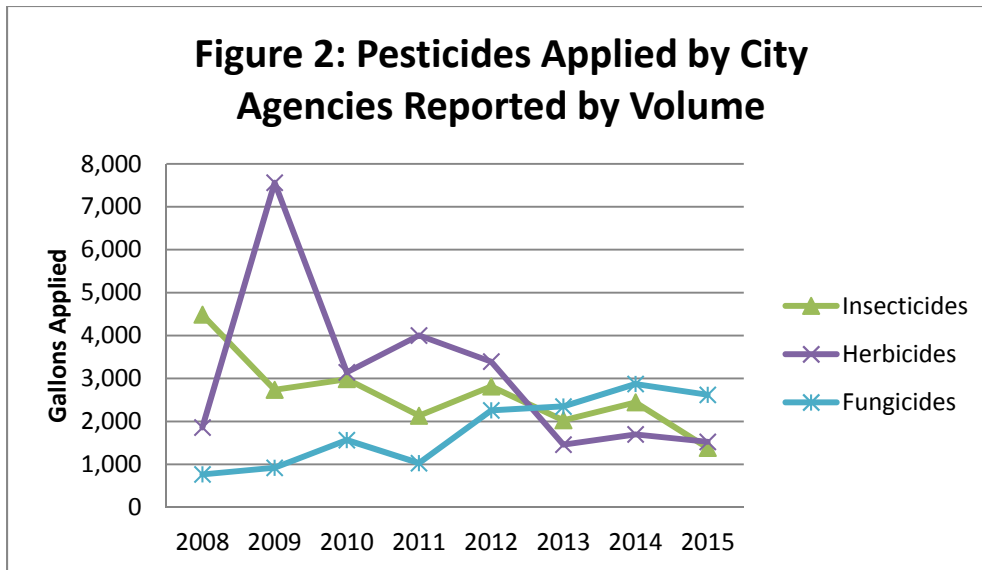
Target Pest	Volume in Gallons	Weight in Pounds	Total Applications	% of Total Applications
Roaches	481	945	63,140	46%
Rats	17	18,990	27,160	20%
Mice	100	12,362	18,916	14%
Bedbugs	357	12	10,397	8%
Mosquitoes	0	48,474	6,163	4%
Weeds, vines, or grasses	1,524	6,075	3,745	3%
Other Crawling Insects	185	257	2,907	2%
Ants	187	91	2,261	2%
Flying insects	94	193	1,163	1%

Target Pest	Volume in Gallons	Weight in Pounds	Total Applications	% of Total Applications
Fungal Disease or Infestation	2,620	9,419	799	1%
Other Pests	89	217	541	0%
Other Rodents	0	28	53	0%
Totals:	5,656	97,061	137,245	

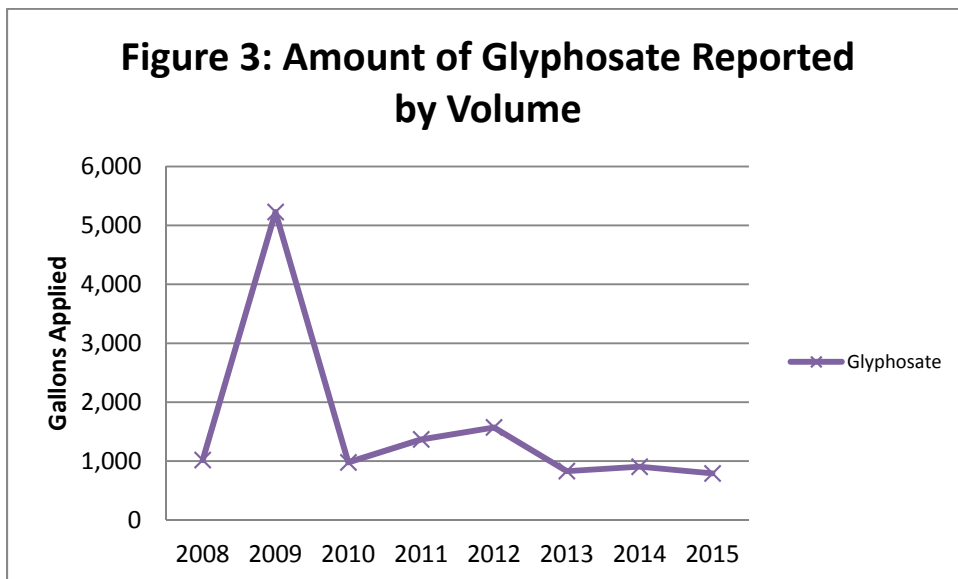
Figures 1 and 2 show trends from 2008 through 2015 in use of pesticides by city agencies by type of pesticide, with products reported by weight and volume respectively. In Figure 1, WNV program larvicides are charted separately from other insecticides because WNV larvicides are a large proportion of city insecticide use and because year to year variation in larvicide use is more weather dependent than use of other insecticides. Pesticides reported by weight were fairly consistent from 2014 to 2015 with an overall 3% decrease in use reported by weight. The decrease was driven by a 32% decline from levels reported in 2014 of solid herbicides. This was offset by an increase of 13% seen in the reporting of solid fungicides which are almost exclusively applied to turf on city golf courses (Figure 1).



Rodenticides and WNV larvacides are not included in Figure 2 as the products are almost exclusively solid formulations.



In 2015 overall herbicides use reported by volume decreased by 10% (Figure 2) due to a 12.5% decrease in the amount of glyphosate applied by volume (Figure 3). The high volume of herbicide (mostly glyphosate) used in 2009 was due in part to large discreet projects by the Parks department to control invasive species in remote, often wooded, parkland. In 2015 forest restoration work was again done by Parks and their contractors, accounting for a substantial proportion of the city’s glyphosate use.

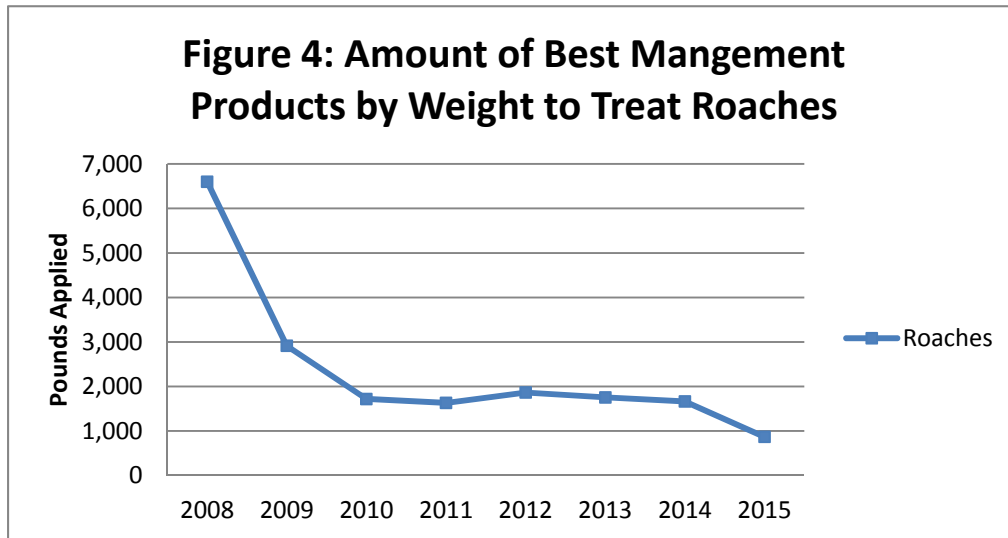


There was also a 43% decrease in insecticide reported by volume driven by a large reduction in NYCHA bedbug applications further discussed below. Fungicides reported by volume decreased by 9% in 2015.

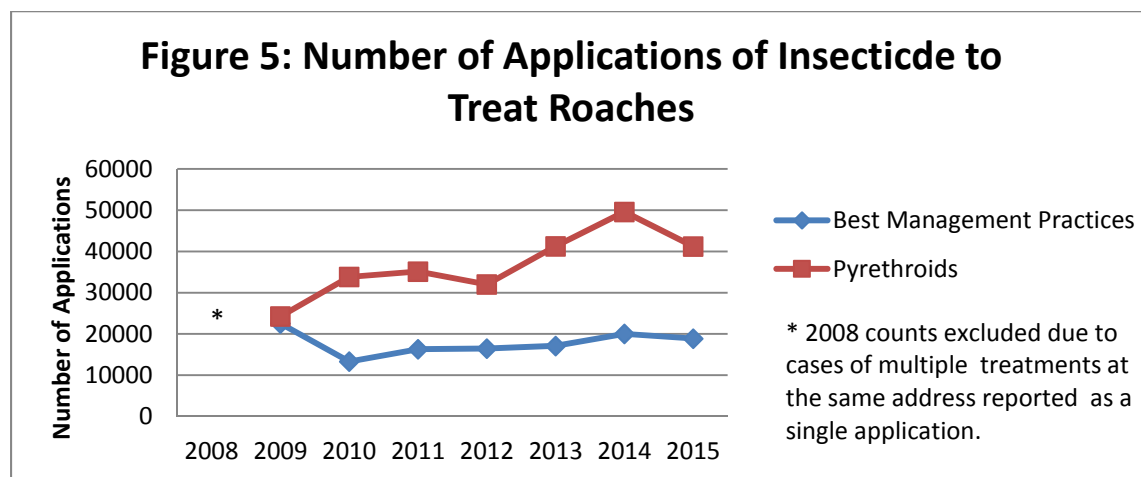
From 2008 to 2015 there was a 69% decrease in use of insecticides reported by volume, with most of the change occurring between 2008 and 2009 (Figure 2). From 2008 to 2015 there was also a drop of 52% in WNV larvicides by weight (Figure 1).

Use of spray formulations vs. Best Management Practices

After a large reduction in BMP products to combat roaches from 2008 to 2010, the amount of use reported for these products seems to have leveled off since, but again declined more steeply by 48% in 2015 (Figure 4).



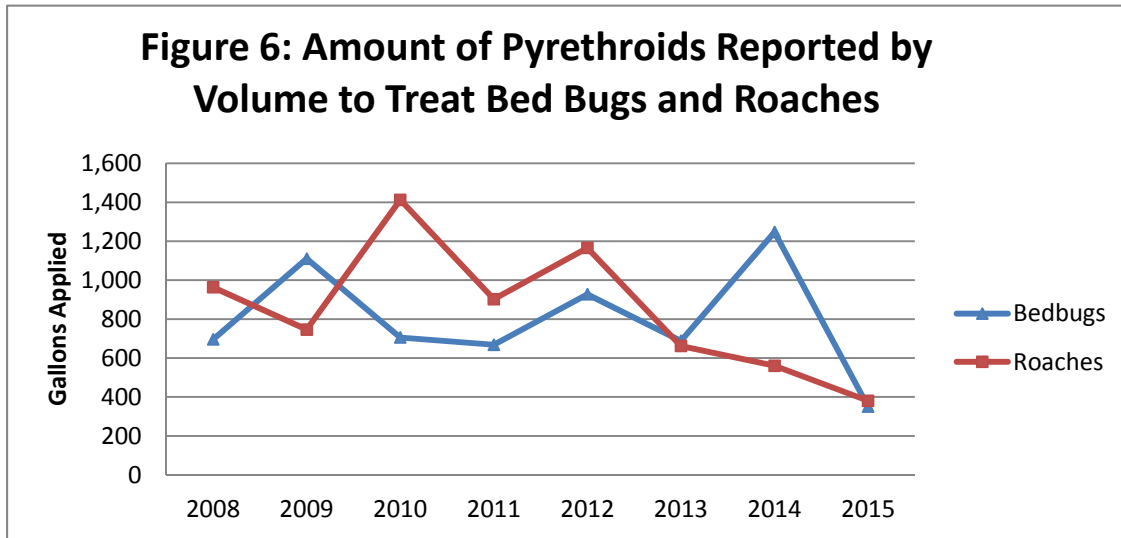
There was a 17% decrease in the number of pyrethroid applications to treat roaches from 2014 to 2015, while the number of applications of BMP products decreased slightly by 6% (Figure 5). Thus best management products had a smaller average amount of product used per application vs the average amount used in 2014. This was the main contributor to the significant decline in the amount of BMP products applied in 2015.



Bed Bugs vs. Roaches

Looking at pyrethroid spray products targeting roaches reported by volume, the use of these products decreased by 32% from 2014 to 2015 (Figure 6). There was also a 72% decrease from 2014 to 2015 in gallons of pyrethroids used by city agencies to treat bed bugs reversing a large increase seen in 2014 (Figure 6). The number of applications of pyrethroids to treat bed bugs decreased by 60% in 2015 due to an equivalent decrease in the number of applications for

bed bugs reported by NYCHA (data not shown). The number of pyrethroid applications to treat roaches also decreased by 17% (Figure 5).



Rodents

Rodenticide use has remained steady in the last few years with only a 5% increase in 2015. This comes after greater year to year variability in earlier years due in part to the frequency of neighborhood rat indexing activity by DOHMH.

Mosquitoes

The DOHMH MNV Vector Control program applied 45,040 pounds of larvicide and 2,982 pounds of adulticide in 2015. This was a slight increase of 1% in larvicide reported by weight from 2014 (Figure 1). This maintains trend that has been declining since 2008. The amount of adulticide required to be applied by DOHMH has been quite variable from year to year depending on the weather and severity of WNV positive mosquito populations around the city.

D. SUMMARY OF AGENCIES' PESTICIDE USE

For each reporting agency, we summarize below total pesticide use by pesticide type, followed by a listing of pesticide products used by reporting City agencies.

Administration for Children's Services

The New York City Administration for Children's Services (ACS) provides for the protection of New York City's children from abuse and neglect. Along with their community partners, Children's Services provides neighborhood-based services to help ensure children grow up in safe, permanent homes with strong families. The Department of Juvenile Justice (DJJ) was merged into this agency in December 2010. The agency contracts for pest management services.

Table 4 summarizes pesticide use by pesticide type. Table 5 lists all pesticide products used by ACS in 2015, primarily at facilities previously under management of the DJJ.

Table 4: Types of Pesticides Used by ACS in 2015

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	50.9	88.9%	179	28.1%
Insecticide	0.0	100.0%	6.4	11.1%	459	71.9%
Totals	0.0		57.2		638	

Table 5: Pesticide Products Used by ACS in 2015

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Rodenticides								
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	14.76	102	Difethialone	3	NO	NO
12455-79	CONTRAC ALL-WEATHER BLOX	0.00	36.09	77	Bromadiolone	3	NO	NO
Insecticides								
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	2.45	360	Indoxacarb	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	0.28	61	Indoxacarb	3	NO	NO
64405-2	ECOLOGICAL ANT & INSECT BAIT	0.00	1.79	18	Boric acid	3	NO	NO
64405-2	REDZONE BAIT	0.00	1.83	15	Boric acid	3	NO	NO
432-763	SUSPEND SC	0.01	0.00	3	Deltamethrin	3	NO	NO
499-370	JOHNSON WAX PROFESSIONAL BRAND GRANULAR ANT BAIT	0.00	0.00	1	Avermectin	3	NO	NO
432-772	DELTA DUST	0.00	0.00	1	Deltamethrin	3	NO	NO

Aging, Department for the

The Department for the Aging (DFTA) promotes, administers and coordinates the development and provision of services for older New Yorkers to help them maintain their independence and participation in their communities. It contracts with non-profit senior service providers to administer 76 different city-owned and city-leased sites, 33 of which engage in food preparation or storage. These facilities are privately operated and contract individually with private vendors for pest control to address typical structural urban pest issues, such as roaches, rodents, and flies. Pesticide use arranged by privately operated facilities by their subcontractors is not required to be reported and is not included in this report, which includes only pest management services contracted directly by DFTA. The agency reported that no pesticides were used during 2015.

Brooklyn Public Libraries

The Brooklyn Public Library (BPL) serves Brooklyn's 2.5 million residents, offering thousands of public programs, millions of books and use of more than 850 free Internet-accessible computers at its 66 locations. Contractors are hired for pest management as needed and the major pest infestations are roaches and mice. Table 6 summarizes pesticide use by pesticide type. Table 7 lists all pesticide products used by BPL in 2015.

Table 6: Types of Pesticides Used by BPL in 2015

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	56.3	59.0%	248	22.8%
Insecticide	0.0	100.0%	39.0	41.0%	842	77.2%
Totals	0.0		95.3		1,090	

Table 7: Pesticide Products Used by BPL in 2015 by Pesticide Type

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Rodenticides								
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	55.67	247	Difethialone	3	NO	NO
7173-113	ROZOL TRACKING POWDER	0.00	0.63	1	Chlorophacinone	2	NO	NO
Insecticides								
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	15.17	599	Indoxacarb	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	8.23	175	Indoxacarb	3	NO	NO
64405-2	ECOLOGICAL ANT & INSECT BAIT	0.00	14.13	22	Boric acid	3	NO	NO
432-763	SUSPEND SC	0.02	0.00	21	Deltamethrin	3	NO	NO
432-1455	BES 0026 FLY SPOT BAIT	0.00	0.45	7	Imidacloprid; (Z)-9-Tricosene	3	NO	NO
432-1483	TEMPRID SC INSECTICIDE	0.00	0.00	5	Cyfluthrin, beta; Imidacloprid	3	NO	NO
1021-1641	CONQUER RESIDUAL INSECTICIDE CONCENTRATE	0.01	0.00	4	Esfenvalerate	3	NO	NO
1021-1815	EVERCIDE ESFENVALERATE 6.4% CS	0.00	0.00	4	Esfenvalerate	3	NO	NO
499-385	WHITMIRE PT-239 TRI-DIE INSECTICIDE	0.00	0.69	3	Diatomaceous earth; Pyrethrins; Piperonyl butoxide	3	YES	NO
2724-351	ZOECON RF-259 EMULSIFIABLE CONCENTRATE	0.00	0.00	1	(7S)-Hydroprene	3	NO	NO
279-9554	CB INSECTICIDE WITH DELTAMETHRIN	0.00	0.38	1	Deltamethrin	3	NO	NO

Board of Elections

The Board of Elections is the administrative body that oversees elections through its staff at its main and five borough offices. The agency contracts for pest control through the city-wide contract administered by DCAS. Table 8 summarizes pesticide use by pesticide type. Table 9 lists all pesticide products used by BOE in 2015.

Table 8: Types of Pesticides Used by BOE in 2015

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	3.4	86.0%	12	15.4%
Insecticide	0.0	0.0%	0.6	14.0%	66	84.6%
Totals	0.0		4.0		78	

Table 9: Pesticide Products Used by BOE in 2015 by Pesticide Type

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Rodenticides								
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	1.94	8	Difethialone	3	NO	NO
12455-79	CONTRAC ALL-WEATHER BLOX	0.00	1.50	4	Bromadiolone	3	NO	NO
Insecticides								
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	0.28	58	Indoxacarb	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	0.02	6	Indoxacarb	3	NO	NO
64405-2	REDZONE BAIT	0.00	0.25	2	Boric acid	3	NO	NO

Chief Medical Examiner

The Office of Chief Medical Examiner (OCME) is responsible for investigating deaths in unusual circumstances, approving requests for cremation, providing additional forensic services to support criminal investigations, and managing all functions of the City mortuary. The agency contracts for pest control through the city-wide contract administered by DCAS. Table 10 summarizes pesticide use by pesticide type. Table 11 lists all pesticide products used by OCME in 2010.

Table 10: Types of Pesticides Used by OCME in 2015

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	43.0	96.9%	24	43.6%
Insecticide	0.0	0.0%	1.4	3.1%	31	56.4%
Totals	0.0		44.3		55	

Table 11: Pesticide Products Used by OCME in 2015

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Rodenticides								
12455-79	CONTRAC ALL-WEATHER BLOX	0.00	41.38	19	Bromadiolone	3	NO	NO
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	1.61	5	Difethialone	3	NO	NO
Insecticides								
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	0.20	23	Indoxacarb	3	NO	NO
64405-2	ECOLOGICAL ANT & INSECT BAIT	0.00	1.03	5	Boric acid	3	NO	NO
432-763	SUSPEND SC	0.00	0.00	1	Deltamethrin	3	NO	NO
64405-2	REDZONE BAIT	0.00	0.13	1	Boric acid	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	0.00	1	Indoxacarb	3	NO	NO

City University of New York

The City University of New York (CUNY) is the nation's largest urban public university and is comprised of 23 institutions. The University serves more than 260,000 degree-credit students and 273,000 adult, continuing and professional education students. Individual institutions contracts for pest control services through private vendors. The data reported is information received from 15 colleges, Baruch College, Borough of Manhattan Community College, Brooklyn College, Bronx Community College, City College, College of Technology, The Graduate Center, Hostos Community College, John Jay College, Kingsborough Community College, La Guardia Community College, Lehman College, Medgar Evers College, Queens Borough Community College, and York College. Table 12 summarizes pesticide use by pesticide type. Table 13 lists all pesticide products used by CUNY in 2015.

Table 12: Types of Pesticides Used by CUNY in 2015

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.2	3.6%	217.0	90.0%	545	37.7%
Insecticide	4.0	59.7%	24.2	10.0%	885	61.3%
Herbicide	2.5	36.7%	0.0	0.0%	14	1.0%
Totals	6.7		241.2		1,444	

Table 13: Pesticide Products Used by CUNY in 2015 by Pesticide Type

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Rodenticides								
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	95.89	328	Difethialone	3	NO	NO
12455-79	CONTRAC ALL-WEATHER BLOX	0.00	90.31	95	Bromadiolone	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
56-42	BAIT BLOCK RODENTICIDE WITH PEANUT BUTTER FLAVORIZ	0.00	1.75	59	Diphacinone	3	NO	NO
100-1055	WEATHERBLOK BAIT WITH BITREX	0.00	23.49	35	Brodifacoum	3	NO	NO
12455-36	CONTRAC RAT AND MOUSE BAIT	0.00	3.94	9	Bromadiolone	3	NO	NO
7173-297	BROMADIOLONE PASTE 0901	0.00	1.22	8	Bromadiolone	3	NO	NO
12455-91	FINAL RODENTICIDE READY-TO-USE PLACE PAC	0.07	0.33	6	Brodifacoum	3	NO	NO
12455-86	CONTRAC RODENTICIDE PLACE PAC	0.09	0.00	2	Bromadiolone	3	NO	NO
47629-16	DI-KILL BAIT BLOCKS KILLS RATS AND MICE	0.07	0.00	1	Difenacoum	3	NO	NO
47629-16	DIFENACOUM RAT AND MOUSE BLOCK	0.01	0.00	1	Difenacoum	3	NO	NO
12455-56	DITRAC TRACKING POWDER	0.00	0.06	1	Diphacinone	2	NO	NO
Insecticides								
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	3.77	419	Indoxacarb	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	1.61	116	Indoxacarb	3	NO	NO
1021-1828	MGK ROACH BAIT 2822	0.01	1.55	80	Avermectin	3	NO	NO
432-763	SUSPEND SC INSECTICIDE	0.48	0.00	52	Deltamethrin	3	NO	NO
432-1262	MAXFORCE IBH10	1.62	0.01	48	Hydramethylnon	3	YES	YES
64405-2	REDZONE BAIT	0.00	3.78	37	Boric acid	3	NO	NO
100-1066	BORDER INSECTICIDE	0.59	0.11	24	Cyhalothrin, lambda	3	NO	NO
100-1483	ADVION INSECT GRANULE	0.00	3.00	15	Indoxacarb	3	NO	NO
62577-12	ECOPCO ACU	0.00	5.50	14	Phenylethyl propionate	3	NO	NO
432-1255	MAXFORCE GRANULAR INSECT BAIT	0.34	0.00	11	Hydramethylnon	3	YES	YES
64405-2	ECOLOGICAL ANT & INSECT BAIT	0.00	1.53	11	Boric acid	3	NO	NO
432-1264	MAXFORCE FC ANT KILLER BAIT GEL	0.40	0.00	8	Fipronil	3	YES	NO
62577-13	EcoPco AR/X	0.00	2.38	8	Phenylethyl propionate; Pyrethrins	3	YES	NO
2724-469	ZOECON (S)-HYDROPRENE ROACH CONTROL STATION II	0.00	0.00	7	(7S)-Hydroprene	3	NO	NO
53883-276	DELTA 4.75% SC	0.02	0.00	5	Deltamethrin	3	NO	NO
432-1460	MAXFORCE FC ROACH KILLER BAIT GEL F.05	0.02	0.00	4	Fipronil	3	YES	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
397-13	STERI-FAB	0.09	0.00	3	Phenothrin; Isopropyl alcohol; Alkyl (60%C14, 25%C12, 15%C16) dimethylbenzyl ammonium chloride; Didecyl dimethyl ammonium chloride	2	NO	NO
499-507	PRESCRIPTION TREATMENT BRAND ALPINE COCKROACH GEL BAIT RESERVOIR	0.03	0.00	3	Dinotefuran	3	NO	NO
279-3206	TALSTAR TC FLOWABLE TERMITICIDE/INSECTICIDE	0.01	0.00	3	Bifenthrin	3	YES	NO
499-362	BOLT WASP & HORNET KILLER	0.27	0.00	2	D-trans Allethrin; Phenothrin	3	YES	NO
499-509	WHITMIRE DE 1606	0.00	0.28	2	Diatomaceous earth	3	NO	NO
432-1256	MAXFORCE FC ANT BAIT STATIONS	0.00	0.05	2	Fipronil	3	YES	NO
432-1304	TEMPO 10 WP INSECTICIDE	0.00	0.02	2	Cyfluthrin, beta	3	NO	NO
1021-1767	BBEDS BY CATCHMASTER BEDBUG TRAVEL SPRAY	0.03	0.00	1	Phenothrin; N-octyl bicycloheptene dicarboximide	3	YES	NO
73079-2	INTICE GRANULAR BAIT	0.02	0.00	1	Boric acid	3	NO	NO
73079-2	HASTA LA VISTA, ANT!	0.02	0.00	1	Boric acid	3	NO	NO
73079-10	INVICT (TM) COCKROACH GEL	0.01	0.00	1	Imidacloprid	3	NO	NO
432-1260	MAXFORCE ANT BAIT F3	0.00	0.00	1	Fipronil	3	YES	NO
499-492	PRESCRIPTION TREATMENT BRAND 388B ADVANCE ANT GEL BAIT	0.00	0.00	1	Borax	3	NO	NO
432-763	SUSPEND SC	0.00	0.00	1	Deltamethrin	3	NO	NO
432-1363	TEMPO SC INSECTICIDE	0.00	0.38	1	Cyfluthrin, beta	3	NO	NO
432-772	DELTA DUST	0.00	0.25	1	Deltamethrin	3	NO	NO
Herbicides								
524-579	ROUNDUP PROMAX	2.45	0.00	14	Glyphosate, potassium salt	3	NO	NO

Citywide Administrative Services, Department of

The Department of Citywide Administrative Services (DCAS) supports government recruitment, oversees surplus city-owned property and the commercial real estate portfolio for the Pesticides Use by NYC, 2015

City and provides supplies and equipment. Of the 14,000 city-owned lots, DCAS is directly responsible for the management of approximately 2,400 of these properties. DCAS cleans and maintains 53 DCAS-managed buildings with 13,365,398 square feet of space throughout the city. These include City Hall, the four Borough Halls, the Manhattan and Brooklyn Municipal Buildings, and all state and municipal court buildings. DCAS manages the city-wide contract for pest management services which city agencies can buy into. This contract is effective from May 1, 2014 to April 30, 2017. Several agencies are housed in DCAS managed buildings and the report submitted reflects these applications. Table 14 summarizes pesticide use by pesticide type. Table 15 lists all pesticide products used by DCAS in 2015.

Table 14: Types of Pesticides Used by DCAS in 2015

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	534.9	97.0%	561	48.3%
Insecticide	0.0	100.0%	16.4	3.0%	601	51.7%
Totals	0.0		551.4		1,162	

Table 15: Pesticide Products Used by DCAS in 2015 by Pesticide Type

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Rodenticides								
12455-79	CONTRAC ALL-WEATHER BLOX	0.00	466.81	377	Bromadiolone	3	NO	NO
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	29.92	150	Difethialone	3	NO	NO
12455-36	CONTRAC RAT AND MOUSE BAIT	0.00	38.20	34	Bromadiolone	3	NO	NO
Insecticides								
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	6.43	424	Indoxacarb	3	NO	NO
64405-2	REDZONE BAIT	0.00	8.00	76	Boric acid	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	0.47	74	Indoxacarb	3	NO	NO
64405-2	ECOLOGICAL ANT & INSECT BAIT	0.00	1.42	12	Boric acid	3	NO	NO
432-763	SUSPEND SC	0.03	0.00	6	Deltamethrin	3	NO	NO
100-1486	DUPONT ADVION COCKROACH BAIT ARENA	0.00	0.10	6	Indoxacarb	3	NO	NO
432-763	SUSPEND SC INSECTICIDE	0.00	0.00	1	Deltamethrin	3	NO	NO
432-1259	PRODUCT: RBF5	0.00	0.01	1	Fipronil	3	YES	NO
432-772	DELTA DUST	0.00	0.00	1	Deltamethrin	3	NO	NO

Consumer Affairs, Department

The Department of Consumer Affairs (DCA) is responsible for enforcing the city's consumer protection laws, licensing businesses, dealing with consumer complaints, and participating in consumer education. It ensures that New York City's consumers and businesses

benefit from a fair and vibrant marketplace. DCA contracts for pest management services for its managed buildings. Table 16 summarizes pesticide use by pesticide type. Table 17 lists all pesticide products used by DCA in 2015.

Table 16: Types of Pesticides Used by DCA in 2015

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	1.2	53.3%	3	18.8%
Insecticide	0.0	0.0%	1.1	46.7%	13	81.3%
Totals	0.0		2.3		16	

Table 17: Pesticide Products Used by DCA in 2015 by Pesticide Type

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Rodenticides								
12455-79	CONTRAC ALL-WEATHER BLOX	0.00	1.19	2	Bromadiolone	3	NO	NO
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	0.04	1	Difethialone	3	NO	NO
Insecticides								
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	0.04	6	Indoxacarb	3	NO	NO
64405-2	ECOLOGICAL ANT & INSECT BAIT	0.00	1.03	5	Boric acid	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	0.01	2	Indoxacarb	3	NO	NO

Corrections, Department of

The Department of Corrections (DOC) is responsible for New York City's inmates, housing the majority of them on Riker's Island. It oversees 44 facilities, including ten correctional facilities that have food preparation areas, laundries, residential areas for inmates, and office space. DOC does not employ contractors for pest management purposes, but relies on in-house pest control professionals and works with DCAS and HHC in maintaining certain facilities. Table 18 summarizes pesticide use by pesticide type. Table 19 lists all pesticide products used by DOC in 2015.

Table 18: Types of Pesticides Used by DOC in 2015

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	6166.9	94.4%	346	14.5%
Insecticide	190.1	100.0%	363.3	5.6%	2042	85.5%
Totals	190.1		6,530.2		2,388	

Table 19: Pesticide Products Used by DOC in 2015 by Pesticide Type

Pesticides Use by NYC, 2015

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Rodenticides								
12455-76	ZEP TOTAL CONTROL PELLET PACKS TOTAL CONTROL SYSTEMS	0.00	69.78	93	Bromadiolone	3	NO	NO
12455-69	CONTRAC RODENTICIDE	0.00	5,531.69	76	Bromadiolone	3	NO	NO
12455-79	CONTRAC ALL-WEATHER BLOX	0.00	88.50	42	Bromadiolone	3	NO	NO
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	61.81	39	Difethialone	3	NO	NO
7173-218	GENERATION MINI BLOCKS	0.00	78.13	29	Difethialone	3	NO	NO
12455-56	DITRAC TRACKING POWDER	0.00	69.94	29	Diphacinone	2	NO	NO
12455-75	CONTRAC RAT AND MOUSE BAIT READY TO USE PLACE PAC	0.00	8.97	17	Bromadiolone	3	NO	NO
12455-86	CONTRAC RODENTICIDE PLACE PAC	0.00	6.63	9	Bromadiolone	3	NO	NO
12455-36	CONTRAC RAT AND MOUSE BAIT	0.00	179.00	6	Bromadiolone	3	NO	NO
7173-188	MAKI RAT AND MOUSE BAIT PACKS (PELLETS)	0.00	52.50	4	Bromadiolone	3	NO	NO
7173-188	BOOT HILL PARAFFINIZED PELLETS	0.00	19.50	1	Bromadiolone	3	NO	NO
12455-76	CONTRAC RODENTICIDE READY TO USE PLACE PAC	0.00	0.50	1	Bromadiolone	3	NO	NO
Insecticides								
432-763	SUSPEND SC	19.79	0.00	495	Deltamethrin	3	NO	NO
432-1363	TEMPO SC INSECTICIDE	15.77	0.00	490	Cyfluthrin, beta	3	NO	NO
499-507	PRESCRIPTION TREATMENT BRAND ALPINE COCKROACH GEL BAIT RESERVOIR	0.05	12.46	311	Dinotefuran	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	140.00	7.42	162	Indoxacarb	3	NO	NO
397-13	STERI-FAB	10.98	0.00	120	Phenothrin; Isopropyl alcohol; Alkyl (60%C14, 25%C12, 15%C16) dimethylbenzyl ammonium chloride; Didecyl dimethyl ammonium chloride	2	NO	NO
432-1259	PRODUCT: RBF5	0.80	6.16	103	Fipronil	3	YES	NO
64405-2	ECOLOGICAL ANT & INSECT BAIT	0.00	48.63	90	Boric acid	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
73049-20	VECTOLEX CG BIOLOGICAL LARVICIDE	0.00	104.34	79	Bacillus sphaericus	3	NO	NO
432-1254	MAXFORCE PROFESSIONAL INSECT CONTROL ROACH KILLER	0.33	1.40	30	Hydramethylnon	3	YES	YES
73049-429	VECTOMAX FG	0.00	7.54	27	Bacillus sphaericus; Bacillus thuringiensis, subsp. israelensis, strain AM 65-52	3	NO	NO
432-1264	MAXFORCE FC ANT KILLER BAIT GEL	0.00	1.21	27	Fipronil	3	YES	NO
432-1262	MAXFORCE IBH10	0.00	4.17	26	Hydramethylnon	3	YES	YES
9688-255	SPECTRACIDE COMMERCIAL WASP & HORNET KILLER 3	2.42	0.00	20	Deltamethrin; S-Bioallethrin	3	YES	NO
2724-274	GOLDEN MUSCAMYL(TM) FLY BAIT	0.00	154.93	19	Methomyl; (Z)-9-Tricosene	3	NO	NO
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	2.36	9	Indoxacarb	3	NO	NO
432-1257	MAXFORCE ROACH BAIT F.05	0.00	0.98	8	Fipronil	3	YES	NO
499-492	PRESCRIPTION TREATMENT BRAND 388B ADVANCE ANT GEL BAIT	0.00	0.32	8	Borax	3	NO	NO
432-1460	MAXFORCE FC ROACH KILLER BAIT GEL F.05	0.00	0.29	8	Fipronil	3	YES	NO
432-1375	PRE-EMPT FLY BAIT	0.00	10.50	4	Imidacloprid; (Z)-9-Tricosene	3	NO	NO
432-1455	BES 0026 FLY SPOT BAIT	0.01	0.00	2	Imidacloprid; (Z)-9-Tricosene	3	NO	NO
499-370	JOHNSON WAX PROFESSIONAL BRAND GRANULAR ANT BAIT	0.00	0.52	2	Avermectin	3	NO	NO
64405-2	REDZONE BAIT	0.00	0.03	1	Boric acid	3	NO	NO
9444-131	BAYER ADVANCED ANT KILLER POWER PEN READYTO-USE BAIT	0.00	0.02	1	Boric acid	3	NO	NO

Education, Department of

The Department of Education (DOE) provides primary and secondary education to over 1 million pre-kindergarten to grade 12 students. Pest management at all New York City public schools is overseen by their Pest Control Unit. There are nineteen in-house licensed pest management professionals that conduct monthly monitoring inspections and respond to pest problems for approximately 900 schools. DOE contracts with several pest management companies

to additionally provide services for an additional 300 schools. Table 20 summarizes pesticide use by pesticide type. Table 21 lists all pesticide products used by DOE in 2015.

Table 20: Types of Pesticides Used by DOE in 2015

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	90.0	49.6%	2052.7	95.1%	4251	48.5%
Insecticide	91.4	50.4%	104.7	4.9%	4509	51.5%
Totals	181.4		2,157.4		8,760	

Table 21: Pesticide Products Used by DOE in 2015 by Pesticide Type

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Rodenticides								
7173-258	DIFETHIALON E PASTE PLACE PACKS	90.00	1,508.55	3,119	Difethialone	3	NO	NO
12455-79	CONTRAC ALL-WEATHER BLOX	0.00	543.84	1,128	Bromadiolone	3	NO	NO
7173-297	BROMADIOLONE PASTE 0901	0.00	0.30	4	Bromadiolone	3	NO	NO
Insecticides								
432-1460	MAXFORCE FC ROACH KILLER BAIT GEL F.05	0.00	37.69	978	Fipronil	3	YES	NO
62577-12	ECOPCO ACU	63.06	0.50	874	Phenylethyl propionate	3	NO	NO
73766-1	GOURMET ANT BAIT GEL	0.00	16.01	722	Disodium octaborate tetrahydrate	3	NO	NO
2724-484	RF 9707 AEROSOL	28.25	0.15	314	(7S)-Hydroprene	3	NO	NO
64405-2	ECOLOGICAL ANT & INSECT BAIT	0.02	25.58	165	Boric acid	3	NO	NO
64405-2	REDZONE BAIT	0.00	3.99	32	Boric acid	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	0.03	17	Indoxacarb	3	NO	NO
100-1486	DUPONT ADVION COCKROACH BAIT ARENA	0.00	1.27	9	Indoxacarb	3	NO	NO
73079-10	INVICT (TM) COCKROACH GEL	0.00	0.14	6	Imidacloprid	3	NO	NO
499-507	PRESCRIPTIO N TREATMENT BRAND ALPINE COCKROACH GEL BAIT RESERVOIR	0.00	0.03	3	Dinotefuran	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
1021-1641	CONQUER RESIDUAL INSECTICIDE CONCENTRATE	0.00	0.00	1	Esfenvalerate	3	NO	NO
279-3385	DRAX ANT KILL GEL	0.00	1.06	1	Boric acid	3	NO	NO
432-1259	PRODUCT: RBF5	0.00	0.26	1	Fipronil	3	YES	NO
432-772	DELTA DUST	0.00	0.03	1	Deltamethrin	3	NO	NO

Environmental Protection, Department of

The Department of Environmental Protection (DEP) has over 1,700 facilities upstate and downstate. These include water pollution control plants, well stations, pumping stations, shafts, chambers, reservoirs, aqueducts, tunnels, gate houses, office space, garages, repair shops, maintenance shops, and police precincts within New York City. DEP contracts for some pest control services and employ approximately 20 licensed applicators for upstate reservoir pest control. Table 22 summarizes pesticide use by pesticide type. Table 23 lists all pesticide products used by DEP in 2015.

Table 22: Types of Pesticides Used by DEP in 2015

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	78.8	72.4%	219	23.6%
Insecticide	5.6	18.1%	30.1	27.6%	666	71.8%
Herbicide	25.3	81.9%	0.0	0.0%	43	4.6%
Totals	30.9		108.9		928	

Table 23: Pesticide Products Used by DEP in 2015 by Pesticide Type

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Rodenticides								
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	25.43	149	Difethialone	3	NO	NO
12455-79	CONTRAC ALL-WEATHER BLOX	0.00	43.16	62	Bromadiolone	3	NO	NO
10551-1	THE GIANT DESTROYER	0.00	10.13	6	Carbon; Sodium nitrate; Sulfur	2	NO	NO
12455-36	CONTRAC RAT AND MOUSE BAIT	0.00	0.13	2	Bromadiolone	3	NO	NO
Insecticides								

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
499-510	PRESCRIPTION TREATMENT BRAND ALPINE COCKROACH GEL BAIT PISTON CAN	0.00	5.53	382	Dinotefuran	3	NO	NO
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	0.75	155	Indoxacarb	3	NO	NO
432-1455	BES 0026 FLY SPOT BAIT	0.00	8.13	36	Imidacloprid; (Z)-9-Tricosene	3	NO	NO
9688-190	SPECTRACIDE DESTROYER BRAND WASP & HORNET KILLER	3.41	0.00	22	Cyhalothrin, lambda; Prallethrin	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	0.10	16	Indoxacarb	3	NO	NO
2724-786	RF2050 SPRAY	1.10	3.00	9	Tetramethrin; Ethofenprox; Piperonyl butoxide	3	YES	NO
64405-2	ECOLOGICAL ANT & INSECT BAIT	0.00	2.66	9	Boric acid	3	NO	NO
499-362	WHITMIRE PT 515 WASP FREEZE	0.96	3.25	8	D-trans Allethrin; Phenothrin	3	YES	NO
64405-2	REDZONE BAIT	0.00	1.02	7	Boric acid	3	NO	NO
432-1255	MAXFORCE GRANULAR INSECT BAIT	0.00	1.19	5	Hydramethylnon	3	YES	YES
149-8	TERRO PCO LIQUID ANT BAIT	0.04	0.00	4	Borax	3	NO	NO
432-763	SUSPEND SC INSECTICIDE	0.00	2.05	3	Deltamethrin	3	NO	NO
8033-109	TRANSPORT (R) MIKRON INSECTICIDE	0.00	0.25	2	Acetamiprid; Bifenthrin	3	YES	NO
432-1527	TEMPRID RTU	0.06	0.00	1	Cyfluthrin, beta; Imidacloprid	0	NO	NO
279-9553	INTRUDER RESIDUAL WITH CYFLUTHRIN	0.01	0.00	1	Cyfluthrin; Pyrethrins; Piperonyl butoxide	3	YES	NO
62577-12	ECOPCO ACU	0.00	0.81	1	Phenylethyl propionate	3	NO	NO
499-470	JOHNSON WAX PROFESSIONAL BRAND RESIDUAL INSECTICIDE CRAWLING INSECT	0.00	0.81	1	Cyfluthrin	3	NO	NO
432-763	SUSPEND SC	0.00	0.31	1	Deltamethrin	3	NO	NO
73079-2	INTICE GRANULAR BAIT	0.00	0.19	1	Boric acid	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
2724-351	ZOECON RF-259 EMULSIFIABLE CONCENTRATE	0.00	0.06	1	(7S)-Hydroprene	3	NO	NO
432-1259	PRODUCT: RBF5	0.00	0.01	1	Fipronil	3	YES	NO
Herbicides								
62719-527	GARLON 4 ULTRA	9.25	0.00	20	Triclopyr	2	NO	NO
228-366	RAZOR HERBICIDE	9.61	0.00	12	Glyphosate, isopropylamine salt	3	NO	NO
524-536	MON 78473 HERBICIDE	5.98	0.00	7	Glyphosate, isopropylamine salt	3	NO	NO
432-1229	FINALE HERBICIDE	0.03	0.00	2	Glufosinate-ammonium	2	NO	NO
1381-192	CORNERSTONE PLUS	0.35	0.00	1	Glyphosate, isopropylamine salt	3	NO	NO
62719-556	ACCORD XRT II	0.11	0.00	1	Glyphosate, dimethylammonium salt	3	NO	NO

Finance, Department of

The Department of Finance (DOF) collects City revenues, ensures compliance with City tax and other revenue laws, evaluates all real property in the City, provides a forum for the public to dispute tax and parking violation liability, and maintains property records. The agency contracts for pest control through the city-wide contract administered by DCAS. Table 24 summarizes pesticide use by pesticide type. Table 25 lists all pesticide products used by DOF in 2010.

Table 24: Types of Pesticides Used by DOF in 2010

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	1.2	44.8%	7	15.9%
Insecticide	0.0	0.0%	1.5	55.2%	37	84.1%
Totals	0.0		2.8		44	

Table 25: Pesticide Products Used by DOF in 2010 by Pesticide Type

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Rodenticides								
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	0.49	5	Difethialone	3	NO	NO
12455-79	CONTRAC ALL-WEATHER BLOX	0.00	0.75	2	Bromadiolone	3	NO	NO
Insecticides								
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	0.08	28	Indoxacarb	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
64405-2	REDZONE BAIT	0.00	1.19	6	Boric acid	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	0.00	2	Indoxacarb	3	NO	NO
64405-2	ECOLOGICAL ANT & INSECT BAIT	0.00	0.25	1	Boric acid	3	NO	NO

Fire Department

The Fire Department of New York City (FDNY) is responsible for the protection against fires and fire hazards and providing emergency medical services, technical rescue and response to various biological, chemical and radioactive hazards. It manages some 350 facilities throughout the City and contracts for pest control services. Table 26 summarizes pesticide use by pesticide type. Table 27 lists all pesticide products used by FDNY in 2015.

Table 26: Types of Pesticides Used by FDNY in 2015

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	279.2	96.2%	593	44.2%
Insecticide	0.0	100.0%	11.0	3.8%	749	55.8%
Totals	0.0		290.2		1,342	

Table 27: Pesticide Products Used by FDNY in 2015 by Pesticide Type

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Rodenticides								
12455-79	CONTRAC ALL-WEATHER BLOX	0.00	230.08	306	Bromadiolone	3	NO	NO
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	49.12	287	Difethialone	3	NO	NO
Insecticides								
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	1.36	516	Indoxacarb	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	0.50	105	Indoxacarb	3	NO	NO
64405-2	ECOLOGICAL ANT & INSECT BAIT	0.00	5.18	68	Boric acid	3	NO	NO
64405-2	REDZONE BAIT	0.00	3.56	42	Boric acid	3	NO	NO
432-763	SUSPEND SC	0.04	0.00	16	Deltamethrin	3	NO	NO
432-763	SUSPEND SC INSECTICIDE	0.00	0.00	1	Deltamethrin	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
432-772	DELTA DUST	0.00	0.38	1	Deltamethrin	3	NO	NO

Health and Hospitals Corporation

The New York City Health and Hospitals Corporation (HHC) is a \$6.7 billion integrated healthcare delivery system with its own 420,000 member health plan, MetroPlus, and is the largest municipal healthcare organization in the country. HHC serves 1.4 million New Yorkers every year and more than 475,000 are uninsured. HHC provides medical, mental health and substance abuse services through its 11 acute care hospitals, four skilled nursing facilities, six large diagnostic and treatment centers and more than 70 community based clinics. HHC Health and Home Care also provide in-home services for New Yorkers. Because each facility is managed separately, pest control protocols differ among facilities. A few facilities have pest control professionals on staff, but the majority relies on outside contractors. Table 28 summarizes pesticide use by pesticide type. Table 29 lists products by pesticide types.

Table 28: Types of Pesticides Used by HHC in 2015

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	190.2	51.8%	149	10.0%
Insecticide	171.0	100.0%	176.7	48.2%	1340	90.0%
Totals	171.0		366.9		1,489	

Table 29: Pesticide Products Used by HHC in 2015 by Pesticide Type

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Rodenticides								
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	189.60	143	Difethialone	3	NO	NO
7173-113	ROZOL TRACKING POWDER	0.00	0.59	6	Chlorophacinone	2	NO	NO
Insecticides								
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	33.14	447	Indoxacarb	3	NO	NO
73079-4	BORACTIN INSECTICIDE POWDER	0.00	91.03	336	Boric acid	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
397-13	STERI-FAB	55.63	0.00	258	Phenothrin; Isopropyl alcohol; Alkyl (60%C14, 25%C12, 15%C16) dimethylbenzyl ammonium chloride; Didecyl dimethyl ammonium chloride	2	NO	NO
64405-8	NIBOR BORATE INSECTICIDE AND FUNGICIDE	35.15	0.63	51	Disodium octaborate tetrahydrate	3	NO	NO
64405-2	ECOLOGICAL ANT & INSECT BAIT	0.00	25.47	46	Boric acid	3	NO	NO
432-1483	TEMPRID SC INSECTICIDE	10.56	0.00	44	Cyfluthrin, beta; Imidacloprid	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	1.10	37	Indoxacarb	3	NO	NO
432-772	DELTA DUST	0.00	0.52	31	Deltamethrin	3	NO	NO
64405-2	REDZONE BAIT	0.00	22.94	25	Boric acid	3	NO	NO
1021-1603	NYLAR 10EC	28.25	0.00	17	Pyriproxyfen	3	NO	NO
100-1501	DUPONT ARILON INSECTICIDE	15.00	0.00	13	Indoxacarb	3	NO	NO
432-1363	TEMPO SC INSECTICIDE	9.15	0.00	13	Cyfluthrin, beta	3	NO	NO
100-1066	BORDER INSECTICIDE	6.76	0.00	7	Cyhalothrin, lambda	3	NO	NO
100-1483	ADVION INSECT GRANULE	0.00	1.63	7	Indoxacarb	3	NO	NO
432-1304	TEMPO 10 WP INSECTICIDE	2.00	0.00	2	Cyfluthrin, beta	3	NO	NO
100-1066	DEMAND CS INSECTICIDE	1.00	0.00	2	Cyhalothrin, lambda	3	NO	NO
432-763	SUSPEND SC INSECTICIDE	4.00	0.00	1	Deltamethrin	3	NO	NO
432-763	SUSPEND SC	3.00	0.00	1	Deltamethrin	3	NO	NO
8033-96	TRANSPORT (R) GHP INSECTICIDE	0.50	0.00	1	Acetamiprid; Bifenthrin	3	YES	NO
279-3384	ROACH KIL COMMERCIAL	0.00	0.25	1	Boric acid	3	NO	NO

Health and Mental Hygiene, Department of

The Department of Health and Mental Hygiene (DOHMH) protects and promotes the health and mental well being of all New Yorkers. The Bureau of Veterinary and Pest Control Services at DOHMH protects the public from animal- and vector-borne diseases and other

hazards, including those that result from uncontrolled or unregulated rodents and other animals, and from mosquito-borne pathogens. Two programs, Pest Control Services (PCS) and Vector Surveillance and Control (VSC) have pest management responsibilities. PCS focuses on rodent control – performing inspections, cleanups and treatments of both private and public property. Currently, PCS employs twenty-one pest management professionals to bait properties that have signs of active rodents with rodenticide placed either directly in rat burrows or in tamper resistant bait stations. Pest management in facilities operated by the DOHMH is done through private contractors. Though Local Law 37 requires the reporting of pesticide use on only public property, applications on private property done by PCS are included in Tables 24 and 25. VSC is charged with mosquito management and uses licensed pest management staff as well as outside contractors. Table 30 summarizes pesticide use by pesticide type. Table 31 lists all pesticide products used by DOHMH in 2015.

Table 30 Types of Pesticides Used by DOHMH in 2015

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	15025.1	23.9%	20476	77.4%
Insecticide	0.0	0.0%	47909.4	76.1%	5976	22.6%
Totals	0.0		62,934.6		26,452	

Table 31 Pesticide Products Used by DOHMH in 2015 by Pesticide Type

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Rodenticides								
12455-69	CONTRAC RODENTICIDE	0.00	10,297.56	11,206	Bromadiolone	3	NO	NO
12455-133	CONTRAC WITH LUMITRACK	0.00	1,413.06	4,234	Bromadiolone	3	NO	NO
12455-90	FINAL RODENTICIDE	0.00	1,823.06	1,610	Brodifacoum	3	NO	NO
12455-79	CONTRAC ALL-WEATHER BLOX	0.00	676.07	1,274	Bromadiolone	3	NO	NO
100-1055	WEATHERBLOK BAIT WITH BITREX	0.00	313.15	922	Brodifacoum	3	NO	NO
7173-297	BROMADIOLONE PASTE 0901	0.00	161.17	544	Bromadiolone	3	NO	NO
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	137.53	466	Difethialone	3	NO	NO
12455-75	CONTRAC RAT AND MOUSE BAIT READY TO USE PLACE PAC	0.00	33.56	70	Bromadiolone	3	NO	NO
100-1050	TALON-G RODENTICIDE BAIT PACK MINI-PELLETS WITH BI	0.00	19.92	54	Brodifacoum	3	NO	NO
7173-205	D-CEASE LOOSE PELLETS MOUSE AND RAT BAIT	0.00	113.38	46	Difethialone	3	NO	NO
7173-205	GENERATION PELLETS	0.00	20.56	37	Difethialone	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
12455-36	CONTRAC RAT AND MOUSE BAIT	0.00	14.00	8	Bromadiolone	3	NO	NO
12455-86	CONTRAC RODENTICIDE PLACE PAC	0.00	0.60	3	Bromadiolone	3	NO	NO
12455-56	DITRAC TRACKING POWDER	0.00	1.50	2	Diphacinone	2	NO	NO
Insecticides								
73049-429	VECTOMAX FG	0.00	1,642.50	4,967	Bacillus sphaericus; Bacillus thuringiensis, subsp. Israelensis, strain AM 65-52	3	NO	NO
73049-20	VECTOLEX CG BIOLOGICAL LARVICIDE	0.00	2,346.94	616	Bacillus sphaericus	3	NO	NO
1021-1688	ANVIL 10+10 ULV	0.00	2,982.08	139	Phenothrin; Piperonyl butoxide	3	YES	NO
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	0.70	137	Indoxacarb	3	NO	NO
73049-19	VECTOBAC CG BIOLOGICAL LARVICIDE GRANULES	0.00	40,800.00	66	Bacillus thuringiensis, subsp. Israelensis, strain AM 65-52	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	0.10	25	Indoxacarb	3	NO	NO
73049-57	VECTOLEX WDG BIOLOGICAL LARVICIDE WATER DISPERSIBLE GRANULE	0.00	136.06	12	Bacillus sphaericus 2362, serotype H5a5b, strain ABTS 1743 solids, spores and insecticidal toxins	3	NO	NO
64405-2	ECOLOGICAL ANT & INSECT BAIT	0.00	0.59	9	Boric acid	3	NO	NO
64405-2	REDZONE BAIT	0.00	0.47	5	Boric acid	3	NO	NO

Homeless Services, Department of

The Department of Homeless Services (DHS) manages homeless shelters and dormitory facilities across the City. Of these, six are Family Services operated, five provide dormitory facilities for families with children and one facility, Preventative Assistance and Temporary Housing (PATH), is an intake facility. There are five adult facilities which also provide housing for men. DHS also operates and manages warehouses. Pest management services, which primarily address rodent and cockroach infestations, are provided by an outside contractor. Table 32

summarizes pesticide use by pesticide type. Table 33 lists all pesticide products used by DHS in 2015.

Table 32: Types of Pesticides Used by DHS in 2015

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	197.1	75.6%	2932	32.0%
Insecticide	68.8	100.0%	63.5	24.4%	6232	68.0%
Totals	68.8		260.6		9,164	

Table 33: Pesticide Products Used by DHS in 2015 by Pesticide Type

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Rodenticides								
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	190.51	2,789	Difethialone	3	NO	NO
56-42	BAIT BLOCK RODENTIICDE WITH PEANUT BUTTER FLAVORIZ	0.00	5.27	139	Diphacinone	3	NO	NO
12455-79	CONTRAC ALL-WEATHER BLOX	0.00	0.75	2	Bromadiolone	3	NO	NO
7173-297	BROMADIOLONE PASTE 0901	0.00	0.55	2	Bromadiolone	3	NO	NO
Insecticides								
432-763	SUSPEND SC	29.17	0.00	2274	Deltamethrin	3	NO	NO
1021-1828	MGK ROACH BAIT 2822	0.00	48.21	1927	Avermectin	3	NO	NO
432-763	SUSPEND SC INSECTICIDE	4.49	0.00	715	Deltamethrin	3	NO	NO
53883-276	DELTA 4.75% SC	4.31	0.00	506	Deltamethrin	3	NO	NO
279-3206	TALSTAR TC FLOWABLE TERMITICIDE/INSECTICIDE	6.39	0.00	406	Bifenthrin	3	YES	NO
397-13	STERI-FAB	17.89	0.00	142	Phenothrin; Isopropyl alcohol; Alkyl (60%C14, 25%C12, 15%C16) dimethylbenzyl ammonium chloride; Didecyl dimethyl ammonium chloride	2	NO	NO
2724-351	ZOECON RF-259 EMULSIFIABLE CONCENTRATE	0.32	0.00	81	(7S)-Hydroprene	3	NO	NO
499-470	WHITMIRE MICRO-GEN TC 198	3.26	0.00	39	Cyfluthrin	3	NO	NO
64405-2	REDZONE BAIT	0.00	6.69	39	Boric acid	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
499-470	JOHNSON WAX PROFESSIONAL BRAND RESIDUAL INSECTICIDE CRAWLING INSECT	2.98	0.00	27	Cyfluthrin	3	NO	NO
53883-283	DM DUST 0.05% INSECTICIDE	0.00	0.37	22	Deltamethrin	3	NO	NO
2724-274	GOLDEN MUSCAMEYL(TM) FLY BAIT	0.00	0.22	14	Methomyl; (Z)-9-Tricosene	3	NO	NO
64405-2	ECOLOGICAL ANT & INSECT BAIT	0.00	2.38	10	Boric acid	3	NO	NO
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	0.16	9	Indoxacarb	3	NO	NO
2724-274	GOLDEN MALRIN RF-128 FLY KILLER	0.00	0.07	9	Methomyl; (Z)-9-Tricosene	3	NO	NO
1021-1767	MULTICIDE LICE & DUST MITE SPRAY 27911	0.00	5.25	6	Phenothrin; N-octyl bicycloheptene dicarboximide	3	YES	NO
432-772	DELTA DUST	0.00	0.13	3	Deltamethrin	3	NO	NO
432-1483	TEMPRID SC INSECTICIDE	0.01	0.00	2	Cyfluthrin, beta; Imidacloprid	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	0.00	1	Indoxacarb	3	NO	NO

Housing Authority

The New York City Housing Authority (NYCHA) manages 2,644 residential buildings and 178,466 apartments, as well as office space and grounds that cover 2,502 acres. NYCHA currently has a staff of some 75 pest management professionals that perform routine inspections and treatments, carry out specialized intensive IPM interventions, apply pesticides, and respond to complaints and requests from other agencies. NYCHA staff members regularly address a range of insect and rodent problems, including interior mice, cockroaches and bedbugs and exterior rats, weeds, and mosquito control. Table 34 summarizes pesticide use by pesticide type. Table 35 lists the products used by NYCHA in 2015.

Table 34: Types of Pesticides Used by NYCHA in 2015

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	4788.8	81.9%	13217	18.2%
Insecticide	615.2	98.7%	1059.9	18.1%	59352	81.8%
Herbicide	8.0	1.3%	0.0	0.0%	20	0.0%
Totals	623.2		5,848.7		72,589	

Table 35: Pesticide Products Used by NYCHA in 2015 by Pesticide Type

Pesticides Use by NYC, 2015

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Rodenticides								
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	2,698.09	9,288	Difethialone	3	NO	NO
12455-86	CONTRAC RODENTICIDE PLACE PAC	0.00	974.52	1,885	Bromadiolone	3	NO	NO
12455-56	DITRAC TRACKING POWDER	0.00	567.76	970	Diphacinone	2	NO	NO
12455-108	FORMUS ALL-WEATHER BLOX	0.00	29.98	244	Brodifacoum	3	NO	NO
7173-113	ROZOL TRACKING POWDER	0.00	185.44	202	Chlorophacino ne	2	NO	NO
56-42	BAIT BLOCK RODENTICIDE WITH PEANUT BUTTER FLAVORIZ	0.02	31.13	163	Diphacinone	3	NO	NO
12455-79	CONTRAC ALL-WEATHER BLOX	0.00	92.85	162	Bromadiolone	3	NO	NO
12455-75	CONTRAC RAT AND MOUSE BAIT READY TO USE PLACE PAC	0.00	36.84	132	Bromadiolone	3	NO	NO
7173-297	BROMADIOLONE PASTE 0901	0.00	123.16	70	Bromadiolone	3	NO	NO
12455-89	FINAL ALL-WEATHER BLOX	0.00	2.61	42	Brodifacoum	3	NO	NO
12455-69	CONTRAC RODENTICIDE	0.00	12.69	17	Bromadiolone	3	NO	NO
7173-208	MAKI RODENTICIDE BAIT PACKS (PELLETS)	0.00	2.62	17	Bromadiolone	3	NO	NO
7173-288	DIFETHIALONE BLOCK 0707	0.00	0.43	17	Difethialone	3	NO	NO
12455-36	CONTRAC RAT AND MOUSE BAIT	0.00	1.50	3	Bromadiolone	3	NO	NO
12455-80	ALL-WEATHER DI-BLOX	0.00	18.81	2	Diphacinone	3	NO	NO
12455-80	DITRAC ALL-WEATHER BLOX	0.00	10.38	2	Diphacinone	3	NO	NO
12455-5	DITRAC ALL-WEATHER CAKE	0.02	0.00	1	Diphacinone	3	NO	NO
Insecticides								
432-763	SUSPEND SC	185.22	0.00	20,746	Deltamethrin	3	NO	NO
432-763	SUSPEND SC INSECTICIDE	90.68	0.00	12,074	Deltamethrin	3	NO	NO
432-1483	TEMPRID SC INSECTICIDE	23.02	0.30	7,911	Cyfluthrin, beta; Imidacloprid	3	NO	NO
499-304	WHITMIRE OPTEM ME PT 600	33.45	0.00	4,494	Cyfluthrin	3	NO	NO
432-1259	PRODUCT: RBF5	0.00	168.20	3,227	Fipronil	3	YES	NO
432-1460	MAXFORCE FC ROACH KILLER BAIT GEL F.05	0.00	136.16	2,877	Fipronil	3	YES	NO
2724-351	ZOECON RF-259 EMULSIFIABLE CONCENTRATE	21.34	0.00	2,696	(7S)-Hydroprene	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
397-13	STERI-FAB	183.22	0.00	1,647	Phenothrin; Isopropyl alcohol; Alkyl (60%C14, 25%C12, 15%C16) dimethylbenzyl ammonium chloride; Didecyl dimethyl ammonium chloride	2	NO	NO
432-1257	MAXFORCE ROACH BAIT F.05	0.00	48.46	1,221	Fipronil	3	YES	NO
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	24.05	494	Indoxacarb	3	NO	NO
64405-2	ECOLOGICAL ANT & INSECT BAIT	0.00	69.91	479	Boric acid	3	NO	NO
2724-421	ZOECON RF-292 BRIQUET	0.00	593.42	241	S-Methoprene	3	NO	NO
279-9554	CB INSECTICIDE WITH DELTAMETHRIN	26.98	0.00	213	Deltamethrin	3	NO	NO
62577-12	ECOPCO ACU	19.28	0.07	186	Phenylethyl propionate	3	NO	NO
1021-1815	EVERCIDE ESFENVALERATE 6.4% CS	1.12	0.00	159	Esfenvalerate	3	NO	NO
1021-2569	MULTICIDE SPRAY 29511	29.33	0.00	143	Imidacloprid; Phenothrin; N-octyl bicycloheptene dicarboximide	0	YES	NO
2724-351	ZOECON GENCOR 9% EMULSIFIABLE CONCENTRATE	1.56	0.00	136	(7S)-Hydroprene	3	NO	NO
499-467	WHITMIRE AVERT TC 181	0.00	5.44	131	Avermectin	3	NO	NO
499-507	PRESCRIPTION TREATMENT BRAND ALPINE COCKROACH GEL BAIT RESERVOIR	0.00	4.43	106	Dinotefuran	3	NO	NO
499-406	AVERT PRESCRIPTION TREATMENT TC 93A BAIT	0.00	3.07	85	Avermectin	3	NO	NO
100-1486	DUPONT ADVION COCKROACH BAIT ARENA	0.00	1.45	29	Indoxacarb	3	NO	NO
432-1375	PRE-EMPT FLY BAIT	0.00	0.23	24	Imidacloprid; (Z)-9-Tricosene	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	3.97	8	Indoxacarb	3	NO	NO
1021-1641	CONQUER RESIDUAL INSECTICIDE CONCENTRATE	0.04	0.00	7	Esfenvalerate	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
432-1531	BES0600 INSECTICIDE	0.00	0.28	7	Clothianidin	0	NO	NO
432-1455	BES 0026 FLY SPOT BAIT	0.00	0.14	2	Imidacloprid; (Z)-9- Tricosene	3	NO	NO
100-1485	DUPONT ADVION ANT BAIT ARENA	0.00	0.06	2	Indoxacarb	3	NO	NO
1001-73	ECOLOGIX COCKROACH BAIT	0.00	0.03	2	Xanthine; Oxyipurinol	3	NO	NO
53871-3	STIMUKIL FLY BAIT	0.00	0.07	1	(Z)-9- Tricosene; Methomyl	3	NO	NO
241-313	SIEGE PBS GEL INSECTICIDE	0.00	0.06	1	Hydramethylnon	3	YES	YES
1021-2593	MGK? Formula 2976	0.00	0.03	1	Avermectin; Pyriproxyfen	3	NO	NO
6218-47	SUMMIT B.T.I. BRIQUETS	0.00	0.03	1	Bacillus thuringiensis subspecies Israelensis strain BMP 144	3	NO	NO
73049-20	VECTOLEX CG BIOLOGICAL LARVICIDE	0.00	0.03	1	Bacillus sphaericus	3	NO	NO
Herbicides								
239-2657	ORTHO GROUND CLEAR TOTAL VEGETATION KILLER	6.00	0.00	6	Glyphosate, isopropylamine salt; Imazapyr, isopropylamine salt	2	NO	NO
524-579	ROUNDUP PROMAX	1.67	0.00	5	Glyphosate, potassium salt	3	NO	NO
9198-129	TEE TIME TREFLAN 5G	0.19	0.00	4	Trifluralin	3	YES	NO
228-366	RAZOR HERBICIDE	0.01	0.00	3	Glyphosate, isopropylamine salt	3	NO	NO
524-517	ACCORD XL HERBICIDE	0.09	0.00	2	Glyphosate, isopropylamine salt	3	NO	NO

Housing Preservation and Development

Housing Preservation and Development (HPD) oversees occupied and vacant residential and commercial buildings, vacant lots as well as a limited number of agency offices. In addition, its Emergency Repair Program occasionally encounters and responds to rats and fleas in occupied private buildings. There are no certified applicators on staff and the agency contracts for pest management services. Table 36 summarizes pesticide use by pesticide type. Table 37 lists all pesticide products used by HPD in 2015.

Table 36: Types of Pesticides Used by HPD in 2015

Volume	Weight	Times Applied
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Pesticide Type	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	12.9	99.0%	25	71.4%
Insecticide	0.0	0.0%	0.1	1.0%	10	28.6%
Totals	0.0		13.0		35	

Table 37: Pesticide Products Used by HPD in 2015

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Rodenticides								
12455-79	CONTRAC ALL-WEATHER BLOX	0.00	11.81	19	Bromadiolone	3	NO	NO
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	1.10	6	Difethialone	3	NO	NO
Insecticides								
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	0.03	8	Indoxacarb	3	NO	NO
64405-2	ECOLOGICAL ANT & INSECT BAIT	0.00	0.09	2	Boric acid	3	NO	NO

Human Resources Administration

The New York City Human Resources Administration/ Department of Social Services (HRA/DSS) provides temporary help to individuals and families with social service and economic needs to assist them in reaching self-sufficiency. HRA serves more than 3 million New Yorkers through essential and diverse programs and services. HRA/DSS has numerous offices and public service centers throughout the 5 boroughs. Table 38 summarizes pesticide use by pesticide type. Table 39 lists the products used by HRA/DSS in 2015.

Table 38: Types of Pesticides Used by HRA in 2015

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	294.9	98.3%	179	36.2%
Insecticide	0.0	100.0%	5.2	1.7%	315	63.8%
Totals	0.0		300.0		494	

Table 39: Pesticide Products Used by HRA in 2015 by Pesticide Type

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Rodenticides								
12455-79	CONTRAC ALL-WEATHER BLOX	0.00	285.25	134	Bromadiolone	3	NO	NO
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	9.63	45	Difethialone	3	NO	NO
Insecticides								

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	2.95	256	Indoxacarb	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	0.08	23	Indoxacarb	3	NO	NO
432-763	SUSPEND SC	0.00	0.00	14	Deltamethrin	3	NO	NO
64405-2	ECOLOGICAL ANT & INSECT BAIT	0.00	1.52	13	Boric acid	3	NO	NO
64405-2	REDZONE BAIT	0.00	0.59	5	Boric acid	3	NO	NO
432-763	SUSPEND SC INSECTICIDE	0.00	0.00	3	Deltamethrin	3	NO	NO
100-1486	DUPONT ADVION COCKROACH BAIT ARENA	0.00	0.03	1	Indoxacarb	3	NO	NO

New York Public Libraries

The New York Public Library (NYPL), through its 85 branches libraries services residents in the boroughs of Manhattan, the Bronx and Staten Island. Pest management is provided by private contractors. No application data was provided by NYPL for 2015.

Parks and Recreation

New York City's 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). The major pest issues facing DPR are weeds (including weed shrubs and weed trees) and rodents. Rarer infestations of exotic insect pests and diseases, often targeting trees, also occur. To address these, DPR employs 104 certified pesticide applicators. Herbicides account for the largest share of DPR's total pesticide use. Contractors are hired for pest management when peripheral rodent problems arise on capital projects.

This data includes pesticides applied on all city-owned golf courses. Local Law 37 exempts these locations from pesticide prohibitions. The table also includes the data from sister organizations that operate on DPR property such as zoos, conservancies, and botanic gardens. Table 40 summarizes pesticide use by pesticide type. Table 41 below lists for each pesticide type, all products used, unless there were more than 10, in which case the 10 most frequently applied products are listed. Appendix 2 includes a complete product listing for DPR.

Table 40: Types of Pesticides Used by DPR in 2015

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.3	0.0%	771.3	4.7%	1,567	27.5%
Insecticide	232.4	5.6%	278.0	1.7%	889	15.6%
Herbicide	1268.9	30.5%	6032.6	36.5%	2,411	42.3%
Fungicide	2619.6	63.0%	9418.7	57.1%	799	14.0%

Other	39.0	0.9%	6.7	0.0%	38	0.7%
Totals	4160.1		16,507.3		5,704	

Table 41: Ten Most Frequently Applied Pesticide Products by DPR in 2015 by Pesticide Type

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Rodenticides								
12455-79	CONTRAC ALL-WEATHER BLOX	0.00	302.13	585	Bromadiolone	3	NO	NO
7173-218	GENERATION MINI BLOCKS	0.00	149.62	215	Difethialone	3	NO	NO
12455-106	TERAD3 BLOX	0.29	76.25	209	Cholecalciferol	3	NO	NO
12455-86	CONTRAC RODENTICIDE PLACE PAC	0.00	80.94	124	Bromadiolone	3	NO	NO
12455-139	Final Soft Bait	0.00	25.38	101	Brodifacoum	3	NO	NO
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	32.77	60	Difethialone	3	NO	NO
12455-69	CONTRAC RODENTICIDE	0.00	25.29	55	Bromadiolone	3	NO	NO
12455-36	CONTRAC RAT AND MOUSE BAIT	0.00	33.13	53	Bromadiolone	3	NO	NO
100-1055	WEATHERBLOK BAIT WITH BITREX	0.00	1.50	49	Brodifacoum	3	NO	NO
12455-75	CONTRAC RAT AND MOUSE BAIT READY TO USE PLACE PAC	0.00	14.19	42	Bromadiolone	3	NO	NO
12455-17	ZP RODENT BAIT AG	0.00	4.75	35	Zinc phosphide	3	NO	NO
7173-202	MAKI MINI BLOCKS	0.00	18.31	26	Bromadiolone	3	NO	NO
7173-236	D-CON RAT & MOUSE BAIT BLOCKS II RODENT CONTROL	0.00	1.41	9	Insecticide	3	NO	NO
7173-188	MAKI RAT AND MOUSE BAIT PACKS (PELLETS)	0.00	1.94	3	Bromadiolone	3	NO	NO
36488-63	DIFENACOU M RAT AND MOUSE BLOCK IV	0.00	3.75	1	Difenacoum	3	NO	NO
Insecticides								
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	4.09	291	Indoxacarb	3	NO	NO
432-763	SUSPEND SC	0.21	0.01	82	Deltamethrin	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	15.00	0.80	78	Indoxacarb	3	NO	NO
48813-1	SUFFOIL-X	6.82	0.00	36	Petroleum distillates	3	NO	NO
100-1489	DUPONT ACELEPRYN INSECTICIDE	9.28	0.00	21	DPX-E2Y45	0	NO	NO
70506-24	UP-STAR GOLD INSECTICIDE	39.74	0.00	19	Bifenthrin	3	YES	NO
70506-23	UP-STAR SC LAWN AND NURSERY INSECTICIDE/MITICIDE	11.88	0.00	19	Bifenthrin	3	YES	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
83100-6	PRIMERAONE IMIDACLOPRID 2F INSECTICIDE	1.18	0.00	19	Imidacloprid	3	NO	NO
100-1088	SCIMITAR GC INSECTICIDE	3.51	0.00	16	Cyhalothrin, lambda	3	NO	NO
70051-2	TRIACT 70	1.88	0.00	16	Neem oil	3	NO	NO
Herbicides								
524-579	ROUNDUP PROMAX	269.04	158.23	1,221	Glyphosate, potassium salt	3	NO	NO
62719-556	ACCORD XRT II	334.10	2.81	362	Glyphosate, dimethylammonium salt	3	NO	NO
62719-527	GARLON 4 ULTRA	68.10	0.00	264	Triclopyr	2	NO	NO
62719-324	GLYPRO	58.01	0.00	123	Glyphosate, isopropylamine salt	3	NO	NO
100-937	PRIMO MAXX	16.69	0.00	54	Trinexapac-ethyl	3	NO	NO
53883-373	QUALI-PRO T-NEX 1 AQ	80.11	0.00	44	Trinexapac-ethyl	3	NO	NO
524-529	ROUNDUP PRO CONCENTRATE	33.17	0.00	43	Glyphosate, isopropylamine salt	3	NO	NO
62719-542	DIMENSION 2EW	28.26	4.38	25	Dithiopyr	2	NO	NO
86064-3	ARMOR TECH PGR 113 MC	4.33	0.00	24	Trinexapac-ethyl	3	NO	NO
62719-305	LONTREL TURF AND ORNAMENTAL	0.38	0.00	19	Clopyralid	3	NO	NO
Fungicides								
100-1364	DACONIL ACTION	519.55	5.00	85	Acibenzolar-S- methyl; Chlorothalonil	2	YES	NO
100-1093	HERITAGE FUNGICIDE	0.00	134.91	61	Azoxystrobin	3	NO	NO
71065-3	COMPANION LIQUID BIOLOGICAL FUNGICIDE	315.50	0.00	51	Bacillus subtilis GBO3	3	NO	NO
228-630	LESCO TWOSOME FUNGICIDE	120.01	0.00	37	Iprodione; Thiophanate- methyl	3	YES	YES
55260-9	PROPLANT TURF AND ORNAMENTAL FUNGICIDE	83.36	0.00	36	Propamocarb hydrochloride	3	NO	NO
70127-2	NOVOZYMES BIOFUNGICIDE GREEN RELEAF 710-140	101.00	0.00	22	Bacillus licheniformis SB3086; IBA	3	NO	NO
432-1445	BAYLETON FLO TURF AND ORNAMENTAL FUNGICIDE	15.30	0.00	22	Triadimefon	3	YES	YES
50534-202	MANICURE ULTREX TURF & ORNAMENTAL	0.00	857.70	22	Chlorothalonil	1	YES	NO
84059-3	REGALIA PTO BIOFUNGICIDE FOR USE ON TURF AND ORNAMENTALS	46.30	0.00	20	Reynoutria sachalinensis	3	NO	NO
60063-3	LESCO MANICURE ULTRA	0.00	640.00	19	Chlorothalonil	2	YES	NO
Other								

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
60061-71	PETTIT MARINE PAINT PREMIUM SINGLE SEASON ABLATIVE	23.00	0.00	15	Copper oxide (ous)	2	NO	NO
59807-4	HORMODIN 1	0.00	1.19	10	IBA	3	NO	NO
71096-7	ORTHO BUG-GETA SNAIL & SLUG KILLER 1	0.00	1.50	6	Metaldehyde	3	NO	NO
73049-15	PROGIBB 4% PLANT GROWTH REGULATOR SOLUTION	0.00	0.00	5	Gibberellins	2	NO	NO
1448-212	CHEMICIDE 100-15	16.00	0.00	1	Poly(oxyethylene) (dimethylimino) ethylene (dimethylimino) ethylene dichloride	3	NO	NO
67702-3	NEU1165M SLUG AND SNAIL BAIT	0.00	4.00	1	Iron phosphate	3	NO	NO

Payroll Administration

The Office of Payroll Administration (OPA) is charged with administering the City's payroll and ensuring prompt and accurate payment of employees' wages and salaries. The agency contracts for pest control through the city-wide contract administered by DCAS. Table 42 summarizes pesticide use by pesticide type. Table 43 lists all pesticide products used by OPA in 2015.

Table 42: Types of Pesticides Used by OPA in 2015

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	0.9	66.0%	2	8.7%
Insecticide	0.0	0.0%	0.5	34.0%	21	91.3%
Totals	0.0		1.4		23	

Table 43: Pesticide Products Used by OPA in 2015

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Rodenticides								
12455-79	CONTRAC ALL-WEATHER BLOX	0.00	0.94	2	Bromadiolone	3	NO	NO
Insecticides								
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	0.48	20	Indoxacarb	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	0.01	1	Indoxacarb	3	NO	NO

Police Department

The Police Department (NYPD) is committed to providing a safe and secure environment for the public. It manages 76 precincts, 12 Transit Districts, and nine Housing Police Service Areas and other investigative and specialized units. The major pest issues facing its facilities are structural pests and are managed by private contractors as needed. Table 44 summarizes pesticide use by pesticide type. Table 45 lists all pesticide products used by NYPD in 2015.

Table 44 Types of Pesticides Used by NYPD in 2015

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0	0.0%	343.4	96.7%	427	Rodenticide
Insecticide	0.0	100.0%	11.6	3.3%	611	Insecticide
Totals	0.0		355.0		1,038	Totals

Table 45: Pesticide Products Used by NYPD in 2015 by Pesticide Type

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Rodenticides								
12455-79	CONTRAC ALL-WEATHER BLOX	0.00	299.69	231	Bromadiolone	3	NO	NO
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	43.76	196	Difethialone	3	NO	NO
Insecticides								
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	3.09	431	Indoxacarb	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	0.52	113	Indoxacarb	3	NO	NO
64405-2	ECOLOGICAL ANT & INSECT BAIT	0.00	6.61	49	Boric acid	3	NO	NO
64405-2	REDZONE BAIT	0.00	1.38	16	Boric acid	3	NO	NO
432-763	SUSPEND SC INSECTICIDE	0.00	0.00	1	Deltamethrin	3	NO	NO
432-772	DELTA DUST	0.00	0.00	1	Deltamethrin	3	NO	NO

Queens Public Libraries

The Queens Public Library (QPL) manages 64 libraries as well as indoor, outdoor and office facilities. Contractors are hired for pest management as needed and the major pest infestations are roaches and mice. Table 46 summarizes pesticide use by pesticide type. Table 47 lists all pesticide products used by QPL in 2015.

Table 46: Types of Pesticides Used by QPL in 2015

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total

Rodenticide	0.0	0.0%	23.8	98.0%	24	64.9%
Insecticide	0.0	100.0%	0.5	2.0%	13	35.1%
Totals	0.0		24.3		37	

Table 47: Pesticide Products Used by QPL in 2015

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Rodenticides								
12455-89	FINAL ALL-WEATHER BLOX	0.00	20.90	21	Brodifacoum	3	NO	NO
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	2.01	2	Difethialone	3	NO	NO
12455-121	TOMCAT MOUSE KILLER	0.00	0.94	1	Bromethalin	3	NO	NO
Insecticides								
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	0.05	6	Indoxacarb	3	NO	NO
64405-2	ECOLOGICAL ANT & INSECT BAIT	0.00	0.41	5	Boric acid	3	NO	NO
1021-1641	CONQUER RESIDUAL INSECTICIDE CONCENTRATE	0.00	0.00	1	Esfenvalerate	3	NO	NO
432-1259	PRODUCT: RBF5	0.00	0.02	1	Fipronil	3	YES	NO

Sanitation, Department of

The Department of Sanitation (DSNY) manages garages, office buildings, transfer stations, and various publicly-owned lots throughout the city. DSNY employs two certified pesticide applicators that make routine visits to facilities and responds to emergency calls because of the nature of the agency's work – managing garbage – pest problems are endemic at some facilities. DSNY also contracts for weed control on some of the City's rights-of-way. Table 48 summarizes pesticide use by pesticide type. Table 49 lists the products used by DSNY.

Table 48: Types of Pesticides Used by DSNY in 2015

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.1	3.5%	225.7	94.8%	118	19.4%
Insecticide	2.0	96.5%	12.4	5.2%	489	80.6%
Totals	2.0		238.1		607	

Table 49: List of Pesticides Applied by DSNY in 2015

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Rodenticides								
12455-89	FINAL ALL-WEATHER BLOX	0.00	203.06	83	Brodifacoum	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
12455-76	ZEP TOTAL CONTROL PELLET PACKS TOTAL CONTROL SYSTEMS	0.00	17.25	24	Bromadiolone	3	NO	NO
12455-76	CONTRAC RODENTICIDE READY TO USE PLACE PAC	0.07	4.97	10	Bromadiolone	3	NO	NO
12455-79	CONTRAC ALL-WEATHER BLOX	0.00	0.38	1	Bromadiolone	3	NO	NO
Insecticides								
432-763	SUSPEND SC	0.73	0.05	167	Deltamethrin	3	NO	NO
100-1066	BORDER INSECTICIDE	0.26	0.00	167	Cyhalothrin, lambda	3	NO	NO
100-1066	DEMAND CS INSECTICIDE	0.18	0.00	98	Cyhalothrin, lambda	3	NO	NO
73766-1	GOURMET ANT BAIT GEL	0.70	6.21	21	Disodium octaborate tetrahydrate	3	NO	NO
432-1256	MAXFORCE FC ANT BAIT STATIONS	0.00	0.79	20	Fipronil	3	YES	NO
432-1257	MAXFORCE ROACH BAIT F.05	0.00	0.06	4	Fipronil	3	YES	NO
499-465	PRO-CONTROL FOGGER II	0.08	1.56	3	Pyrethrins; Piperonyl butoxide; N-octyl bicycloheptene dicarboximide	3	YES	NO
73766-1	ADIOS ANT KILLER GEL	0.01	0.00	3	Disodium octaborate tetrahydrate	3	NO	NO
432-1258	MAXFORCE LARGE ROACH BAIT F.03	0.00	0.21	3	Fipronil	3	YES	NO
73766-1	ADIOS ANT & ROACH KILLER IN A GEL	0.01	0.00	1	Disodium octaborate tetrahydrate	3	NO	NO
2724-274	GOLDEN MUSCAMYL(TM) FLY BAIT	0.00	2.00	1	Methomyl; (Z)-9-Tricosene	3	NO	NO
9444-168	ZEP TOTAL CONTROL TOTAL RELEASE FOGGER TOTAL CONTROL SYSTEMS	0.00	1.56	1	Esfenvalerate; Prallethrin; Pyriproxyfen	3	NO	NO

Taxi and Limousine Commission

The Taxi and Limousine Commission (TLC) licenses and regulates over 50,000 vehicles and approximately 100,000 drivers, performs safety and emissions inspections of the more than 13,000 medallion taxicabs three times each year, and holds numerous hearings for violations of City and TLC rules and regulations, making it the most active taxi and limousine licensing regulatory agency in the United States. The agency contracts for pest control through the city-wide contract administered by DCAS. Table 50 summarizes pesticide use by pesticide type. Table 51 lists all pesticide products used by TLC in 2015.

Table 50: Types of Pesticides Used by TLC in 2015

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	1.4	97.3%	3	60.0%
Insecticide	0.0	0.0%	0.0	2.7%	2	40.0%
Totals	0.0		1.5		5	

Table 51: Pesticide Products Used by TLC in 2015

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Rodenticides								
12455-79	CONTRAC ALL-WEATHER BLOX	0.00	1.44	3	Bromadiolone	3	NO	NO
Insecticides								
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	0.04	2	Indoxacarb	3	NO	NO

Transportation, Department of

The Department of Transportation (DOT) has a staff of over 4,000 that oversees one of the most complex urban transportation networks in the world. They manage approximately 5,800 miles of streets, sidewalks, and highways and 789 bridge structures, including six tunnels. They operate the Staten Island Ferry, oversee ferry operations on City-owned piers and operate approximately 75 facilities throughout the City. DOT is responsible for pest management at maintenance yards, lots, and agency offices throughout the city, as well as on rights-of-way along city highways. DOT is also contracted by New York State to provide right-of-way maintenance on state highways within city borders. Table 52 summarizes pesticide use by pesticide type. Table 53 lists all pesticide products used by DOT in 2015.

Table 52: Types of Pesticides Used by DOT in 2015

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	81.6	65.7%	221	13.3%
Insecticide	1.4	0.6%	0.2	0.2%	185	11.1%
Herbicide	219.7	99.4%	42.4	34.1%	1257	75.6%
Totals	221.1		124.3		1,663	

Table 53: Pesticide Products Used by DOT in 2015

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Rodenticides								
228-397	RIVERDALE VANQUISH HERBICIDE	34.82	0.00	220	Dicamba, diglycolamine salt	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
62719-556	ACCORD XRT II	52.33	0.00	217	Glyphosate, dimethylammonium salt	3	NO	NO
432-1557	DUPONT OUST EXTRA HERBICIDE	0.00	13.44	193	Sulfometuron methyl; Metsulfuron-methyl	3	NO	NO
432-1580	DUPONT VIEWPOINT HERBICIDE	0.00	28.94	182	Aminocyclopyrachlor; Imazapyr; Metsulfuron-methyl	3	NO	NO
62719-176	PATHFINDER II	104.80	0.00	172	Triclopyr, butoxyethyl ester	3	NO	NO
432-1516	ESPLANADE 200 SC	2.49	0.00	154	Indaziflam	3	NO	NO
62719-527	GARLON 4 ULTRA	24.42	0.00	93	Triclopyr	2	NO	NO
524-536	MON 78473 HERBICIDE	0.82	0.00	26	Glyphosate, isopropylamine salt	3	NO	NO
Insecticides								
432-763	SUSPEND SC INSECTICIDE	1.38	0.00	170	Deltamethrin	3	NO	NO
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	0.11	4	Indoxacarb	3	NO	NO
1021-1828	MGK ROACH BAIT 2822	0.00	0.01	4	Avermectin	3	NO	NO
432-763	SUSPEND SC	0.02	0.00	3	Deltamethrin	3	NO	NO
73079-2	INTICE GRANULAR BAIT	0.00	0.11	3	Boric acid	3	NO	NO
432-1254	MAXFORCE PROFESSIONAL INSECT CONTROL ROACH KILLER	0.00	0.01	1	Hydramethylnon	3	YES	YES
Herbicides								
228-397	RIVERDALE VANQUISH HERBICIDE	34.82	0.00	220	Dicamba, diglycolamine salt	3	NO	NO
62719-556	ACCORD XRT II	52.33	0.00	217	Glyphosate, dimethylammonium salt	3	NO	NO
432-1557	DUPONT OUST EXTRA HERBICIDE	0.00	13.44	193	Sulfometuron methyl; Metsulfuron-methyl	3	NO	NO
432-1580	DUPONT VIEWPOINT HERBICIDE	0.00	28.94	182	Aminocyclopyrachlor; Imazapyr; Metsulfuron-methyl	3	NO	NO
62719-176	PATHFINDER II	104.80	0.00	172	Triclopyr, butoxyethyl ester	3	NO	NO
432-1516	ESPLANADE 200 SC	2.49	0.00	154	Indaziflam	3	NO	NO
62719-527	GARLON 4 ULTRA	24.42	0.00	93	Triclopyr	2	NO	NO
524-536	MON 78473 HERBICIDE	0.82	0.00	26	Glyphosate, isopropylamine salt	3	NO	NO

APPENDIX 1: Complete Listing of Pesticide Products Used by New York City Agencies by Pesticide Type in 2015

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox. Cat.	EPA Carcin	CA Dev. Toxin
Rodenticides								
7173-258	DIFETHIALONE PASTE PLACE PACKS	90.00	5,161.34	17,625	Difethialone	3	NO	NO
12455-69	CONTRAC RODENTICIDE	0.00	15,867.23	11,354	Bromadiolone	3	NO	NO
12455-79	CONTRAC ALL-WEATHER BLOX	0.00	3,282.34	4,547	Bromadiolone	3	NO	NO
12455-133	CONTRAC WITH LUMITRACK	0.00	1,413.06	4,234	Bromadiolone	3	NO	NO
12455-86	CONTRAC RODENTICIDE PLACE PAC	0.09	1,062.69	2,023	Bromadiolone	3	NO	NO
12455-90	FINAL RODENTICIDE	0.00	1,823.06	1,610	Brodifacoum	3	NO	NO
100-1055	WEATHERBLOK BAIT WITH BITREX	0.00	338.14	1,006	Brodifacoum	3	NO	NO
12455-56	DITRAC TRACKING POWDER	0.00	639.26	1,002	Diphacinone	2	NO	NO
7173-297	BROMADIOLONE PASTE 0901	0.00	286.40	628	Bromadiolone	3	NO	NO
56-42	BAIT BLOCK RODENTIICDE WITH PEANUT BUTTER FLAVORIZ	0.02	38.37	369	Diphacinone	3	NO	NO
12455-75	CONTRAC RAT AND MOUSE BAIT READY TO USE PLACE PAC	0.00	93.56	261	Bromadiolone	3	NO	NO
7173-218	GENERATION MINI BLOCKS	0.00	227.75	244	Difethialone	3	NO	NO
12455-108	FORMUS ALL-WEATHER BLOX	0.00	29.98	244	Brodifacoum	3	NO	NO
12455-106	TERAD3 BLOX	0.29	76.25	209	Cholecalciferol	3	NO	NO
7173-113	ROZOL TRACKING POWDER	0.00	186.66	209	Chlorophacinone	2	NO	NO
12455-89	FINAL ALL-WEATHER BLOX	0.00	226.57	146	Brodifacoum	3	NO	NO
12455-76	ZEP TOTAL CONTROL PELLET PACKS TOTAL CONTROL SYSTEMS	0.00	87.03	117	Bromadiolone	3	NO	NO
12455-36	CONTRAC RAT AND MOUSE BAIT	0.00	270.27	116	Bromadiolone	3	NO	NO
12455-139	Final Soft Bait	0.00	25.38	101	Brodifacoum	3	NO	NO
100-1050	TALON-G RODENTICIDE BAIT PACK MINI-PELLETS WITH BI	0.00	22.42	56	Brodifacoum	3	NO	NO
7173-205	D-CEASE LOOSE PELLETS MOUSE AND RAT BAIT	0.00	113.38	46	Difethialone	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox. Cat.	EPA Carcin	CA Dev. Toxin
7173-205	GENERATION PELLETS	0.00	20.56	37	Difethialone	3	NO	NO
12455-17	ZP RODENT BAIT AG	0.00	4.75	35	Zinc phosphide	3	NO	NO
7173-202	MAKI MINI BLOCKS	0.00	18.31	26	Bromadiolone	3	NO	NO
7173-208	MAKI RODENTICIDE BAIT PACKS (PELLETS)	0.00	2.62	17	Bromadiolone	3	NO	NO
7173-288	DIFETHIALONE BLOCK 0707	0.00	0.43	17	Difethialone	3	NO	NO
12455-76	CONTRAC RODENTICIDE READY TO USE PLACE PAC	0.07	5.47	11	Bromadiolone	3	NO	NO
7173-236	D-CON RAT & MOUSE BAIT BLOCKS II RODENT CONTROL	0.00	1.41	9	Insecticide	3	NO	NO
7173-188	MAKI RAT AND MOUSE BAIT PACKS (PELLETS)	0.00	54.44	7	Bromadiolone	3	NO	NO
12455-91	FINAL RODENTICIDE READY-TO-USE PLACE PAC	0.07	0.33	6	Brodifacoum	3	NO	NO
10551-1	THE GIANT DESTROYER	0.00	10.13	6	Carbon; Sodium nitrate; Sulfur	2	NO	NO
12455-80	ALL-WEATHER DI-BLOX	0.00	18.81	2	Diphacinone	3	NO	NO
12455-80	DITRAC ALL-WEATHER BLOX	0.00	10.38	2	Diphacinone	3	NO	NO
47629-16	DI-KILL BAIT BLOCKS KILLS RATS AND MICE	0.07	0.00	1	Difenacoum	3	NO	NO
12455-5	DITRAC ALL-WEATHER CAKE	0.02	0.00	1	Diphacinone	3	NO	NO
47629-16	DIFENACOUM RAT AND MOUSE BLOCK	0.01	0.00	1	Difenacoum	3	NO	NO
7173-188	BOOT HILL PARAFFINIZED PELLETS	0.00	19.50	1	Bromadiolone	3	NO	NO
36488-63	DIFENACOUM RAT AND MOUSE BLOCK IV	0.00	3.75	1	Difenacoum	3	NO	NO
12455-121	TOMCAT MOUSE KILLER	0.00	0.94	1	Bromethalin	3	NO	NO
Insecticides								
432-763	SUSPEND SC	238.25	0.37	23,831	Deltamethrin	3	NO	NO
432-763	SUSPEND SC INSECTICIDE	101.02	2.05	13,022	Deltamethrin	3	NO	NO
432-1483	TEMPRID SC INSECTICIDE	33.59	0.30	7,962	Cyfluthrin, beta; Imidacloprid	3	NO	NO
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.03	119.75	6,087	Indoxacarb	3	NO	NO
73049-429	VECTOMAX FG	0.00	1,650.04	4,994	Bacillus sphaericus; Bacillus thuringiensis, subsp. Israelensis, strain AM 65-52	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox. Cat.	EPA Carcin	CA Dev. Toxin
499-304	WHITMIRE OPTEM ME PT 600	33.45	0.00	4,494	Cyfluthrin	3	NO	NO
432-1460	MAXFORCE FC ROACH KILLER BAIT GEL F.05	0.02	174.26	3,871	Fipronil	3	YES	NO
432-1259	PRODUCT: RBF5	0.80	174.66	3,335	Fipronil	3	YES	NO
2724-351	ZOECON RF-259 EMULSIFIABLE CONCENTRATE	21.66	0.06	2,779	(7S)-Hydroprene	3	NO	NO
397-13	STERI-FAB	267.82	0.00	2,170	Phenothrin; Isopropyl alcohol; Alkyl (60%C14, 25%C12, 15%C16) dimethylbenzyl ammonium chloride; Didecyl dimethyl ammonium chloride	2	NO	NO
1021-1828	MGK ROACH BAIT 2822 375	0.01234	49.8	2,011	Avermectin	3	NO	NO
432-1257	MAXFORCE ROACH BAIT F.05	0.00	49.50	1,233	Fipronil	3	YES	NO
62577-12	ECOPCO ACU	82.34	6.89	1,075	Phenylethyl propionate	3	NO	NO
64405-2	ECOLOGICAL ANT & INSECT BAIT	0.02	210.98	1,027	Boric acid	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	155.00	25.23	1,023	Indoxacarb	3	NO	NO
73766-1	GOURMET ANT BAIT GEL	0.70	22.22	743	Disodium octaborate tetrahydrate	3	NO	NO
73049-20	VECTOLEX CG BIOLOGICAL LARVICIDE	0.00	2,451.31	696	Bacillus sphaericus	3	NO	NO
53883-276	DELTA 4.75% SC	4.33	0.00	511	Deltamethrin	3	NO	NO
432-1363	TEMPO SC INSECTICIDE	24.92	3.69	505	Cyfluthrin, beta	3	NO	NO
499-507	PRESCRIPTION TREATMENT BRAND ALPINE COCKROACH GEL BAIT RESERVOIR	0.07	16.92	423	Dinotefuran	3	NO	NO
279-3206	TALSTAR TC FLOWABLE TERMITICIDE/INSECTICIDE	6.40	0.00	409	Bifenthrin	3	YES	NO
499-510	PRESCRIPTION TREATMENT BRAND ALPINE COCKROACH GEL BAIT PISTON CAN	0.00	5.53	382	Dinotefuran	3	NO	NO
73079-4	BORACTIN INSECTICIDE POWDER	0.00	91.03	336	Boric acid	3	NO	NO
64405-2	REDZONE BAIT	0.00	56.97	325	Boric acid	3	NO	NO
2724-484	RF 9707 AEROSOL	28.25	0.15	314	(7S)-Hydroprene	3	NO	NO
2724-421	ZOECON RF-292 BRIQUET	0.00	593.42	241	S-Methoprene	3	NO	NO
279-9554	CB INSECTICIDE WITH DELTAMETHRIN	26.98	0.38	214	Deltamethrin	3	NO	NO
100-1066	BORDER INSECTICIDE	7.61	0.11	198	Cyhalothrin, lambda	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox. Cat.	EPA Carcin	CA Dev. Toxin
1021-1815	EVERCIDE ESFENVALERATE 6.4% CS	1.12	0.00	163	Esfenvalerate	3	NO	NO
1021-2569	MULTICIDE SPRAY 29511	29.33	0.00	143	Imidacloprid; Phenothrin; N- octyl bicycloheptene dicarboximide	0	YES	NO
2724-351	ZOECON GENCOR 9% EMULSIFIABLE CONCENTRATE	2.14	0.00	141	(7S)-Hydroprene	3	NO	NO
1021-1688	ANVIL 10+10 ULV	0.00	2,982.08	139	Phenothrin; Piperonyl butoxide	3	YES	NO
499-467	WHITMIRE AVERT TC 181	0.00	5.44	131	Avermectin	3	NO	NO
100-1066	DEMAND CS INSECTICIDE	1.18	0.00	100	Cyhalothrin, lambda	3	NO	NO
499-406	AVERT PRESCRIPTION TREATMENT TC 93A BAIT	0.00	3.07	85	Avermectin	3	NO	NO
432-1262	MAXFORCE IBH10	1.62	4.18	74	Hydramethylnon	3	YES	YES
73049-19	VECTOBAC CG BIOLOGICAL LARVICIDE GRANULES	0.00	40,800.0 0	66	Bacillus thuringiensis, subsp. Israelensis, strain AM 65-52	3	NO	NO
64405-8	NIBOR BORATE INSECTICIDE AND FUNGICIDE	35.15	0.63	51	Disodium octaborate tetrahydrate	3	NO	NO
432-1455	BES 0026 FLY SPOT BAIT	0.01	8.72	47	Imidacloprid; (Z)- 9-Tricosene	3	NO	NO
100-1486	DUPONT ADVION COCKROACH BAIT ARENA	0.00	2.84	45	Indoxacarb	3	NO	NO
432-772	DELTA DUST	0.00	1.41	42	Deltamethrin	3	NO	NO
499-470	WHITMIRE MICRO-GEN TC 198	3.26	0.00	39	Cyfluthrin	3	NO	NO
9688-190	SPECTRACIDE DESTROYER BRAND WASP & HORNET KILLER	3.41	21.25	38	Cyhalothrin, lambda; Prallethrin	3	NO	NO
432-1264	MAXFORCE FC ANT KILLER BAIT GEL	0.40	1.23	37	Fipronil	3	YES	NO
48813-1	SUFFOIL-X	6.82	0.00	36	Petroleum distillates	3	NO	NO
2724-274	GOLDEN MUSCAMYL(TM) FLY BAIT	0.00	157.15	34	Methomyl; (Z)-9- Tricosene	3	NO	NO
432-1254	MAXFORCE PROFESSIONAL INSECT CONTROL ROACH KILLER	0.33	1.41	31	Hydramethylnon	3	YES	YES
499-470	JOHNSON WAX PROFESSIONAL BRAND RESIDUAL INSECTICIDE CRAWLING INSECT	2.98	0.81	28	Cyfluthrin	3	NO	NO
432-1375	PRE-EMPT FLY BAIT	0.00	10.73	28	Imidacloprid; (Z)- 9-Tricosene	3	NO	NO
100-1483	ADVION INSECT GRANULE	0.00	4.63	22	Indoxacarb	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox. Cat.	EPA Carcin	CA Dev. Toxin
432-1256	MAXFORCE FC ANT BAIT STATIONS	0.00	0.84	22	Fipronil	3	YES	NO
53883-283	DM DUST 0.05% INSECTICIDE	0.00	0.37	22	Deltamethrin	3	NO	NO
100-1489	DUPONT ACELEPRYN INSECTICIDE	9.28	0.00	21	DPX-E2Y45	0	NO	NO
9688-255	SPECTRACIDE COMMERCIAL WASP & HORNET KILLER 3	2.42	0.00	20	Deltamethrin; S-Bioallethrin	3	YES	NO
70506-24	UP-STAR GOLD INSECTICIDE	39.74	0.00	19	Bifenthrin	3	YES	NO
70506-23	UP-STAR SC LAWN AND NURSERY INSECTICIDE/MITICIDE	11.88	0.00	19	Bifenthrin	3	YES	NO
83100-6	PRIMERAONE IMIDACLOPRID 2F INSECTICIDE	1.18	0.00	19	Imidacloprid	3	NO	NO
1021-1603	NYLAR 10EC	28.25	0.00	17	Pyriproxyfen	3	NO	NO
100-1088	SCIMITAR GC INSECTICIDE	3.51	0.00	16	Cyhalothrin, lambda	3	NO	NO
70051-2	TRIACT 70	1.88	0.00	16	Neem oil	3	NO	NO
432-1255	MAXFORCE GRANULAR INSECT BAIT	0.34	1.19	16	Hydramethylnon	3	YES	YES
53883-371	QUALI-PRO ABAMECTIN 0.15 EC	0.65	0.00	14	Avermectin	2	NO	NO
59639-96	DISTANCE INSECT GROWTH REGULATOR	0.19	0.00	14	Pyriproxyfen	3	NO	NO
279-3287	FLONICAMID 50SG INSECTICIDE	0.00	0.90	14	Fonicamid	3	NO	NO
100-1501	DUPONT ARILON INSECTICIDE	15.00	0.00	13	Indoxacarb	3	NO	NO
1021-1641	CONQUER RESIDUAL INSECTICIDE CONCENTRATE	0.05	0.00	13	Esfenvalerate	3	NO	NO
69526-5	PURESPRAY SPRAY OIL 10E	25.68	0.00	12	Mineral oil	3	NO	NO
53883-145	LAMBDA 9.7 EW INSECTICIDE	5.53	0.00	12	Cyhalothrin, lambda	2	NO	NO
73049-57	VECTOLEX WDG BIOLOGICAL LARVICIDE WATER DISPERSIBLE GRANULE	0.00	136.06	12	Bacillus sphaericus 2362, serotype H5a5b, strain ABTS 1743 solids, spores and insecticidal toxins	3	NO	NO
8033-106	TRISTAR 8.5 SL INSECTICIDE	0.50	0.00	11	Acetamiprid	3	NO	NO
73049-39	DIPEL DF DRY FLOWABLE BIOLOGICAL INSECTICIDE	0.00	1.95	10	Bacillus thuringiensis, subsp. Kurstaki, strain ABTS-351, fermentation solids and solubles	3	NO	NO
2724-786	RF2050 SPRAY	1.10	3.00	9	Tetramethrin; Ethofenprox; Piperonyl butoxide	3	YES	NO
400-508	FLORAMITE SC	0.04	0.00	9	Bifenazate	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox. Cat.	EPA Carcin	CA Dev. Toxin
499-492	PRESCRIPTION TREATMENT BRAND 388B ADVANCE ANT GEL BAIT	0.00	0.32	9	Borax	3	NO	NO
432-1318	LESCO SYSTEMIC INSECTICIDE CONTAINS MERIT IN WATER SOLUBLE PACKETS	0.00	40.03	9	Imidacloprid	3	NO	NO
2724-274	GOLDEN MALRIN RF-128 FLY KILLER	0.00	0.07	9	Methomyl; (Z)-9-Tricosene	3	NO	NO
499-362	WHITMIRE PT 515 WASP FREEZE	0.96	3.25	8	D-trans Allethrin; Phenothrin	3	YES	NO
100-1487	PROVAUNT	0.00	77.76	8	Indoxacarb	3	NO	NO
62577-13	EcoPco AR/X	0.00	2.38	8	Phenylethyl propionate; Pyrethrins	3	YES	NO
432-1312	GARANT T&O 2F	4.06	0.00	7	Imidacloprid	3	NO	NO
83100-5	LUCID ORNAMENTAL MITICIDE/INSECTICIDE	0.10	0.00	7	Avermectin	2	NO	NO
432-1369	MARATHON II GREENHOUSE AND NURSERY INSECTICIDE	0.02	0.00	7	Imidacloprid	3	NO	NO
73079-10	INVICT (TM) COCKROACH GEL	0.01	0.14	7	Imidacloprid	3	NO	NO
2724-469	ZOECON (S)-HYDROPRENE ROACH CONTROL STATION II	0.00	0.00	7	(7S)-Hydroprene	3	NO	NO
432-1457	MERIT FXT TABLET INSECTICIDE	0.00	7.56	7	Imidacloprid	3	NO	NO
432-1233	SKEETER-MITE 150-750 ULV	0.00	7.13	7	Permethrin; Piperonyl butoxide	3	YES	NO
432-1531	BES0600 INSECTICIDE	0.00	0.28	7	Clothianidin	0	NO	NO
66222-19	CHLORPYRIFOS 4E	7.78	0.00	6	Chlorpyrifos	2	NO	NO
1021-1767	MULTICIDE LICE & DUST MITE SPRAY 27911	0.00	5.25	6	Phenothrin; N-octyl bicycloheptene dicarboximide	3	YES	NO
86203-11	SAFARI 20SG INSECTICIDE	0.00	1.43	6	Dinotefuran	3	NO	NO
432-1506	MAXFORCE QUANTUM ANT BAIT	0.00	0.22	6	Imidacloprid	3	NO	NO
70051-27	AZANTIN XL BIOLOGICAL INSECTICIDE	0.16	0.00	5	Azadirachtin	3	NO	NO
62719-291	CONSERVE SC TURF AND ORNAMENTAL	0.14	0.00	5	Spinosad	3	NO	NO
70506-121	UPI-2005 EXP-06 RUP INSECTICIDE	0.11	0.00	5	Cyhalothrin, lambda	2	NO	NO
432-1471	KONTOS	0.07	0.00	5	Spirotetramat	3	NO	NO
73079-2	INTICE GRANULAR BAIT	0.02	0.30	5	Boric acid	3	NO	NO
53883-229	QUALI-PRO IMIDACLOPRID 2F TURF & ORNAMENTAL INSECT	3.78	0.00	4	Imidacloprid	3	NO	NO
432-1304	TEMPO 10 WP INSECTICIDE	2.00	0.02	4	Cyfluthrin, beta	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox. Cat.	EPA Carc in	CA Dev. Toxin
2724-476	ENSTAR II INSECT GROWTH REGULATOR (ENSTAR 5E)	0.27	0.00	4	(S)-Kinoprene	2	NO	NO
149-8	TERRO PCO LIQUID ANT BAIT	0.04	0.00	4	Borax	3	NO	NO
279-3155	TALSTAR NURSERY FLOWABLE INSECTICIDE/MITICIDE	3.31	0.00	3	Bifenthrin	3	YES	NO
100-1018	CYPERMETHRIN CONCENTRATE	2.11	0.00	3	Cypermethrin, beta	2	YES	NO
53883-244	QUALI-PRO LAMBDA GC-0	0.76	0.00	3	Cyhalothrin, lambda	2	NO	NO
228-708	NUFARM LAMBDA-CYHALOTHRIN 1 EC INSECTICIDE	0.48	0.00	3	Cyhalothrin, lambda	2	NO	NO
4-80	BONIDE HORTICULTURAL AND DORMANT SPRAY OIL	0.15	0.00	3	Mineral oil	3	NO	NO
499-465	PRO-CONTROL FOGGER II	0.08	1.56	3	Pyrethrins; Piperonyl butoxide; N-octyl bicycloheptene dicarboximide	3	YES	NO
42697-60	SAFER BRAND O-INSECTICIDAL SOAP CONCENTRATE	0.02	0.00	3	Potassium laurate	2	NO	NO
73766-1	ADIOS ANT KILLER GEL	0.01	0.00	3	Disodium octaborate tetrahydrate	3	NO	NO
10163-326	CAPTIVA	0.00	0.00	3	Garlic; Resins, oleo-, capsicum; Soybean oil	3	NO	NO
499-385	WHITMIRE PT-239 TRI-DIE INSECTICIDE	0.00	0.69	3	Diatomaceous earth; Pyrethrins; Piperonyl butoxide	3	YES	NO
499-370	JOHNSON WAX PROFESSIONAL BRAND GRANULAR ANT BAIT	0.00	0.52	3	Avermectin	3	NO	NO
432-1258	MAXFORCE LARGE ROACH BAIT F.03	0.00	0.21	3	Fipronil	3	YES	NO
432-1464	DYLOX 420 SL TURF AND ORNAMENTAL INSECTICIDE	48.00	0.00	2	Trichlorfon	3	YES	NO
42750-115	IMIDIPRO SYSTEMIC INSECTICIDE	4.30	0.00	2	Imidacloprid	3	NO	NO
499-362	BOLT WASP & HORNET KILLER	0.27	0.00	2	D-trans Allethrin; Phenothrin	3	YES	NO
228-588	MALLET 75 WP	0.00	18.66	2	Imidacloprid	3	NO	NO
66222-199	QUALI-PRO IMIDACLOPRID 75 WSB	0.00	13.50	2	Imidacloprid	3	NO	NO
499-509	WHITMIRE DE 1606	0.00	0.28	2	Diatomaceous earth	3	NO	NO
8033-109	TRANSPORT (R) MIKRON INSECTICIDE	0.00	0.25	2	Acetamiprid; Bifenthrin	3	YES	NO
432-1402	DECATHLON 20 WP GREENHOUSE AND NURSERY INSECTICIDE	0.00	0.10	2	Cyfluthrin	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox. Cat.	EPA Carcin	CA Dev. Toxin
100-1485	DUPONT ADVION ANT BAIT ARENA	0.00	0.06	2	Indoxacarb	3	NO	NO
1001-73	ECOLOGIX COCKROACH BAIT	0.00	0.03	2	Xanthine; Oxypurinol	3	NO	NO
228-624	NUFARM CHLORPYRIFOS SPC 4 INSECTICIDE	27.00	0.00	1	Chlorpyrifos	2	NO	NO
83100-6	LADA 2F INSECTICIDE	6.00	0.00	1	Imidacloprid	3	NO	NO
100-1551	Ference	0.75	0.00	1	Cyantraniliprole	0	NO	NO
8033-96	TRANSPORT (R) GHP INSECTICIDE	0.50	0.00	1	Acetamiprid; Bifenthrin	3	YES	NO
38167-36	AMTIDE IMIDACLOPRID 2F INSECTICIDE	0.30	0.00	1	Imidacloprid	3	NO	NO
432-1527	TEMPRID RTU	0.06	0.00	1	Cyfluthrin, beta; Imidacloprid	0	NO	NO
1021-1767	BBEDS BY CATCHMASTER BEDBUG TRAVEL SPRAY	0.03	0.00	1	Phenothrin; N-octyl bicycloheptene dicarboximide	3	YES	NO
70051-9	SUPERNEEM 4.5-B	0.03	0.00	1	Azadirachtin	2	NO	NO
73079-2	HASTA LA VISTA, ANTI	0.02	0.00	1	Boric acid	3	NO	NO
73766-1	ADIOS ANT & ROACH KILLER IN A GEL	0.01	0.00	1	Disodium octaborate tetrahydrate	3	NO	NO
10163-324	M-PEDE INSECTICIDE/FUNGICIDE	0.01	0.00	1	Potassium laurate	2	NO	NO
279-9553	INTRUDER RESIDUAL WITH CYFLUTHRIN	0.01	0.00	1	Cyfluthrin; Pyrethrins; Piperonyl butoxide	3	YES	NO
432-1260	MAXFORCE ANT BAIT F3	0.00	0.00	1	Fipronil	3	YES	NO
71711-4	SEPRO AKARI 5SC MITICIDE/INSECTICIDE	0.00	0.00	1	Fenpyroximate	2	NO	NO
228-620	NUFARM CHLORPYRIFOS SPC 2.32% G INSECTICIDE	0.00	75.00	1	Chlorpyrifos	3	NO	NO
228-501	MALLET 0.5 G INSECTICIDE	0.00	2.00	1	Imidacloprid	3	NO	NO
9444-168	ZEP TOTAL CONTROL TOTAL RELEASE FOGGER TOTAL CONTROL SYSTEMS	0.00	1.56	1	Esfenvalerate; Prallethrin; Pyriproxyfen	3	NO	NO
279-3385	DRAX ANT KILL GEL	0.00	1.06	1	Boric acid	3	NO	NO
279-3384	ROACH KIL COMMERCIAL	0.00	0.25	1	Boric acid	3	NO	NO
6218-47	ANTI-MOS BRIQUETS	0.00	0.17	1	Bacillus thuringiensis subspecies israelensis strain BMP 144	3	NO	NO
53871-3	STIMUKIL FLY BAIT	0.00	0.07	1	(Z)-9-Tricosene; Methomyl	3	NO	NO
241-313	SIEGE PBS GEL INSECTICIDE	0.00	0.06	1	Hydramethylnon	3	YES	YES
1021-2593	MGK? Formula 2976	0.00	0.03	1	Avermectin; Pyriproxyfen	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox. Cat.	EPA Carcin	CA Dev. Toxin
6218-47	SUMMIT B.T.I. BRIQUETS	0.00	0.03	1	Bacillus thuringiensis subspecies israelensis strain BMP 144	3	NO	NO
9444-131	BAYER ADVANCED ANT KILLER POWER PEN READYTO-USE BAIT	0.00	0.02	1	Boric acid	3	NO	NO
499-496	PRESCRIPTION TREATMENT BRAND ADVANCE 360A DUAL CHOICE ANT BAIT STATIONS	0.00	0.00	1	Avermectin	3	NO	NO
Herbicides								
524-579	ROUNDUP PROMAX	273.16	158.23	1,240	Glyphosate, potassium salt	3	NO	NO
62719-556	ACCORD XRT II	386.54	2.81	580	Glyphosate, dimethylammonium salt	3	NO	NO
62719-527	GARLON 4 ULTRA	101.77	0.00	377	Triclopyr	2	NO	NO
228-397	RIVERDALE VANQUISH HERBICIDE	34.82	0.00	220	Dicamba, diglycolamine salt	3	NO	NO
432-1557	DUPONT OUST EXTRA HERBICIDE	0.00	13.44	193	Sulfometuron methyl; Metsulfuron-methyl	3	NO	NO
432-1580	DUPONT VIEWPOINT HERBICIDE	0.00	28.94	182	Aminocyclopyrachlor; Imazapyr; Metsulfuron-methyl	3	NO	NO
62719-176	PATHFINDER II	105.70	0.00	180	Triclopyr, butoxyethyl ester	3	NO	NO
432-1516	ESPLANADE 200 SC	2.49	0.00	154	Indaziflam	3	NO	NO
62719-324	GLYPRO	58.01	0.00	123	Glyphosate, isopropylamine salt	3	NO	NO
100-937	PRIMO MAXX	16.69	0.00	54	Trinexapac-ethyl	3	NO	NO
53883-373	QUALI-PRO T-NEX 1 AQ	80.11	0.00	44	Trinexapac-ethyl	3	NO	NO
524-529	ROUNDUP PRO CONCENTRATE	33.17	0.00	43	Glyphosate, isopropylamine salt	3	NO	NO
524-536	MON 78473 HERBICIDE	6.80	0.00	33	Glyphosate, isopropylamine salt	3	NO	NO
62719-542	DIMENSION 2EW	28.26	4.38	25	Dithiopyr	2	NO	NO
86064-3	ARMOR TECH PGR 113 MC	4.33	0.00	24	Trinexapac-ethyl	3	NO	NO
62719-305	LONTREL TURF AND ORNAMENTAL	0.38	0.00	19	Clopyralid	3	NO	NO
62719-445	DIMENSION* ULTRA 40WP	0.00	127.44	19	Dithiopyr	3	NO	NO
9198-213	THE ANDERSONS 0.25% GRANULAR DITHIOPYR HERBICIDE	0.00	3,350.50	18	Dithiopyr	3	NO	NO
228-317	COOL POWER SELECTIVE HERBICIDE	1.77	0.00	17	Dicamba; MCPA, 2-ethyl hexyl ester; Triclopyr, butoxyethyl ester	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox. Cat.	EPA Carcin	CA Dev. Toxin
62719-566	TURFLON ESTER ULTRA	1.15	0.01	16	Triclopyr, butoxyethyl ester	3	NO	NO
228-366	RAZOR HERBICIDE	9.62	0.00	15	Glyphosate, isopropylamine salt	3	NO	NO
62719-517	ACCORD XRT	1.16	0.00	13	Glyphosate, isopropylamine salt	3	NO	NO
524-475	ROUNDUP ULTRA HERBICIDE	16.41	0.00	11	Glyphosate, isopropylamine salt	3	NO	NO
70299-23	AXXE BROAD SPECTRUM HERBICIDE	59.75	0.00	9	Nonanoic acid, ammonium salt	2	NO	NO
82052-1	AVENGER WEED KILLER CONCENTRATE	5.25	0.00	9	Limonene	3	NO	NO
62719-40	GARLON 4	0.63	0.00	9	Triclopyr, butoxyethyl ester	3	NO	NO
100-1267	TENACITY	0.47	0.00	7	Mesotrione	3	NO	NO
10404-44	LESCO THREE-WAY BENTGRASS SELECTIVE HERBICIDE	72.50	0.00	6	2,4-D, dimethylamine salt; Dicamba, dimethylamine salt; MCPP-P, dimethylamine salt	3	NO	NO
239-2657	ORTHO GROUND CLEAR TOTAL VEGETATION KILLER	6.00	0.00	6	Glyphosate, isopropylamine salt; Imazapyr, isopropylamine salt	2	NO	NO
100-1014	PACLOBUTRAZOL 2SC	3.70	0.00	6	Paclobutrazol	3	NO	NO
66330-276	DICAMBA DMA 4# AG	1.83	0.00	6	Dicamba, dimethylamine salt	2	NO	NO
53883-374	QUALI-PRO DITHIOPYR 40 WSB	0.00	26.25	6	Dithiopyr	3	NO	NO
432-1230	PROXY GROWTH REGULATOR	104.50	0.00	5	Ethephon	1	NO	NO
432-950	ACCLAIM EXTRA HERBICIDE	0.58	0.00	5	Fenoxaprop-P (+)	3	NO	NO
524-517	ACCORD XL HERBICIDE	0.46	0.00	5	Glyphosate, isopropylamine salt	3	NO	NO
4-484	AGWAY KLEENUP GRASS & WEED KILLER CONCENTRATE	0.03	0.00	5	Glyphosate, isopropylamine salt	2	NO	NO
279-3419	F7275 70 WG HERBICIDE	0.00	1.69	5	Carfentrazone-ethyl; Quinclorac	3	NO	NO
228-711	NUFARM PROSEGE SELECTIVE HERBICIDE2	0.00	0.17	5	Halosulfuron-methyl	3	NO	NO
81880-1	SEDGEHAMMER	0.00	0.12	5	Halosulfuron-methyl	3	NO	NO
228-453	BATTLESHIP 3	8.09	0.00	4	MCPA, dimethylamine salt; Triclopyr, triethylamine salt; Fluroxypyr 1-methylheptyl ester	1	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox. Cat.	EPA Carc in	CA Dev. Toxin
74779-3	CAMBISTAT	1.60	0.00	4	Paclobutrazol	3	NO	NO
9198-129	TEE TIME TREFLAN 5G	0.19	0.00	4	Trifluralin	3	YES	NO
264-267	PROXY	20.89	0.00	3	Ethephon	1	NO	NO
524-475	ROUNDUP ULTRA	0.31	0.00	3	Glyphosate, isopropylamine salt	3	NO	NO
279-3265	F8426 HERBICIDE	0.19	0.00	3	Carfentrazone-ethyl	3	NO	NO
2217-833	SPEED ZONE BROADLEAF HERBICIDE	27.00	0.00	2	2,4-D, 2-ethylhexyl ester; Carfentrazone-ethyl; Dicamba; Mecroprop-p	3	YES	NO
10404-43	LESCO THREE-WAY SELECTIVE HERBICIDE	10.66	0.00	2	2,4-D, dimethylamine salt; Dicamba, dimethylamine salt; MCP-P, dimethylamine salt	1	NO	NO
432-1229	FINALE HERBICIDE	0.03	0.00	2	Glufosinate-ammonium	2	NO	NO
538-317	0.08% MESO + FERTILIZER	0.00	538.00	2	Mesotrione	3	NO	NO
9198-65	THE ANDERSONS CRABGRASS PREVENTER WITH 4.7% TUPERSAN	0.00	160.00	2	Siduron	3	NO	NO
2217-696	BETAMEC 4 PRE-EMERGENCE GRASS KILLER	13.00	0.00	1	Bensulide	3	NO	NO
7969-88	POAST PLUS HERBICIDE	12.50	0.00	1	Sethoxydim	3	NO	NO
42750-144	BW III	4.25	0.00	1	2,4-D; Dicamba	1	NO	NO
2217-656	ENDRUN	3.25	0.00	1	2,4-D, dimethylamine salt; Dicamba, dimethylamine salt; MCP-P, dimethylamine salt	1	NO	NO
2217-759	EMBARK 2-S PLANT GROWTH REGULATOR	2.63	0.00	1	Mefluidide, diethanolamine salt	3	NO	NO
2217-768	EMBARK E-Z-TU-USE PLANT GROWTH REGULATOR	0.75	0.00	1	Mefluidide, diethanolamine salt	3	NO	NO
7969-272	DRIVE XLR8 HERBICIDE	0.50	0.00	1	Quinclorac	3	NO	NO
1381-192	CORNERSTONE PLUS	0.35	0.00	1	Glyphosate, isopropylamine salt	3	NO	NO
53883-336	QUINCLORAC 1.5 L	0.09	0.00	1	Quinclorac, Dimethylamine Salt	3	NO	NO
10404-85	0.10% DIMENSION PLUS FERTILIZER	0.00	1,000.00	1	Dithiopyr	3	NO	NO
9198-176	ANDERSON'S GOOSE/CRABGRASS CONTROL	0.00	300.00	1	Bensulide; Oxadiazon	2	YES	YES

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox. Cat.	EPA Carcin	CA Dev. Toxin
62719-483	CHOICE TURF PREMIUM LAWN CARE FERTILIZER WITH DIMENSION 0.125% HERBICI	0.00	200.00	1	Dithiopyr	3	NO	NO
961-405	LEBANON TRIFLURALIN G-5	0.00	100.00	1	Trifluralin	3	YES	NO
10163-213	GORDON'S PROFESSIONAL TURF & ORNAMENTAL PRODUCTS TUPERSAN HERBICIDE	0.00	48.00	1	Siduron	3	NO	NO
81927-36	ALLIGARE PRODIAMINE 65 WG HERBICIDE	0.00	15.00	1	Prodiamine	3	YES	NO
Fungicides								
100-1364	DACONIL ACTION	519.55	5.00	85	Acibenzolar-S-methyl; Chlorothalonil	2	YES	NO
100-1093	HERITAGE FUNGICIDE	0.00	134.91	61	Azoxystrobin	3	NO	NO
71065-3	COMPANION LIQUID BIOLOGICAL FUNGICIDE	315.50	0.00	51	Bacillus subtilis GBO3	3	NO	NO
228-630	LESCO TWOSOME FUNGICIDE	120.01	0.00	37	Iprodione; Thiophanate-methyl	3	YES	YES
55260-9	PROPLANT TURF AND ORNAMENTAL FUNGICIDE	83.36	0.00	36	Propamocarb hydrochloride	3	NO	NO
70127-2	NOVOZYMES BIOFUNGICIDE GREEN RELEAF 710-140	101.00	0.00	22	Bacillus licheniformis SB3086; IBA	3	NO	NO
432-1445	BAYLETON FLO TURF AND ORNAMENTAL FUNGICIDE	15.30	0.00	22	Triadimefon	3	YES	YES
50534-202	MANICURE ULTREX TURF & ORNAMENTAL	0.00	857.70	22	Chlorothalonil	1	YES	NO
84059-3	REGALIA PTO BIOFUNGICIDE FOR USE ON TURF AND ORNAMENTALS	46.30	0.00	20	Reynoutria sachalinensis	3	NO	NO
60063-3	LESCO MANICURE ULTRA	0.00	640.00	19	Chlorothalonil	2	YES	NO
264-1155	RHAPSODY AS0	186.40	0.00	17	QST 713 strain of dried Bacillus subtilis	3	NO	NO
432-890	LESCO PRODIGY SIGNATURE	0.00	829.00	17	Fosetyl-AI	3	NO	NO
432-942	LESCO BANOT TURF AND ORNAMENTAL FUNGIIDE	21.16	0.00	15	Propamocarb hydrochloride	3	NO	NO
7969-224	CURALAN EG	0.00	771.11	15	Vinclozolin	3	YES	YES
66222-41	QUALI-PRO PROPICONAZOLE 14.3	75.24	0.00	14	Propiconazole	2	NO	NO
432-1446	TARTAN FLO FUNGICIDE	26.29	0.00	13	Triadimefon; Trifloxystrobin	3	YES	YES
228-623	NUFARM PROPICONAZOLE SPC 14.3 MEC FUNGICIDE	0.45	0.00	13	Propiconazole	2	YES	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox. Cat.	EPA Carcin	CA Dev. Toxin
86064-1	ARMORTECH CLT 825 DF	0.00	270.00	13	Chlorothalonil	2	YES	NO
66222-150	EQUUS 500 ZN	157.71	0.00	12	Chlorothalonil	2	YES	NO
84229-44	AMTIDE TEBU 3.6F FOLIAR FUNGICIDE	36.63	0.00	12	Tebuconazole	3	YES	NO
62719-388	FORE 80WP RAINSHIELD	0.00	600.00	12	Mancozeb	3	YES	NO
70506-241	IPRODIONE 2F FUNGICIDE	124.00	0.00	11	Iprodione	3	YES	NO
70299-1	ZEROTOL ALGAECIDE/FUNGICIDE	67.46	0.00	11	Hydrogen peroxide	1	NO	NO
7969-350	LEXICON INTRINSIC BRAND FUNGICIDE	5.41	0.00	11	Fluxapyroxad; Pyraclostrobin	3	NO	NO
66222-134	THIOPHANATE METHYL 4.5 F	88.29	0.00	10	Thiophanate-methyl	3	YES	YES
68173-3	AFFIRM WDG	0.00	50.24	10	Polyoxin D zinc salt	3	NO	NO
59639-144	V-10116 VPP FUNGICIDE	0.00	131.28	9	Metconazole	3	NO	NO
67702-2	CAMELOT O FUNGICIDE/BACTERICIDE	7.41	0.00	8	Copper octanoate	3	NO	NO
70299-6	GREENCLEAN PRO GRANULAR ALGAECIDE/FUNGICIDE	0.00	685.00	8	Sodium percarbonate	1	NO	NO
70644-1	NUTROL	0.00	486.00	8	Phosphoric acid, monopotassium salt	3	NO	NO
66222-117	ORIOUS 3.6F	27.48	0.00	7	Tebuconazole	3	YES	NO
100-1323	HERITAGE G	0.00	210.00	7	Azoxystrobin	3	NO	NO
432-1371	COMPASS O 50 WDG FUNGICIDE	0.00	0.12	7	Trifloxystrobin	3	NO	NO
228-623	PRIMERAONE PROPICONAZOLE 14.3	6.61	0.00	6	Propiconazole	2	YES	NO
7969-290	INSIGNIA SC INTRINSIC BRAND FUNGICIDE	4.80	0.00	6	Pyraclostrobin	2	NO	NO
66222-216	QUALI-PRO MEFENOXAM 2AQ	4.02	0.00	6	Mefenoxam	2	NO	NO
70252-11	QUALI-PRO MEFENOXAM 2 AQ	2.19	0.00	6	Mefenoxam	3	NO	NO
9198-115	THE ANDERSONS TURF FUNGICIDE WITH 5.0% DACONIL	0.00	2,350.00	6	Chlorothalonil	1	YES	NO
50534-202	MANICURE ULTREX	0.00	405.00	6	Chlorothalonil	1	YES	NO
68539-3	T-22G BIOLOGICAL PLANT PROTECTANT GRANULES	0.00	25.50	6	Trichoderma harzianum rifai strain KRL-AG2	3	NO	NO
228-684	NUFARM IPRODIONE SPC FUNGICIDE	39.00	0.00	5	Iprodione	3	YES	NO
86064-2	ARMOR TECH CLT 720 FL	38.50	0.00	5	Chlorothalonil	2	YES	NO
432-1529	TEBUCONAZOLE SC TURF AND ORNAMENTAL FUNGICIDE	34.63	0.00	5	Tebuconazole	3	YES	NO
69361-27	TEBUCONAZOLE 3.6F FUNGICIDE	16.00	0.00	5	Tebuconazole	3	YES	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox. Cat.	EPA Carc in	CA Dev. Toxin
432-1360	BAYLETON 50 TURF AND ORNAMENTAL FUNGICIDE IN WATER	0.00	53.28	5	Triadimefon	3	YES	YES
432-1371	COMPASS	0.00	16.11	5	Trifloxystrobin	3	NO	NO
432-888	CHIPCO 26019 FLO BRAND FUNGICIDE	58.55	0.00	4	Iprodione	3	YES	NO
100-1347	CONCERT II	45.00	0.00	4	Propiconazole	1	YES	NO
432-1505	CHIPCO 26019T FUNGICIDE	37.40	0.00	4	Iprodione; Trifloxystrobin	3	YES	NO
100-741	LESCO SPECTATOR ULTRA 1.3 FUNGICIDE	33.51	0.00	4	Propiconazole	2	YES	NO
228-626	NUFARM T-METHYL PRO 4.5 F FUNGICIDE	18.00	0.00	4	Thiophanate-methyl	3	YES	YES
100-1433	BRISKWAY	8.25	0.00	4	Azoxystrobin; Difenoconazole	3	YES	NO
400-416	TERRAZOLE 35% WETTABLE POWDER	2.00	15.75	4	Terrazole	3	YES	NO
66222-161	QUALI-PRO FOSETYL - AL 80 WDG	0.00	196.00	4	Fosetyl-Al	3	NO	NO
50534-209	MANICURE 6 FLOWABLE	53.30	0.00	3	Chlorothalonil	3	YES	NO
1001-69	LESCO CAVALIER FLOWABLE	47.20	0.00	3	Thiophanate-methyl	3	YES	YES
60063-7	LESCO MANICRUE 6FL	31.00	0.00	3	Chlorothalonil	2	YES	NO
70506-304	ANDERSONS GOLF PRODUCTS FUNGO FLO	10.00	20.63	3	Thiophanate-methyl	3	YES	YES
100-1326	BANNER MAXX II	5.00	0.00	3	Propiconazole	3	YES	NO
100-796	SUBDUE MAXX	4.64	0.00	3	Mefenoxam	3	NO	NO
71512-13	SEGWAY FUNGICIDE	1.14	0.00	3	Cyazofamid	3	NO	NO
7969-255	HONOR FUNGICIDE	0.00	50.10	3	Nicobifen; Pyraclostrobin	3	YES	NO
81803-6	JET- AG	11.00	0.00	2	Hydrogen peroxide; Peroxyacetic acid	1	NO	NO
53883-375	QUALI-PRO IPRO 2SE	6.88	0.00	2	Iprodione	3	YES	NO
66222-41	PRIMEERAONE PROPICONAZOLA 14.3	3.84	0.00	2	Propiconazole	2	NO	NO
86064-4	ARMOR TECH PPZ 143 MC	1.72	0.00	2	Propiconazole	2	YES	NO
264-1155	CEASE	1.00	0.00	2	QST 713 strain of dried Bacillus subtilis	3	NO	NO
7969-349	Xzemplar Fungicide	0.58	0.00	2	Fluxapyroxad	3	NO	NO
66222-149	ARMOR TECH CLT 825	0.00	465.00	2	Chlorothalonil	2	YES	NO
432-1223	PROSTAR 70 WP	0.00	36.00	2	Flutolanil	3	NO	NO
53883-343	AZOXYSTROBIN 50 WG	0.00	2.50	2	Azoxystrobin	3	NO	NO
100-1434	MEDALLION WDG	0.00	0.10	2	Fludioxonil	3	NO	NO
53883-309	QUALI-PRO ENCLAVE 5.3F	20.00	0.00	1	Chlorothalonil; Thiophanate-methyl; Iprodione; Tebuconazole	3	YES	YES
464-693	CHEMICAR 15	17.00	0.00	1	Glutaraldehyde	1	NO	NO
228-684	PRIMERA ONE IPRDIONE 25E FUNGICIDE	7.50	0.00	1	Iprodione	3	YES	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox. Cat.	EPA Carc in	CA Dev. Toxin
100-1216	BANNER HERITAGE MAXX	6.40	0.00	1	Azoxystrobin; Propiconazole	3	YES	NO
432-889	CHIPCO 26019 FUNGICIDE	5.40	0.00	1	Iprodione	3	YES	NO
8033-122	TOPSIN 4.5FL FUNGICIDE	5.00	0.00	1	Thiophanate-methyl	3	YES	YES
66330-293	LESCO T-STORM FLOWABLE TURF & ORNAMENTAL FUNGICIDE	5.00	0.00	1	Thiophanate-methyl	3	NO	NO
100-892	ARBOTECT 20-S FUNGICIDE	1.81	0.00	1	Thiabendazole	3	NO	NO
87290-44	WILLOWOOD AZOXYSTROBIN 2.08SC	0.50	0.00	1	Azoxystrobin	3	NO	NO
7969-184	Insignia Fungicide	0.25	0.00	1	Pyraclostrobin	3	NO	NO
70870-1	MILSTOP BROAD SPECTRUM FOLIAR FUNGICIDE	0.02	0.00	1	Potassium bicarbonate	3	NO	NO
10163-274	RUBIGAN A.S. TURF AND ORNAMENTAL	0.00	0.00	1	Fenarimol	3	NO	NO
70506-185	PENNCOZEB 75 DF	0.00	96.00	1	Mancozeb	3	YES	NO
7969-196	EMERALD FUNGICIDE	0.00	14.00	1	Nicobifen	2	YES	NO
70051-117	ARMICARB 100	0.00	1.25	1	Potassium bicarbonate	3	NO	NO
62388-1	NOGALL	0.00	1.10	1	Agrobacterium radiobacter strain K1026	3	NO	NO
Other (Repellents, Biochemical Pesticides, Etc.)								
60061-71	PETTIT MARINE PAINT PREMIUM SINGLE SEASON ABLATIVE	23.00	0.00	15	Copper oxide (ous)	2	NO	NO
59807-4	HORMODIN 1	0.00	1.19	10	IBA	3	NO	NO
71096-7	ORTHO BUG-GETA SNAIL & SLUG KILLER 1	0.00	1.50	6	Metaldehyde	3	NO	NO
73049-15	PROGIBB 4% PLANT GROWTH REGULATOR SOLUTION	0.00	0.00	5	Gibberellins	2	NO	NO
1448-212	CHEMICIDE 100-15	16.00	0.00	1	Poly(oxyethylene) (dimethylimino) ethylene (dimethylimino) ethylene dichloride	3	NO	NO
67702-3	NEU1165M SLUG AND SNAIL BAIT	0.00	4.00	1	Iron phosphate	3	NO	NO

APPENDIX 2: Complete Listing of Pesticide Products Used by the Department of Parks and Recreation in 2015

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Rodenticides								
12455-79	CONTRAC ALL-WEATHER BLOX	0.00	302.13	585	Bromadiolone	3	NO	NO
7173-218	GENERATION MINI BLOCKS	0.00	149.62	215	Difethialone	3	NO	NO
12455-106	TERAD3 BLOX	0.29	76.25	209	Cholecalciferol	3	NO	NO
12455-86	CONTRAC RODENTICIDE PLACE PAC	0.00	80.94	124	Bromadiolone	3	NO	NO
12455-139	Final Soft Bait	0.00	25.38	101	Brodifacoum	3	NO	NO
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	32.77	60	Difethialone	3	NO	NO
12455-69	CONTRAC RODENTICIDE	0.00	25.29	55	Bromadiolone	3	NO	NO
12455-36	CONTRAC RAT AND MOUSE BAIT	0.00	33.13	53	Bromadiolone	3	NO	NO
100-1055	WEATHERBLOK BAIT WITH BITREX	0.00	1.50	49	Brodifacoum	3	NO	NO
12455-75	CONTRAC RAT AND MOUSE BAIT READY TO USE PLACE PAC	0.00	14.19	42	Bromadiolone	3	NO	NO
12455-17	ZP RODENT BAIT AG	0.00	4.75	35	Zinc phosphide	3	NO	NO
7173-202	MAKI MINI BLOCKS	0.00	18.31	26	Bromadiolone	3	NO	NO
7173-236	D-CON RAT & MOUSE BAIT BLOCKS II RODENT CONTROL	0.00	1.41	9	Insecticide	3	NO	NO
7173-188	MAKI RAT AND MOUSE BAIT PACKS (PELLETS)	0.00	1.94	3	Bromadiolone	3	NO	NO
36488-63	DIFENACOUM RAT AND MOUSE BLOCK IV	0.00	3.75	1	Difenacoum	3	NO	NO
Insecticides								
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	4.09	291	Indoxacarb	3	NO	NO
432-763	SUSPEND SC	0.21	0.01	82	Deltamethrin	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	15.00	0.80	78	Indoxacarb	3	NO	NO
48813-1	SUFFOIL-X	6.82	0.00	36	Petroleum distillates	3	NO	NO
100-1489	DUPONT ACELEPRYN INSECTICIDE	9.28	0.00	21	DPX-E2Y45	0	NO	NO
70506-24	UP-STAR GOLD INSECTICIDE	39.74	0.00	19	Bifenthrin	3	YES	NO
70506-23	UP-STAR SC LAWN AND NURSERY INSECTICIDE/MITICIDE	11.88	0.00	19	Bifenthrin	3	YES	NO
83100-6	PRIMERAONE IMIDACLOPRID 2F INSECTICIDE	1.18	0.00	19	Imidacloprid	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
100-1088	SCIMITAR GC INSECTICIDE	3.51	0.00	16	Cyhalothrin, lambda	3	NO	NO
70051-2	TRIACT 70	1.88	0.00	16	Neem oil	3	NO	NO
9688-190	SPECTRACIDE DESTROYER BRAND WASP & HORNET KILLER	0.00	21.25	16	Cyhalothrin, lambda; Prallethrin	3	NO	NO
64405-2	REDZONE BAIT	0.00	1.13	16	Boric acid	3	NO	NO
53883-371	QUALI-PRO ABAMECTIN 0.15 EC	0.65	0.00	14	Avermectin	2	NO	NO
59639-96	DISTANCE INSECT GROWTH REGULATOR	0.19	0.00	14	Pyriproxyfen	3	NO	NO
279-3287	FLONICAMID 50SG INSECTICIDE	0.00	0.90	14	Flonicamid	3	NO	NO
69526-5	PURESpray SPRAY OIL 10E	25.68	0.00	12	Mineral oil	3	NO	NO
53883-145	LAMBDA 9.7 EW INSECTICIDE	5.53	0.00	12	Cyhalothrin, lambda	2	NO	NO
8033-106	TRISTAR 8.5 SL INSECTICIDE	0.50	0.00	11	Acetamiprid	3	NO	NO
73049-39	DIPEL DF DRY FLOWABLE BIOLOGICAL INSECTICIDE	0.00	1.95	10	Bacillus thuringiensis, subsp. Kurstaki, strain ABTS-351, fermentation solids and solubles	3	NO	NO
400-508	FLORAMITE SC	0.04	0.00	9	Bifenazate	3	NO	NO
432-1318	LESCO SYSTEMIC INSECTICIDE CONTAINS MERIT IN WATER SOLUBLE PACKETS	0.00	40.03	9	Imidacloprid	3	NO	NO
100-1487	PROVAUNT	0.00	77.76	8	Indoxacarb	3	NO	NO
64405-2	ECOLOGICAL ANT & INSECT BAIT	0.00	0.76	8	Boric acid	3	NO	NO
432-1312	GARANT T&O 2F	4.06	0.00	7	Imidacloprid	3	NO	NO
83100-5	LUCID ORNAMENTAL MITICIDE/INSECTICIDE	0.10	0.00	7	Avermectin	2	NO	NO
432-1369	MARATHON II GREENHOUSE AND NURSERY INSECTICIDE	0.02	0.00	7	Imidacloprid	3	NO	NO
432-1457	MERIT FXT TABLET INSECTICIDE	0.00	7.56	7	Imidacloprid	3	NO	NO
432-1233	SKEETER-MITE 150-750 ULV	0.00	7.13	7	Permethrin; Piperonyl butoxide	3	YES	NO
66222-19	CHLORPYRIFOS 4E	7.78	0.00	6	Chlorpyrifos	2	NO	NO
86203-11	SAFARI 20SG INSECTICIDE	0.00	1.43	6	Dinotefuran	3	NO	NO
432-1506	MAXFORCE QUANTUM ANT BAIT	0.00	0.22	6	Imidacloprid	3	NO	NO
2724-351	ZOECON GENCOR 9% EMULSIFIABLE CONCENTRATE	0.58	0.00	5	(7S)-Hydroprene	3	NO	NO
70051-27	AZANTIN XL BIOLOGICAL INSECTICIDE	0.16	0.00	5	Azadirachtin	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
62719-291	CONSERVE SC TURF AND ORNAMENTAL	0.14	0.00	5	Spinosad	3	NO	NO
70506-121	UPI-2005 EXP-06 RUP INSECTICIDE	0.11	0.00	5	Cyhalothrin, lambda	2	NO	NO
432-1471	KONTOS	0.07	0.00	5	Spirotetramat	3	NO	NO
53883-229	QUALI-PRO IMIDACLOPRID 2F TURF & ORNAMENTAL INSECT	3.78	0.00	4	Imidacloprid	3	NO	NO
2724-476	ENSTAR II INSECT GROWTH REGULATOR (ENSTAR 5E)	0.27	0.00	4	(S)-Kinoprene	2	NO	NO
432-1460	MAXFORCE FC ROACH KILLER BAIT GEL F.05	0.00	0.12	4	Fipronil	3	YES	NO
279-3155	TALSTAR NURSERY FLOWABLE INSECTICIDE/MITICIDE	3.31	0.00	3	Bifenthrin	3	YES	NO
100-1018	CYPERMETHRIN CONCENTRATE	2.11	0.00	3	Cypermethrin, beta	2	YES	NO
53883-244	QUALI-PRO LAMBDA GC-0	0.76	0.00	3	Cyhalothrin, lambda	2	NO	NO
228-708	NUFARM LAMBDA-CYHALOTHRIN 1 EC INSECTICIDE	0.48	0.00	3	Cyhalothrin, lambda	2	NO	NO
4-80	BONIDE HORTICULTURAL AND DORMANT SPRAY OIL	0.15	0.00	3	Mineral oil	3	NO	NO
42697-60	SAFER BRAND O-INSECTICIDAL SOAP CONCENTRATE	0.02	0.00	3	Potassium laurate	2	NO	NO
10163-326	CAPTIVA	0.00	0.00	3	Garlic; Resins, oleo-, capsicum; Soybean oil	3	NO	NO
432-1464	DYLOX 420 SL TURF AND ORNAMENTAL INSECTICIDE	48.00	0.00	2	Trichlorfon	3	YES	NO
42750-115	IMIDIPO SYSTEMIC INSECTICIDE	4.30	0.00	2	Imidacloprid	3	NO	NO
228-588	MALLET 75 WP	0.00	18.66	2	Imidacloprid	3	NO	NO
66222-199	QUALI-PRO IMIDACLOPRID 75 WSB	0.00	13.50	2	Imidacloprid	3	NO	NO
432-1402	DECATHLON 20 WP GREENHOUSE AND NURSERY INSECTICIDE	0.00	0.10	2	Cyfluthrin	3	NO	NO
432-772	DELTA DUST	0.00	0.09	2	Deltamethrin	3	NO	NO
432-1264	MAXFORCE FC ANT KILLER BAIT GEL	0.00	0.03	2	Fipronil	3	YES	NO
228-624	NUFARM CHLORPYRIFOS SPC 4 INSECTICIDE	27.00	0.00	1	Chlorpyrifos	2	NO	NO
83100-6	LADA 2F INSECTICIDE	6.00	0.00	1	Imidacloprid	3	NO	NO
100-1551	Ference	0.75	0.00	1	Cyantraniliprole	0	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
38167-36	AMTIDE IMIDACLOPRID 2F INSECTICIDE	0.30	0.00	1	Imidacloprid	3	NO	NO
70051-9	SUPERNEEM 4.5-B	0.03	0.00	1	Azadirachtin	2	NO	NO
10163-324	M-PEDE INSECTICIDE/FUNGI CIDE	0.01	0.00	1	Potassium laurate	2	NO	NO
71711-4	SEPRO AKARI 5SC MITICIDE/INSECTICI DE	0.00	0.00	1	Fenpyroximate	2	NO	NO
432-763	SUSPEND SC INSECTICIDE	0.00	0.00	1	Deltamethrin	3	NO	NO
228-620	NUFARM CHLORPYRIFOS SPC 2.32% G INSECTICIDE	0.00	75.00	1	Chlorpyrifos	3	NO	NO
432-1363	TEMPO SC INSECTICIDE	0.00	3.31	1	Cyfluthrin, beta	3	NO	NO
228-501	MALLET 0.5 G INSECTICIDE	0.00	2.00	1	Imidacloprid	3	NO	NO
6218-47	ANTI-MOS BRIQUETS	0.00	0.17	1	Bacillus thuringiensis subspecies Israelensis strain BMP 144	3	NO	NO
499-496	PRESCRIPTION TREATMENT BRAND ADVANCE 360A DUAL CHOICE ANT BAIT STATIONS	0.00	0.00	1	Avermectin	3	NO	NO
432-1259	PRODUCT: RBF5	0.00	0.00	1	Fipronil	3	YES	NO
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	4.09	291	Indoxacarb	3	NO	NO
432-763	SUSPEND SC	0.21	0.01	82	Deltamethrin	3	NO	NO
Herbicides								
524-579	ROUNDUP PROMAX	269.04	158.23	1,221	Glyphosate, potassium salt	3	NO	NO
62719-556	ACCORD XRT II	334.10	2.81	362	Glyphosate, dimethylammoniu m salt	3	NO	NO
62719-527	GARLON 4 ULTRA	68.10	0.00	264	Triclopyr	2	NO	NO
62719-324	GLYPRO	58.01	0.00	123	Glyphosate, isopropylamine salt	3	NO	NO
100-937	PRIMO MAXX	16.69	0.00	54	Trinexapac-ethyl	3	NO	NO
53883-373	QUALI-PRO T-NEX 1 AQ	80.11	0.00	44	Trinexapac-ethyl	3	NO	NO
524-529	ROUNDUP PRO CONCENTRATE	33.17	0.00	43	Glyphosate, isopropylamine salt	3	NO	NO
62719-542	DIMENSION 2EW	28.26	4.38	25	Dithiopyr	2	NO	NO
86064-3	ARMOR TECH PGR 113 MC	4.33	0.00	24	Trinexapac-ethyl	3	NO	NO
62719-305	LONTREL TURF AND ORNAMENTAL	0.38	0.00	19	Clopyralid	3	NO	NO
62719-445	DIMENSION* ULTRA 40WP	0.00	127.44	19	Dithiopyr	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
9198-213	THE ANDERSONS 0.25% GRANULAR DITHIOPYR HERBICIDE	0.00	3,350.50	18	Dithiopyr	3	NO	NO
228-317	COOL POWER SELECTIVE HERBICIDE	1.77	0.00	17	Dicamba; MCPA, 2-ethyl hexyl ester; Triclopyr, butoxyethyl ester	3	NO	NO
62719-566	TURFLON ESTER ULTRA	1.15	0.01	16	Triclopyr, butoxyethyl ester	3	NO	NO
62719-517	ACCORD XRT	1.16	0.00	13	Glyphosate, isopropylamine salt	3	NO	NO
524-475	ROUNDUP ULTRA HERBICIDE	16.41	0.00	11	Glyphosate, isopropylamine salt	3	NO	NO
70299-23	AXXE BROAD SPECTRUM HERBICIDE	59.75	0.00	9	Nonanoic acid, ammonium salt	2	NO	NO
82052-1	AVENGER WEED KILLER CONCENTRATE	5.25	0.00	9	Limonene	3	NO	NO
62719-40	GARLON 4	0.63	0.00	9	Triclopyr, butoxyethyl ester	3	NO	NO
62719-176	PATHFINDER II	0.91	0.00	8	Triclopyr, butoxyethyl ester	3	NO	NO
100-1267	TENACITY	0.47	0.00	7	Mesotrione	3	NO	NO
10404-44	LESCO THREE-WAY BENTGRASS SELECTIVE HERBICIDE	72.50	0.00	6	2,4-D, dimethylamine salt; Dicamba, dimethylamine salt; MCPP-P, dimethylamine salt	3	NO	NO
100-1014	PACLOBUTRAZOL 2SC	3.70	0.00	6	Paclobutrazol	3	NO	NO
66330-276	DICAMBA DMA 4# AG	1.83	0.00	6	Dicamba, dimethylamine salt	2	NO	NO
53883-374	QUALI-PRO DITHIOPYR 40 WSB	0.00	26.25	6	Dithiopyr	3	NO	NO
432-1230	PROXY GROWTH REGULATOR	104.50	0.00	5	Ethephon	1	NO	NO
432-950	ACCLAIM EXTRA HERBICIDE	0.58	0.00	5	Fenoxaprop-P (+)	3	NO	NO
4-484	AGWAY KLEENUP GRASS & WEED KILLER CONCENTRATE	0.03	0.00	5	Glyphosate, isopropylamine salt	2	NO	NO
279-3419	F7275 70 WG HERBICIDE	0.00	1.69	5	Carfentrazone- ethyl; Quinclorac	3	NO	NO
228-711	NUFARM PROSEDGE SELECTIVE HERBICIDE2	0.00	0.17	5	Halosulfuron- methyl	3	NO	NO
81880-1	SEDGEHAMMER	0.00	0.12	5	Halosulfuron- methyl	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
228-453	BATTLESHIP 3	8.09	0.00	4	MCPA, dimethylamine salt; Triclopyr, triethylamine salt; Fluroxypyr 1-methylheptyl ester	1	NO	NO
74779-3	CAMBISTAT	1.60	0.00	4	Paclobutrazol	3	NO	NO
264-267	PROXY	20.89	0.00	3	Ethephon	1	NO	NO
524-517	ACCORD XL HERBICIDE	0.37	0.00	3	Glyphosate, isopropylamine salt	3	NO	NO
524-475	ROUNDUP ULTRA	0.31	0.00	3	Glyphosate, isopropylamine salt	3	NO	NO
279-3265	F8426 HERBICIDE	0.19	0.00	3	Carfentrazone-ethyl	3	NO	NO
2217-833	SPEED ZONE BROADLEAF HERBICIDE	27.00	0.00	2	2,4-D, 2-ethylhexyl ester; Carfentrazone-ethyl; Dicamba; Mecroprop-p	3	YES	NO
10404-43	LESCO THREE-WAY SELECTIVE HERBICIDE	10.66	0.00	2	2,4-D, dimethylamine salt; Dicamba, dimethylamine salt; MCP-P, dimethylamine salt	1	NO	NO
538-317	0.08% MESO + FERTILIZER	0.00	538.00	2	Mesotrione	3	NO	NO
9198-65	THE ANDERSONS CRABGRASS PREVENTER WITH 4.7% TUPERSAN	0.00	160.00	2	Siduron	3	NO	NO
2217-696	BETAMEC 4 PRE-EMERGENCE GRASS KILLER	13.00	0.00	1	Bensulide	3	NO	NO
7969-88	POAST PLUS HERBICIDE	12.50	0.00	1	Sethoxydim	3	NO	NO
42750-144	BW III	4.25	0.00	1	2,4-D; Dicamba	1	NO	NO
2217-656	ENDRUN	3.25	0.00	1	2,4-D, dimethylamine salt; Dicamba, dimethylamine salt; MCP-P, dimethylamine salt	1	NO	NO
2217-759	EMBARK 2-S PLANT GROWTH REGULATOR	2.63	0.00	1	Mefluidide, diethanolamine salt	3	NO	NO
2217-768	EMBARK E-Z-TU-USE PLANT GROWTH REGULATOR	0.75	0.00	1	Mefluidide, diethanolamine salt	3	NO	NO
7969-272	DRIVE XLR8 HERBICIDE	0.50	0.00	1	Quinclorac	3	NO	NO
53883-336	QUINCLORAC 1.5 L	0.09	0.00	1	Quinclorac, Dimethylamine Salt	3	NO	NO
10404-85	0.10% DIMENSION PLUS FERTILIZER	0.00	1,000.00	1	Dithiopyr	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
9198-176	ANDERSON'S GOOSE/CRABGRASS CONTROL	0.00	300.00	1	Bensulide; Oxadiazon	2	YES	YES
62719-483	CHOICE TURF PREMIUM LAWN CARE FERTILIZER WITH DIMENSION 0.125% HERBICI	0.00	200.00	1	Dithiopyr	3	NO	NO
961-405	LEBANON TRIFLURALIN G-5	0.00	100.00	1	Trifluralin	3	YES	NO
10163-213	GORDON'S PROFESSIONAL TURF & ORNAMENTAL PRODUCTS TUPERSAN HERBICIDE	0.00	48.00	1	Siduron	3	NO	NO
81927-36	ALLIGARE PRODIAMINE 65 WG HERBICIDE	0.00	15.00	1	Prodiamine	3	YES	NO
Fungicides								
100-1364	DACONIL ACTION	519.55	5.00	85	Acibenzolar-S-methyl; Chlorothalonil	2	YES	NO
100-1093	HERITAGE FUNGICIDE	0.00	134.91	61	Azoxystrobin	3	NO	NO
71065-3	COMPANION LIQUID BIOLOGICAL FUNGICIDE	315.50	0.00	51	Bacillus subtilis GBO3	3	NO	NO
228-630	LESCO TWOSOME FUNGICIDE	120.01	0.00	37	Iprodione; Thiophanate-methyl	3	YES	YES
55260-9	PROPLANT TURF AND ORNAMENTAL FUNGICIDE	83.36	0.00	36	Propamocarb hydrochloride	3	NO	NO
70127-2	NOVOZYMES BIOFUNGICIDE GREEN RELEAF 710-140	101.00	0.00	22	Bacillus licheniformis SB3086; IBA	3	NO	NO
432-1445	BAYLETON FLO TURF AND ORNAMENTAL FUNGICIDE	15.30	0.00	22	Triadimefon	3	YES	YES
50534-202	MANICURE ULTREX TURF & ORNAMENTAL	0.00	857.70	22	Chlorothalonil	1	YES	NO
84059-3	REGALIA PTO BIOFUNGICIDE FOR USE ON TURF AND ORNAMENTALS	46.30	0.00	20	Reynoutria sachalinensis	3	NO	NO
60063-3	LESCO MANICURE ULTRA	0.00	640.00	19	Chlorothalonil	2	YES	NO
264-1155	RHAPSODY AS0	186.40	0.00	17	QST 713 strain of dried Bacillus subtilis	3	NO	NO
432-890	LESCO PRODIGY SIGNATURE	0.00	829.00	17	Fosetyl-AI	3	NO	NO
432-942	LESCO BANOT TURF AND ORNAMENTAL FUNGIIDE	21.16	0.00	15	Propamocarb hydrochloride	3	NO	NO
7969-224	CURALAN EG	0.00	771.11	15	Vinclozolin	3	YES	YES

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
66222-41	QUALI-PRO PROPICONAZOLE 14.3	75.24	0.00	14	Propiconazole	2	NO	NO
432-1446	TARTAN FLO FUNGICIDE	26.29	0.00	13	Triadimefon; Trifloxystrobin	3	YES	YES
228-623	NUFARM PROPICONAZOLE SPC 14.3 MEC FUNGICIDE	0.45	0.00	13	Propiconazole	2	YES	NO
86064-1	ARMORTECH CLT 825 DF	0.00	270.00	13	Chlorothalonil	2	YES	NO
66222-150	EQUUS 500 ZN	157.71	0.00	12	Chlorothalonil	2	YES	NO
84229-44	AMTIDE TEBU 3.6F FOLIAR FUNGICIDE	36.63	0.00	12	Tebuconazole	3	YES	NO
62719-388	FORE 80WP RAINSHIELD	0.00	600.00	12	Mancozeb	3	YES	NO
70506-241	IPRODIONE 2F FUNGICIDE	124.00	0.00	11	Iprodione	3	YES	NO
70299-1	ZEROTOL ALGAECIDE/FUNGIC IDE	67.46	0.00	11	Hydrogen peroxide	1	NO	NO
7969-350	LEXICON INTRINSIC BRAND FUNGICIDE	5.41	0.00	11	Fluxapyroxad; Pyraclostrobin	3	NO	NO
66222-134	THIOPHANATE METHYL 4.5 F	88.29	0.00	10	Thiophanate- methyl	3	YES	YES
68173-3	AFFIRM WDG	0.00	50.24	10	Polyoxin D zinc salt	3	NO	NO
59639-144	V-10116 VPP FUNGICIDE	0.00	131.28	9	Metconazole	3	NO	NO
67702-2	CAMELOT O FUNGICIDE/BACTER ICIDE	7.41	0.00	8	Copper octanoate	3	NO	NO
70299-6	GREENCLEAN PRO GRANULAR ALGAECIDE/FUNGIC IDE	0.00	685.00	8	Sodium percarbonate	1	NO	NO
70644-1	NUTROL	0.00	486.00	8	Phosphoric acid, monopotassium salt	3	NO	NO
66222-117	ORIOUS 3.6F	27.48	0.00	7	Tebuconazole	3	YES	NO
100-1323	HERITAGE G	0.00	210.00	7	Azoxystrobin	3	NO	NO
432-1371	COMPASS O 50 WDG FUNGICIDE	0.00	0.12	7	Trifloxystrobin	3	NO	NO
228-623	PRIMERAONE PROPICONAZOLE 14.3	6.61	0.00	6	Propiconazole	2	YES	NO
7969-290	INSIGNIA SC INTRINSIC BRAND FUNGICIDE	4.80	0.00	6	Pyraclostrobin	2	NO	NO
66222-216	QUALI-PRO MEFENOXAM 2AQ	4.02	0.00	6	Mefenoxam	2	NO	NO
70252-11	QUALI-PRO MEFENOXAM 2 AQ	2.19	0.00	6	Mefenoxam	3	NO	NO
9198-115	THE ANDERSONS TURF FUNGICIDE WITH 5.0% DACONIL	0.00	2,350.00	6	Chlorothalonil	1	YES	NO
50534-202	MANICURE ULTREX	0.00	405.00	6	Chlorothalonil	1	YES	NO
68539-3	T-22G BIOLOGICAL PLANT PROTECTANT GRANULES	0.00	25.50	6	Trichoderma harzianum rifai strain KRL-AG2	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
228-684	NUFARM IPRIDIONE SPC FUNGICIDE	39.00	0.00	5	Iprodione	3	YES	NO
86064-2	ARMOR TECH CLT 720 FL	38.50	0.00	5	Chlorothalonil	2	YES	NO
432-1529	TEBUCONAZOLE SC TURF AND ORNAMENTAL FUNGICIDE	34.63	0.00	5	Tebuconazole	3	YES	NO
69361-27	TEBUCONAZOLE 3.6F FUNGICIDE	16.00	0.00	5	Tebuconazole	3	YES	NO
432-1360	BAYLETON 50 TURF AND ORNAMENTAL FUNGICIDE IN WATER	0.00	53.28	5	Triadimefon	3	YES	YES
432-1371	COMPASS	0.00	16.11	5	Trifloxystrobin	3	NO	NO
432-888	CHIPCO 26019 FLO BRAND FUNGICIDE	58.55	0.00	4	Iprodione	3	YES	NO
100-1347	CONCERT II	45.00	0.00	4	Propiconazole	1	YES	NO
432-1505	CHIPCO 26019T FUNGICIDE	37.40	0.00	4	Iprodione; Trifloxystrobin	3	YES	NO
100-741	LESCO SPECTATOR ULTRA 1.3 FUNGICIDE	33.51	0.00	4	Propiconazole	2	YES	NO
228-626	NUFARM T-METHYL PRO 4.5 F FUNGICIDE	18.00	0.00	4	Thiophanate-methyl	3	YES	YES
100-1433	BRISKWAY	8.25	0.00	4	Azoxystrobin; Difenconazole	3	YES	NO
400-416	TERRAZOLE 35% WETTABLE POWDER	2.00	15.75	4	Terrazole	3	YES	NO
66222-161	QUALI-PRO FOSETYL -AL 80 WDG	0.00	196.00	4	Fosetyl-Al	3	NO	NO
50534-209	MANICURE 6 FLOWABLE	53.30	0.00	3	Chlorothalonil	3	YES	NO
1001-69	LESCO CAVALIER FLOWABLE	47.20	0.00	3	Thiophanate-methyl	3	YES	YES
60063-7	LESCO MANICRUE 6FL	31.00	0.00	3	Chlorothalonil	2	YES	NO
70506-304	ANDERSONS GOLF PRODUCTS FUNGO FLO	10.00	20.63	3	Thiophanate-methyl	3	YES	YES
100-1326	BANNER MAXX II	5.00	0.00	3	Propiconazole	3	YES	NO
100-796	SUBDUE MAXX	4.64	0.00	3	Mefenoxam	3	NO	NO
71512-13	SEGWAY FUNGICIDE	1.14	0.00	3	Cyazofamid	3	NO	NO
7969-255	HONOR FUNGICIDE	0.00	50.10	3	Nicobifen; Pyraclostrobin	3	YES	NO
81803-6	JET- AG	11.00	0.00	2	Hydrogen peroxide; Peroxyacetic acid	1	NO	NO
53883-375	QUALI-PRO IPRO 2SE	6.88	0.00	2	Iprodione	3	YES	NO
66222-41	PRIMEERAONE PROPICONAZOLA 14.3	3.84	0.00	2	Propiconazole	2	NO	NO
86064-4	ARMOR TECH PPZ 143 MC	1.72	0.00	2	Propiconazole	2	YES	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
264-1155	CEASE	1.00	0.00	2	QST 713 strain of dried Bacillus subtilis	3	NO	NO
7969-349	Xzemplar Fungicide	0.58	0.00	2	Fluxapyroxad	3	NO	NO
66222-149	ARMOR TECH CLT 825	0.00	465.00	2	Chlorothalonil	2	YES	NO
432-1223	PROSTAR 70 WP	0.00	36.00	2	Flutolanil	3	NO	NO
53883-343	AZOXYSTROBIN 50 WG	0.00	2.50	2	Azoxystrobin	3	NO	NO
100-1434	MEDALLION WDG	0.00	0.10	2	Fludioxonil	3	NO	NO
53883-309	QUALI-PRO ENCLAVE 5.3F	20.00	0.00	1	Chlorothalonil; Thiophanate-methyl; Iprodione; Tebuconazole	3	YES	YES
464-693	CHEMICAR 15	17.00	0.00	1	Glutaraldehyde	1	NO	NO
228-684	PRIMERA ONE IPRDIONE 25E FUNGICIDE	7.50	0.00	1	Iprodione	3	YES	NO
100-1216	BANNER HERITAGE MAXX	6.40	0.00	1	Azoxystrobin; Propiconazole	3	YES	NO
432-889	CHIPCO 26019 FUNGICIDE	5.40	0.00	1	Iprodione	3	YES	NO
8033-122	TOPSIN 4.5FL FUNGICIDE	5.00	0.00	1	Thiophanate-methyl	3	YES	YES
66330-293	LESCO T-STORM FLOWABLE TURF & ORNAMENTAL FUNGICIDE	5.00	0.00	1	Thiophanate-methyl	3	NO	NO
100-892	ARBOTECT 20-S FUNGICIDE	1.81	0.00	1	Thiabendazole	3	NO	NO
87290-44	WILLOWOOD AZOXYSTROBIN 2.08SC	0.50	0.00	1	Azoxystrobin	3	NO	NO
7969-184	Insignia Fungicide	0.25	0.00	1	Pyraclostrobin	3	NO	NO
70870-1	MILSTOP BROAD SPECTRUM FOLIAR FUNGICIDE	0.02	0.00	1	Potassium bicarbonate	3	NO	NO
10163-274	RUBIGAN A.S. TURF AND ORNAMENTAL	0.00	0.00	1	Fenarimol	3	NO	NO
70506-185	PENNZOZEB 75 DF	0.00	96.00	1	Mancozeb	3	YES	NO
7969-196	EMERALD FUNGICIDE	0.00	14.00	1	Nicobifen	2	YES	NO
70051-117	ARMICARB 100	0.00	1.25	1	Potassium bicarbonate	3	NO	NO
62388-1	NOGALL	0.00	1.10	1	Agrobacterium radiobacter strain K1026	3	NO	NO
Other (Repellents, Biochemical Pesticides, Etc.)								
60061-71	PETTIT MARINE PAINT PREMIUM SINGLE SEASON ABLATIVE	23.00	0.00	15	Copper oxide (ous)	2	NO	NO
59807-4	HORMODIN 1	0.00	1.19	10	IBA	3	NO	NO
71096-7	ORTHO BUG-GETA SNAIL & SLUG KILLER 1	0.00	1.50	6	Metaldehyde	3	NO	NO
73049-15	PROGIBB 4% PLANT GROWTH REGULATOR SOLUTION	0.00	0.00	5	Gibberellins	2	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
1448-212	CHEMICIDE 100-15	16.00	0.00	1	Poly(oxyethylene) (dimethylimino) ethylene (dimethylimino) ethylene dichloride	3	NO	NO
67702-3	NEU1165M SLUG AND SNAIL BAIT	0.00	4.00	1	Iron phosphate	3	NO	NO

APPENDIX 3: Complete Listing of “Best Management Practices” Insecticides Used Citywide in 2015

EPA Reg. #	EPA Prod Name	Volume in Gallons	Weight in Pounds	Total Applications	Active Ingredient Data
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.03	119.75	6,087	Indoxacarb
73049-429	VECTOMAX FG	0.00	1650.04	4,994	Bacillus sphaericus; Bacillus thuringiensis, subsp. Israelensis, strain AM 65-52
432-1460	MAXFORCE FC ROACH KILLER BAIT GEL F.05	0.02	174.26	3,871	Fipronil
432-1259	PRODUCT: RBF5	0.80	174.66	3,335	Fipronil
1021-1828	MGK ROACH BAIT 2822	0.01	49.76	2,011	Avermectin
432-1257	MAXFORCE ROACH BAIT F.05	0.00	49.50	1,233	Fipronil
62577-12	ECOPCO ACU	82.34	6.89	1,075	Phenylethyl propionate
64405-2	ECOLOGICAL ANT & INSECT BAIT	0.02	210.98	1,027	Boric acid
100-1498	DUPONT ADVION ANT GEL	155.00	25.23	1,023	Indoxacarb
73766-1	GOURMET ANT BAIT GEL	0.70	22.22	743	Disodium octaborate tetrahydrate
73049-20	VECTOLEX CG BIOLOGICAL LARVICIDE	0.00	2451.31	696	Bacillus sphaericus
73079-4	BORACTIN INSECTICIDE POWDER	0.00	91.03	336	Boric acid
64405-2	REDZONE BAIT	0.00	56.97	325	Boric acid
499-406	AVERT PRESCRIPTION TREATMENT TC 93A BAIT	0.00	3.07	85	Avermectin
432-1262	MAXFORCE IBH10	1.62	4.18	74	Hydramethylnon
73049-19	VECTOBAC CG BIOLOGICAL LARVICIDE GRANULES	0.00	40800.00	66	Bacillus thuringiensis, subsp. Israelensis, strain AM 65-52
64405-8	NIBOR BORATE INSECTICIDE AND FUNGICIDE	35.15	0.63	51	Disodium octaborate tetrahydrate
432-1455	BES 0026 FLY SPOT BAIT	0.01	8.72	47	Imidacloprid; (Z)-9-Tricosene
100-1486	DUPONT ADVION COCKROACH BAIT ARENA	0.00	2.84	45	Indoxacarb
432-1264	MAXFORCE FC ANT KILLER BAIT GEL	0.40	1.23	37	Fipronil
48813-1	SUFFOIL-X	6.82	0.00	36	Petroleum distillates
432-1254	MAXFORCE PROFESSIONAL INSECT CONTROL ROACH KILLER	0.33	1.41	31	Hydramethylnon
432-1375	PRE-EMPT FLY BAIT	0.00	10.73	28	Imidacloprid; (Z)-9-Tricosene
100-1483	ADVION INSECT GRANULE	0.00	4.63	22	Indoxacarb
432-1256	MAXFORCE FC ANT BAIT STATIONS	0.00	0.84	22	Fipronil
1021-1603	NYLAR 10EC	28.25	0.00	17	Pyriproxyfen
70051-2	TRIACT 70	1.88	0.00	16	Neem oil
432-1255	MAXFORCE GRANULAR INSECT BAIT	0.34	1.19	16	Hydramethylnon
59639-96	DISTANCE INSECT GROWTH REGULATOR	0.19	0.00	14	Pyriproxyfen
100-1501	DUPONT ARILON INSECTICIDE	15.00	0.00	13	Indoxacarb

73049-57	VECTOLEX WDG BIOLOGICAL LARVICIDE WATER DISPERSIBLE GRANULE	0.00	136.06	12	Bacillus sphaericus 2362, serotype H5a5b, strain ABTS 1743 solids, spores and insecticidal toxins
73049-39	DIPEL DF DRY FLOWABLE BIOLOGICAL INSECTICIDE	0.00	1.95	10	Bacillus thuringiensis, subsp. Kurstaki, strain ABTS-351, fermentation solids and solubles
100-1487	PROVAUNT	0.00	77.76	8	Indoxacarb
73079-10	INVICT (TM) COCKROACH GEL	0.01	0.14	7	Imidacloprid
432-1506	MAXFORCE QUANTUM ANT BAIT	0.00	0.22	6	Imidacloprid
62719-291	CONSERVE SC TURF AND ORNAMENTAL	0.14	0.00	5	Spinosad
73079-2	INTICE GRANULAR BAIT	0.02	0.30	5	Boric acid
42697-60	SAFER BRAND O-INSECTICIDAL SOAP CONCENTRATE	0.02	0.00	3	Potassium laurate
73766-1	ADIOS ANT KILLER GEL	0.01	0.00	3	Disodium octaborate tetrahydrate
499-370	JOHNSON WAX PROFESSIONAL BRAND GRANULAR ANT BAIT	0.00	0.52	3	Avermectin
432-1258	MAXFORCE LARGE ROACH BAIT F.03	0.00	0.21	3	Fipronil
499-509	WHITMIRE DE 1606	0.00	0.28	2	Diatomaceous earth
100-1485	DUPONT ADVION ANT BAIT ARENA	0.00	0.06	2	Indoxacarb
73079-2	HASTA LA VISTA, ANT!	0.02	0.00	1	Boric acid
73766-1	ADIOS ANT & ROACH KILLER IN A GEL	0.01	0.00	1	Disodium octaborate tetrahydrate
10163-324	M-PEDE INSECTICIDE/FUNGICIDE	0.01	0.00	1	Potassium laurate
432-1260	MAXFORCE ANT BAIT F3	0.00	0.00	1	Fipronil
279-3385	DRAX ANT KILL GEL	0.00	1.06	1	Boric acid
279-3384	ROACH KIL COMMERCIAL	0.00	0.25	1	Boric acid
6218-47	ANTI-MOS BRIQUETS	0.00	0.17	1	Bacillus thuringiensis subspecies israelensis strain BMP 144
241-313	SIEGE PBS GEL INSECTICIDE	0.00	0.06	1	Hydramethylnon
1021-2593	MGK? Formula 2976	0.00	0.03	1	Avermectin; Pyriproxyfen
6218-47	SUMMIT B.T.I. BRIQUETS	0.00	0.03	1	Bacillus thuringiensis subspecies israelensis strain BMP 144