



# **Pesticide Use by New York City Agencies in 2019**

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# Pesticide Use by New York City Agencies in 2019

## 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 the city. New York State receives pesticide use data from all commercial applicators. New York City agencies' use in 2013 (the last year for which New York State data has been processed) accounted for an estimated 3% of the total volume of liquid pesticides, and 19% of the total pounds of solid pesticides applied within the five boroughs of New York City.

In 2019, 29 municipal agencies reported their pesticide use to DOHMH. This report summarizes pesticides applied by or on behalf of agencies on city-owned or -leased property.

Key findings include:

- Pesticides were applied 331,682 times by New York City agencies in 2019. Agencies used 7,119 gallons of liquid and 189,338 pounds of solid pesticide products (Table 1).
- As in previous years, roaches were the most commonly targeted pests in 2019, with rats, mosquitos, mice, and bed bugs making up the top 5 targets (by total number of applications in descending order) (Table 3).
- Most liquid pesticide products (51% by volume) used by City Agencies were fungicides, while most solid products (43% by weight) were rodenticides (Table 1). Excluding DOHMH mosquito larviciding conducted to prevent spread of West Nile Virus and other mosquito-borne diseases, increases the rodenticide percentage of solid pesticide products to over half (64% by weight).
- Insecticides
  - Insecticides were the most frequently applied type of pesticide, accounting for 69% of all applications (Table 1).
  - The volume of all liquid insecticides decreased 5% in 2019, compared with 2018 (Figure 2). This decline was due to a reduction in the number and volume of pyrethroids applications targeting roaches and bedbugs mostly at NYCHA (Figure 6).
  - Liquid pyrethroid products targeting cockroaches decreased 8% from 2018 to 2019, continuing a downward trend. Treatments targeting bedbugs also decreased 17% (Figure 6).
  - The use of solid mosquito larvicide by weight increased by 6% compared with 2018 after a steep increase in 2016 in response to Zika virus. Based on extensive mosquito surveillance in 2016 and 2017, the Health Department does not expect local Zika transmission.

- “Best Management Practices” (BMP) insecticide products (Appendix 3) include gel and bait insecticides with little potential for human exposure. They accounted for 50% of insecticide applications in 2019 versus only 36% in 2018. Much of this increase was due to multiple citywide applications of mosquito larvicide in sewer catch basins. BMP application amounts by weight to treat cockroaches increased by 36% in 2019 after more than doubling in 2017 and a slight decline in 2018 (Figure 4).
- Herbicides
  - Liquid herbicide product use remained low in 2019, relative to other liquid pesticides (Figure 2). Volume increased by 10%, but there was a 19% reduction in the use of glyphosate products, continuing a steady reduction in use since 2014 (Figure 3). Additionally the Parks Department is working to phase out the use of glyphosate products in areas of parks accessible to the public.
  - The use of solid herbicide products in 2019 increased 48% compared with 2018, driven by greater use of outdoor granular turf formulations, mainly on golf courses and large institutional lawns.
  - The Parks Department no longer applies pre-emergent herbicides near roadways or along walkways and perimeters of city parks.
- Rodenticides
  - Use of solid rodenticide products increased 31% by weight and 12% in the number of applications citywide, compared with 2018 (Figure 1). The DOHMH calibrates rodenticide use based on findings from neighborhood rat ‘indexing’.

# Pesticide Use by New York City Agencies in 2019

## 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 for pesticide use on property owned or leased by the City, including the prohibition of certain products, posting of warning notices prior to pesticide use, and the requirement that agencies report their pesticide use annually. With the enactment of Local Law 37, 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. By May 2006, use of pesticides classified by the EPA as of July 19, 2004, as possible, probable or known human carcinogens was prohibited. Finally, by November 2006, use of pesticides classified by the State of California’s Office of Environmental Health Hazard Assessment as developmental toxicants as of March 4, 2005 was prohibited.

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 DOHMH to issue a summary report to the City Council and the Mayor. This is the thirteenth annual summary report and fulfills these requirements. City agencies have made significant improvements to the quality and delivery of pesticide use data since the enactment of Local Law 37. In 2006, only three agencies provided data in an electronic format that enabled summarization. In 2019, all agencies reported data electronically.

## 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 DOHMH for pesticides applied during calendar year 2019.

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, the target pest, and the date and location the product was applied, and what agency or contractor applied it. 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, DOHMH links 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 they were 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 Microsoft 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.

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 and allows for the importation of data maintained by other electronic systems.

Where DOHMH was able to evaluate the completeness of these records, summary statistics are reported by agency. 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 have led to difficulty maintaining dependable and timely reporting at some agencies.
- Year-to-year variation in agency pesticide use can be due to many factors, including but not limited to changes in practice, budgets and the incidence of actual pest problems.
- Additionally the decisions on how to determine a single application, whether by entire buildings or by apartment or office suite, can significantly affect the reported amounts per applications and total number of applications in a year.

Despite the above-mentioned limitations, the data continue to improve over previous years with agency and contractor use of NYCPURS. Reporting errors, especially in reporting the incorrect units, were further reduced in 2019 due to continued increased use of the NYCPURS system with input standardization and consistent formatting.

In 2019, 99% of records were either imported or directly entered into the NYCPURS system, with remainder reported in electronic format outside of the NYCPURS system. We expect to see further improvements in the data over the next year as more agencies and contractors migrate 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. In 2019, DOHMH, Parks, and NYCHA continued and DOE began using dry ice (frozen CO<sub>2</sub>) as an alternative rodenticide in sensitive outdoor locations, such as nearby city parks and sensitive outdoor areas on school properties. DOHMH worked with federal and state regulators to receive approval for this new rodent control method in 2017, which has no risk of secondary poisoning to predatory animals. Some other common rodenticide products used by agencies in 2019 were: Contrac All-Weather Blox®, Contrac Rodenticide®, Weatherblok Bait with Bitrex® and Difethialone Paste Place Packs®.

In 2019, a total of 83,803 pounds of rodenticides were applied by City agencies, accounting for 44% by weight of all pesticides applied, and 64% by weight when excluding mosquito larvicides, which are a significant proportion of insecticides by weight (Table 1).

#### **Insecticides**

A total of 2,528 gallons and 67,615 pounds of insecticides were applied by New York City agencies in 2019, accounting for 36% by volume, and 36% by weight of the total applications. Biological insecticides applied to target mosquito larvae account for 86% of insecticides by weight (Table 1). When those products are excluded, 9,774 pounds of insecticides by weight were applied, making up 7% of solid pesticides applied. Insecticides used by NYC agencies in 2019 fell largely into three classes of products: conventional pyrethrins and pyrethroids, organophosphates and carbamates, and “Best Management Practices” (BMP) 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, cyhalothrin, esfenvalerate, and deltamethrin. Pyrethrin and pyrethroid products used by agencies in 2019 include Whitmere Optem ME PT 600®, Steri-Fab®, Demand CS Insecticide®, Temprid SC Insecticide®, Suspend SC Insecticide® and Tempo SC Insecticide®.

Together, pyrethrins and pyrethroids accounted in 2019 for 56% of total liquid insecticides applied by volume and 5% of solid insecticides by weight – 34% by weight when excluding mosquito larvicides. These products made up 46% of the total number of insecticide applications. There was a 5.3% decrease in pyrethroids applied by volume in 2019, largely due to decreased applications by NYCHA targeting roaches and bedbugs.

### ***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 2019 were outdoor applications of chlorpyrifos, acephate, and trichlorfon on some golf courses, which are exempt from use prohibitions. The only carbamate active ingredients applied in 2019 were carbaryl and methomyl. Organophosphate and carbamate products applied by agencies in 2019 include Orthene PCO Formula II®, Chlorpyrifos 4E AG®, Dylox 420 SL Turf and Ornamental Insecticide®, Sevin SL Carbaryl Insecticide®, and Golden Malrin RF-128 Fly Killer®.

These products remain a very small percentage of the insecticides used by city agencies, making up well below 1% of the total number of insecticide applications. Reports submitted by agencies showed that in 2019, the use of organophosphates and carbamates accounted for only 7% of total liquid insecticides applied by agencies by volume – a small increase from 2018 levels – and <1% of total solids by weight, even when excluding mosquito larvicides.

### ***“Best Management Practices” Insecticides***

The market offers several highly effective insecticide products with little or no potential risk for human exposure. 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 programs 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®, Vectomax FG®, Summit B.T.I. Briquets®, Vendetta Plus Cockroach Gel Bait®, and DuPont Advion Cockroach Gel Bait®.

In 2019, 25% of the total insecticides applied by volume, and 93% by weight, were insecticidal dusts, gels and baits, or biological larvicides. Excluding mosquito larvicides, the totals equal 54% of solid insecticide products by weight. These products made up 36% of the total number of insecticide applications, a 66% increase in the number of applications compared with 2018, mostly due to citywide larvaciding in sewer catch basins.

## Herbicides

New York City agencies used herbicides in 2019 primarily for vegetation control in parks and for the maintenance of highways and street medians. The active ingredients most commonly used were glyphosate, dinitroanilines, chlorophenoxyacetic acids and ureas. A total of 810 gallons and 30,287 pounds of herbicides were applied in 2019, accounting for 11% of total volume and 16% of total weight overall, or 23% when excluding mosquito larvaciding. (Table 1)

### *Glyphosate*

Some of the most heavily used liquid herbicides 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.” However, a risk assessment by the European Food Safety Authority (EFSA) determined that glyphosate is “unlikely to pose a carcinogenic hazard to humans.”<sup>1</sup> Glyphosate shows little acute toxicity, but there has been growing concern that chronic exposure may increase risk 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 for developing severe kidney damage in agricultural workers. Currently no regulatory determination has been made by the federal EPA or NY State 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, but began to decline in 2013. In 2019, 31% of liquid herbicide use (by volume) contained glyphosate compared to 53% in 2016 (Figure 3).

### *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

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1. <sup>1</sup> European Food Safety Authority. Conclusion on the peer review of the pesticide risk assessment of the active substance glyphosate. *Efsa J* 2015;13:4302.

break down slowly. Common dinitroaniline active ingredients are pendimethalin, trifluralin, benefin, benfluralin and prodiamine. Agencies used only one dinitroaniline product in 2019 called Barricade 4FL®. In 2013, the Parks Department chose to no longer use pendimethalin-containing herbicides, after requesting a waiver in previous years to use this herbicide.

### ***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 2019 were Riverdale Vanquish Herbicide® and Lesco Three-Way Selective Herbicide®. In 2019, 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, parks, and botanic gardens.

### ***Ureas***

Like dinitroaniline herbicides, urea herbicides are of low acute toxicity, but some may pose some chronic risks. Classification as a possible human carcinogen varies within the group. Diuron, a urea herbicide among the twenty most heavily used herbicides reported by commercial applicators in the private market in the City in 2013 (most recent data available), 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 agencies in 2019 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 2019 were Sedgehammer®, Dupont Viewpoint Herbicide® and Nufarm Prosedge Selective Herbicide®. In 2019, 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 2019 were chlorothalonil, thiophanate-methyl, propiconazole, azoxystrobin, iprodione and triadimefon. Common fungicide products applied in 2019 include Daconil Action®, Heritage Fungicide®, Bayleton Flo Turf and Ornamental Fungicide® and Lesco Manicrue 6FL®.

Fungicides represented less than 1% of the total number of pesticide applications in 2019, but they made up 51% of total volume of liquid pesticides applied, 4% of total weight of solid products, and 6% of weight, after excluding mosquito larvicides (Table 1). Though the total volume of liquid fungicides reported has only increased slightly since 2012, they are now the most

heavily used type of pesticide reported by volume. 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 frequency of applications and quantity applied. Quantities for liquid applications are usually measured as volume in gallons. Quantities for solid applications are typically measured as weight in pounds. However, we included pesticides applied in totals by weight and volume based on the unit reported by City agencies or their contractors. In other words, if a pesticide typically reported in gallons was reported in pounds, it was included in the weight totals. Pesticides were applied a total of 331,682 times by New York City agencies in 2019, 17% more than in 2018 due to an increase in larvicide and rodenticide applications, with a 10% decline in the number of pyrethroid applications targeting roaches and bedbugs, primarily at NYCHA. The pesticides applied most frequently by New York City agencies were insecticides. Rodenticides were the most heavily used solid products (44% by weight), and fungicides were the most heavily used liquid (51% by volume). In 2019, 86% of the insecticides reported by weight were bacterial or insect growth regulator products designed to kill or halt the development of mosquito larvae in stagnant waters away from human contact. Excluding these products used as part of DOHMH mosquito-borne disease control programs, 7% of total solid pesticides by weight were insecticides and 64% were rodenticide. The majority of rodenticide applied by the City is placed directly into rat burrows and poses little risk of exposure to the public. Table 1 summarizes these findings of applications by pesticide type.

**Table 1. Total Applications Reported Applied by NYC Agencies in 2019, by Pesticide Type**

Pesticide Type	Volume		Weight			Times Applied	
	Gallons	% of Total	Pounds	% of Total	% wo larvicide	Number	% of Total
Rodenticide	11	0.2%	83,803	44.3%	63.7%	100,389	30.3%
Insecticide	2,528	35.5%	67,615	35.7%	7.4%	227,701	68.7%
Herbicide	810	11.4%	30,287	16.0%	23.0%	2,504	0.8%
Fungicide	3,606	50.6%	7,630	4.0%	5.8%	1,002	0.3%
Other	165	2.3%	4	0.0%	0.0%	86	0.0%
	<b>7,119</b>		<b>189,338</b>			<b>331,682</b>	

Table 2 lists the ten most frequently used products for each pesticide type on New York City owned or leased property in 2019. 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 a known, possible or suspect carcinogen by EPA, 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 labels require 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 slightly toxic, while Toxicity 4 products

are considered relatively non-toxic, and both carry the signal word “Caution.” A complete list of products used by New York City by pesticide type is included in Appendix 1.

**Table 2. Ten Most Frequently Applied Pesticide Products by NYC Agencies in 2019 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
<b>Rodenticides</b>								
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.01	15,865.32	45294	Difethialone	3	NO	NO
12455-69	CONTRAC RODENTICIDE	0.00	29,412.41	18130	Bromadiolone	3	NO	NO
12455-90	FINAL RODENTICIDE	0.00	10,429.44	13460	Brodifacoum	3	NO	NO
12455-133	CONTRAC WITH LUMITRACK	0.00	1,355.06	3869	Bromadiolone	3	NO	NO
12455-146	CONTRAC SOFT BAIT	0.00	1,082.53	3027	Bromadiolone	3	NO	NO
7173-297	BROMADIOLONE PASTE 0901	0.00	857.49	2803	Bromadiolone	3	NO	NO
12455-86	CONTRAC RODENTICIDE PLACE PAC	0.28	1,831.07	2802	Bromadiolone	3	NO	NO
12455-148	Rat Ice	0.00	15,775.81	1831	Carbon dioxide	2	NO	NO
12455-36	CONTRAC RAT AND MOUSE BAIT	0.00	2,014.03	1613	Bromadiolone	3	NO	NO
12455-56	DITRAC TRACKING POWDER	0.00	242.50	1395	Diphacinone	2	NO	NO
<b>Insecticides</b>								
73049-429	VECTOMAX FG	0.00	3,368.66	50,238	Bacillus sphaericus; Bacillus thuringiensis, subsp. Israelensis, strain AM 65-52	3	NO	NO
432-763	SUSPEND SC INSECTICIDE	408.69	0.00	46,885	Deltamethrin	3	NO	NO
432-1483	TEMPRID SC INSECTICIDE	147.22	0.00	44,165	Cyfluthrin, beta; Imidacloprid	3	NO	NO
1021-2593	VENDETTA PLUS COCKROACH GEL BAIT	0.00	310.03	10,911	Avermectin; Pyriproxyfen	3	NO	NO
432-1257	MAXFORCE ROACH BAIT F.05	0.21	337.44	10,597	Fipronil	3	YES	NO
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	471.22	9,883	Indoxacarb	3	NO	NO
432-1259	PRODUCT: RBF5	0.00	363.24	9,880	Fipronil	3	YES	NO
432-1460	MAXFORCE FC ROACH KILLER BAIT GEL F.05	0.00	160.71	6,128	Fipronil	3	YES	NO
2724-351	ZOECON RF-259 EMULSIFIABLE CONCENTRATE	32.61	0.00	4,192	(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
499-304	WHITMIRE OPTEM MEPT 600	31.92	4.75	4,098	Cyfluthrin	3	NO	NO
<b>Herbicides</b>								
62719-556	ACCORD XRT II	68.32	0.00	373	Glyphosate, dimethylammonium salt	3	NO	NO
228-397	RIVERDALE VANQUISH HERBICIDE	39.85	14.28	296	Dicamba, diglycolamine salt	3	NO	NO
432-1580	DUPONT VIEWPOINT HERBICIDE	0.08	23.19	292	Aminocyclopyrachlor; Imazapyr; Metsulfuron-methyl	3	NO	NO
432-1516	ESPLANADE 200 SC	5.08	0.00	290	Indaziflam	3	NO	NO
62719-324	GLYPRO	66.67	0.00	239	Glyphosate, isopropylamine salt	3	NO	NO
524-579	ROUNDUP PROMAX	60.59	0.03	227	Glyphosate, potassium salt	3	NO	NO
62719-176	PATHFINDER II	102.57	0.00	166	Triclopyr, butoxyethyl ester	3	NO	NO
62719-527	GARLON 4 ULTRA	29.51	0.00	104	Triclopyr	2	NO	NO
62719-542	DIMENSION 2EW	31.68	0.00	47	Dithiopyr	2	NO	NO
100-937	PRIMO MAXX	20.65	0.00	46	Trinexapac-ethyl	3	NO	NO
<b>Fungicides</b>								
100-1364	DACONIL ACTION	431.85	0.00	67	Acibenzolar-S-methyl; Chlorothalonil	2	YES	NO
71065-3	COMPANION LIQUID BIOLOGICAL FUNGICIDE	333.57	0.00	55	Bacillus subtilis GBO3	NULL	NO	NO
53883-353	QUALI-PRO T-NEX	26.44	51.00	55	Trinexapac-ethyl	3	NO	NO
53883-323-86064	ARMOR TECH TMI 2020XL	196.00	87.50	44	Thiophanate-methyl; Iprodione	3	YES	YES
432-942	BANOL TURF AND ORNAMENTAL FUNGICIDE	71.30	59.38	44	Propamocarb hydrochloride	3	NO	NO
100-1093	HERITAGE FUNGICIDE	0.00	86.35	35	Azoxystrobin	3	NO	NO
60063-7-10404	LESCO MANICRUE 6FL	200.75	0.00	27	Chlorothalonil	2	YES	NO
432-1541	12ESP705 FUNGICIDE	0.00	1,311.61	25	Fosetyl-Al	3	NO	NO
50534-202-100	MANICURE ULTREX TURF & ORNAMENTAL	0.00	790.60	25	Chlorothalonil	1	YES	NO
84059-3-87865	REGALIA PTO BIOFUNGICIDE FOR USE ON TURF AND ORNAMENTALS	51.94	0.00	23	Reynoutria sachalinensis	3	NO	NO
<b>Other</b>								

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
52483-1	HYPOCHLORITE SOLUTION	83.50	0.00	42	Sodium hypochlorite	1	NO	NO
14802-8-74466	MICROBE LIFE ALGAWAY 5.4 ALGAECIDE FOR PONDS	5.00	0.00	14	Poly(oxyethylene) (dimethylimino) ethylene (dimethylimino) ethylene dichloride	3	NO	NO
2693-193	OPTIMA-BLUE	12.00	0.00	9	Copper oxide (ous)	2	NO	NO
2693-172	AQUARIUS ANTIFOULING BOTTOM PAINT 568 NAVY BLUE	10.00	0.00	9	Copper oxide (ous)	2	NO	NO
59807-4	HORMODIN 1	0.00	0.18	4	IBA	3	NO	NO
67702-3-54705	NEU1165M SLUG AND SNAIL BAIT	0.00	2.19	2	Iron phosphate	3	NO	NO
63838-5	BROMMAX 7.1	50.00	0.00	1	Sodium bromide; Sodium hypochlorite	1	NO	NO
44891-9	MONTEREY WATER-BASED ANTIFOULING COATING	2.00	0.00	1	Copper oxide (ous)	2	NO	NO
60061-14	WOOLSEY/Z*SPAR SUPER TOX ANTI-FOULING FINISH B-74	1.00	0.00	1	Copper oxide (ous)	2	NO	NO
60061-71	PETTIT MARINE PAINT PREMIUM SINGLE SEASON ABLATIVE	1.00	0.00	1	Copper oxide (ous)	2	NO	NO

### C. CHANGES IN PESTICIDE USE

A complete listing of application amounts by target pest is listed in Table 3.

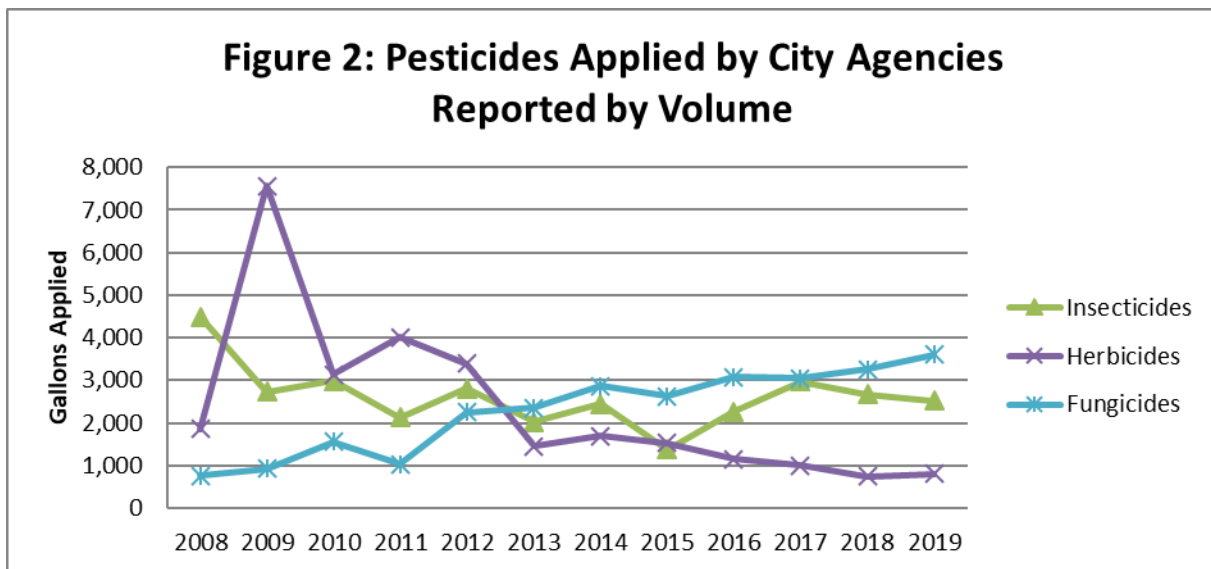
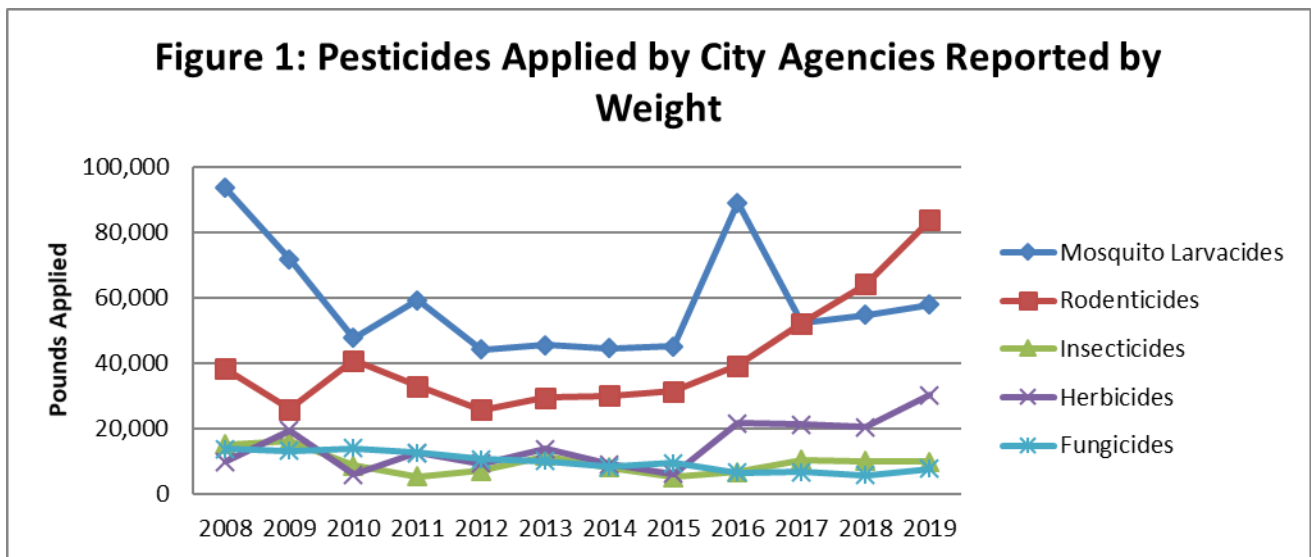
**Table 3: Complete listing of pesticide applications by New York City Agencies by Target Pest, 2019**

Target Pest	Volume in Gallons	Weight in Pounds	Total Applications	% of Total Applications
Roaches	955	4,852	158,985	48%
Rats	38	73,659	70,569	21%
Mosquitoes	3	60,231	51,164	15%
Mice	11	10,200	31,013	9%
Bedbugs	397	545	8,686	3%
Weeds, vines, or grasses	810	30,287	2,504	1%
Ants	48	205	2,393	1%
Flying insects	629	306	2,312	1%
Other Crawling Insects	218	1,179	1,604	0%
Other Pests	406	244	1,449	0%
Fungal Disease or Infestation	3,606	7,630	1,002	0%
Other Rodents	-	0.005	1	0%
<b>Totals:</b>	<b>7,119</b>	<b>189,338</b>	<b>331,682</b>	

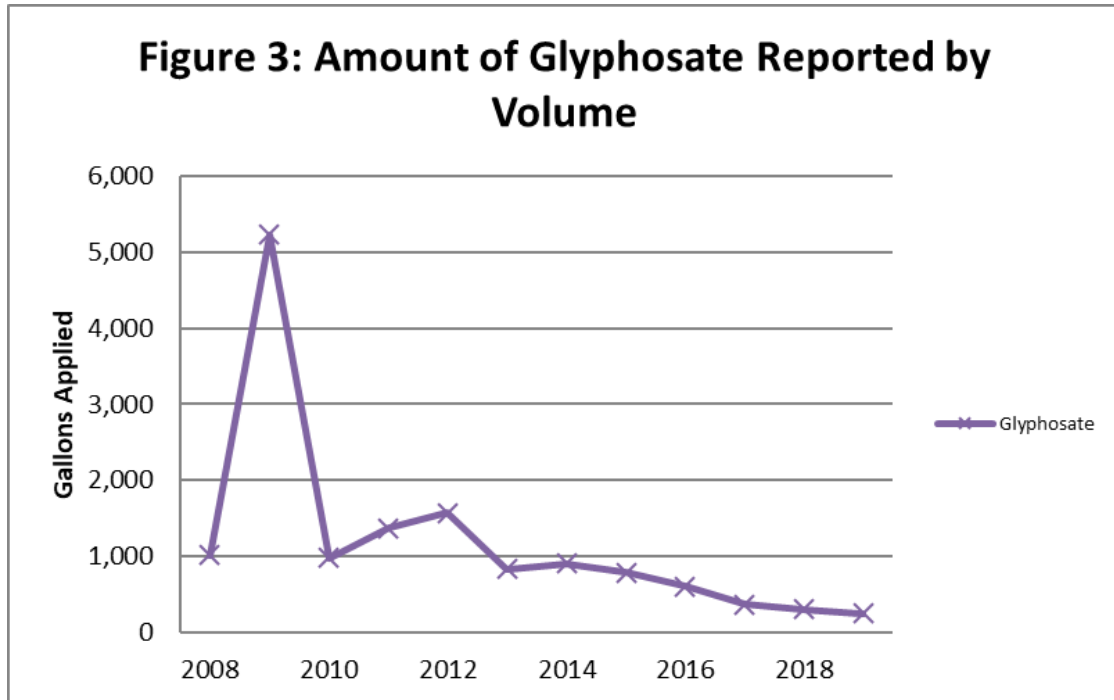
The level of completeness of city agency pesticide reporting has improved dramatically over the past ten years, making analysis of trends in pesticide use possible since 2008. Figures 1 and 2 show

trends from 2008 through 2019 in use of pesticides by city agencies by type of pesticide, with solid and liquid products reported by weight and volume, respectively.

In Figure 1, DOHMH mosquito control program larvicides are charted separately from other insecticides, because they represent a large proportion of city insecticide use and their year-to-year use varies more with weather than other insecticides. There was a consistent decline in larvicide use until an increase in 2016 due to the broader larvicide application plan in response to the threat of Zika virus. Larvicide use has now returned to a level similar to previous years (Figure 1). Use of solid rodenticide products showed a considerable increase (31% by weight) from 2018 to 2019, and there was an overall 22% increase in amount of all pesticides reported by weight. Solid herbicide by weight increased first in 2016 and jumped again in 2019 due to the use of outdoor granular turf formulations that include fertilizer (adding to the product weight), mainly on golf courses and large institutional lawns (Figure 1).



Rodenticides and mosquito larvicides are not included in Figure 2 as those products are almost exclusively solid formulations reported by weight. In 2019, liquid herbicide use increased 9% by volume (Figure 2) from 2018 despite a 19% decrease in gallons of glyphosate applied (Figure 3). Overall, there has been an 84% decline in liquid herbicide levels applied since 2012. 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.

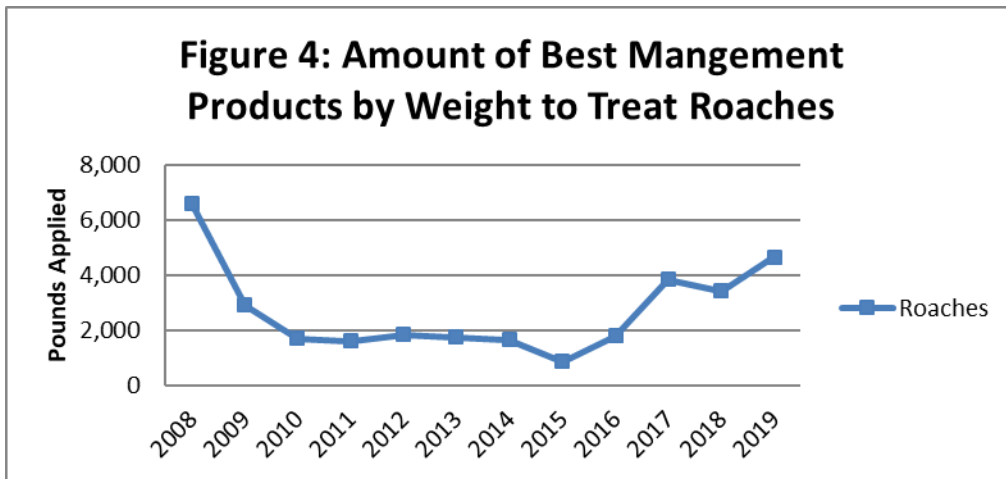


There was also a 5% decrease in liquid insecticide use, reported by volume, due to a reduction at NYCHA of roach and bedbug applications, discussed below. This reduction was seen even as more liquid BMP insecticides, the preferred treatment, are being reported by volume (Appendix 1 & 3). From 2008 to 2019, there was a 44% decrease in the volume of liquid insecticides used, with much of the reduction happening between 2008 and 2009 (Figure 2).

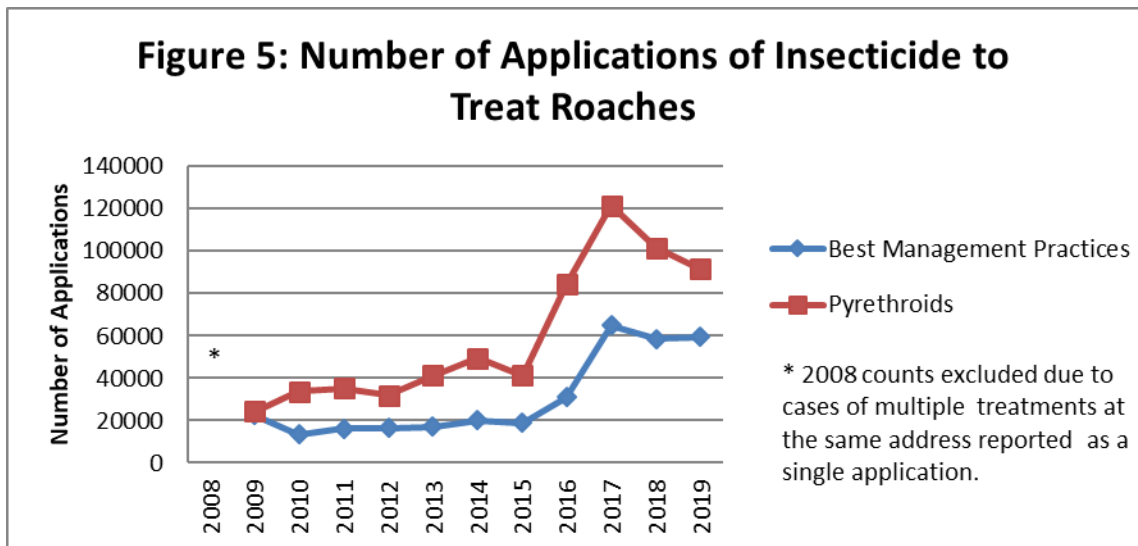
### Use of spray formulations vs. Best Management Practices

After a large reduction in BMP products to combat roaches from 2008 to 2010, the reported use of these products had leveled off through 2015. Continuing an upward trend since then, in 2019 there was a 36% increase in BMP products targeting roaches (Figure 4).



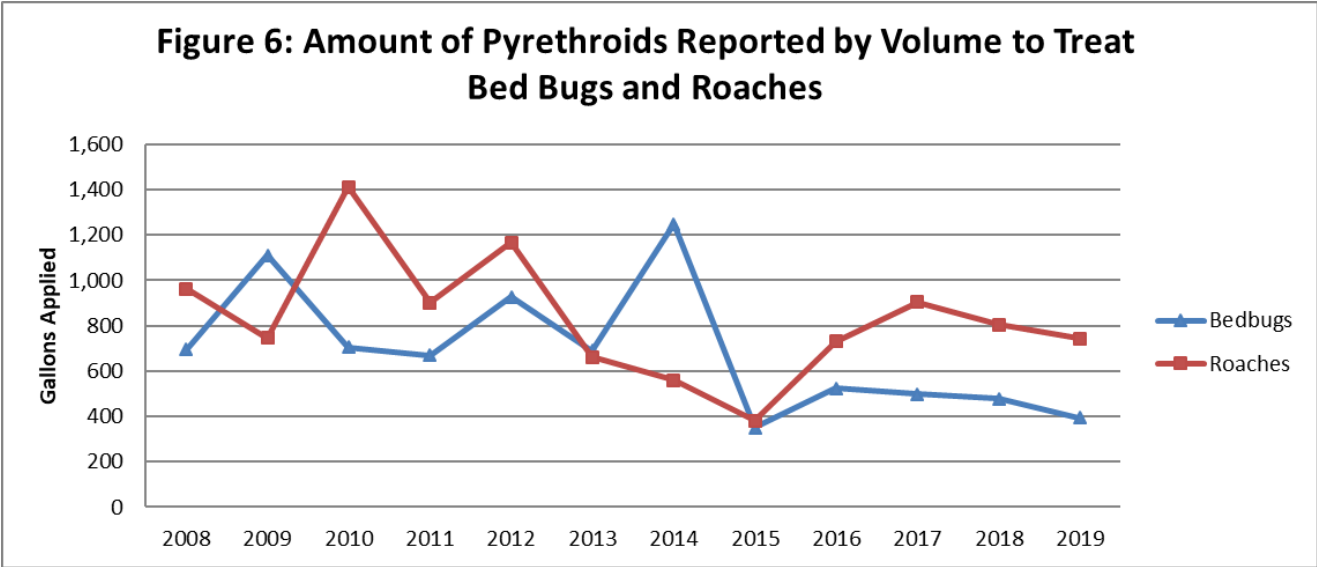


There was a 10% decrease in the number of pyrethroid applications to treat roaches from 2018 to 2019, while the number of applications of BMP products remained steady after the number of applications more than doubled in 2017 (Figure 5). This decrease in pyrethroid applications corresponded to an 8% lower volume of applied pyrethroids. Meanwhile the BMP amount by weight increased by 36%, continuing an upward trend. (Figure 6 and Figure 4).



### Bed Bugs vs. Roaches

Use of pyrethroid spray products targeting roaches decreased 8% by volume, and number of applications decreased 10% from 2018 to 2019 (Figure 6 and Figure 5). There was also a 17% decrease in gallons of pyrethroids used by city agencies to treat bed bugs from 2018 to 2019 (Figure 6). Citywide, the number of pyrethroid applications to treat bed bugs decreased 15% in 2019, due to a decrease in applications for bed bugs reported by NYCHA (data not shown). Total volume of pyrethroid use for control of bed bugs from 2008 to 2019 has remained low since 2015 compared with previous years, while volume for cockroaches started to decline in the past two years.



**Rodents**

Rodenticide use increased by 31% in 2019 by weight (Figure 1). There was also an increase of 12% in the number of rodenticide applications. This variability year to year is due to the Neighborhood Rat Reduction program funded in 2017 and to the trials of and subsequent increased use of a new rodenticide, “Rat Ice”.

**Mosquitoes**

Mosquito control measures include larviciding (killing larvae) and adulticiding (killing flying adults). The DOHMH Vector Control program applied 57,841 pounds of mosquito larvicide and 2,413 pounds of adulticide in 2019. Larvicide reported by weight increased by 6% in 2019 (Figure 1). The agency will continue to monitor mosquito populations across the five boroughs, especially the populations that commonly carry mosquito-borne illnesses such as the West Nile and Zika viruses. The amount of adulticide applied by DOHMH has varied year to year, depending on weather and severity of mosquitoes. In 2019, the volume of liquid adulticide used decreased 47% compared with 2018 due to decreased mosquito activity (data not shown).

**D. SUMMARY OF AGENCIES’ PESTICIDE USE**

For each reporting agency, we summarize 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, ACS 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 2019, primarily at facilities previously under management of the DJJ.

**Table 4: Types of Pesticides Used by ACS in 2019**

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	1.5	92.4%	7	25.9%
Insecticide	0.0	0.0%	0.1	7.6%	20	74.1%
<b>Totals</b>	<b>0.0</b>		<b>1.6</b>		<b>27</b>	

**Table 5: Pesticide Products Used by ACS in 2019**

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
<b>Rodenticides</b>								
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	1.10	4	Difethialone	3	NO	NO
12455-69	CONTRAC RODENTICIDE	0.00	0.08	2	Bromadiolone	3	NO	NO
12455-139	Final Soft Bait	0.00	0.30	1	Brodifacoum	3	NO	NO
<b>Insecticides</b>								
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	0.12	20	Indoxacarb	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. DFTA 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 with 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 2019.

### ***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 2019.

**Table 6: Types of Pesticides Used by BPL in 2019**

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	86.3	30.7%	458	26.0%
Insecticide	0.0	100.0%	194.4	69.3%	1302	74.0%
<b>Totals</b>	<b>0.0</b>		<b>280.7</b>		<b>1,760</b>	

**Table 7: Pesticide Products Used by BPL in 2019 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
<b>Rodenticides</b>								
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	79.01	406	Difethialone	3	NO	NO
12455-56	DITRAC TRACKING POWDER	0.00	0.61	38	Diphacinone	2	NO	NO
7173-113	ROZOL TRACKING POWDER	0.00	6.50	12	Chlorophacinone	2	NO	NO
7173-218	GENERATION MINI BLOCKS	0.00	0.18	2	Difethialone	3	NO	NO
<b>Insecticides</b>								
64405-2	REDZONE BAIT	0.00	171.44	618	Boric acid	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	4.77	284	Indoxacarb	3	NO	NO
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	2.98	268	Indoxacarb	3	NO	NO
432-763	SUSPEND SC INSECTICIDE	0.03	0.00	42	Deltamethrin	3	NO	NO
279-9554	CB INSECTICIDE WITH DELTAMETHRIN	0.00	13.63	36	Deltamethrin	3	NO	NO
100-1485	DUPONT ADVION ANT BAIT ARENA	0.00	0.73	34	Indoxacarb	3	NO	NO
432-1506	MAXFORCE QUANTUM ANT BAIT	0.00	0.19	10	Imidacloprid	3	NO	NO
432-1544	TEMPRID SC-F INSECTICIDE	0.00	0.00	4	Cyfluthrin, beta; Imidacloprid	3	NO	NO
1021-1641-57076	CONQUER RESIDUAL INSECTICIDE CONCENTRATE	0.00	0.00	2	Esfenvalerate	3	NO	NO
432-772	DELTA DUST	0.00	0.63	2	Deltamethrin	3	NO	NO
1021-2593	VENDETTA PLUS COCKROACH GEL BAIT	0.00	0.04	2	Avermectin; Pyriproxyfen	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 citywide contract administered by DCAS. Table 8 summarizes pesticide use by pesticide type. Table 9 lists all pesticide products used by OCME in 2019.

**Table 8: Types of Pesticides Used by OCME in 2019**

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Insecticide	0.0	0.0%	0.2	100.0%	6	100.0%
<b>Totals</b>	<b>0.0</b>		<b>0.2</b>		<b>6</b>	

**Table 9: Pesticide Products Used by OCME in 2019**

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
<b>Insecticides</b>								
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	0.19	6	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 consists of 23 institutions. The University serves more than 260,000 degree-credit students and 273,000 adult continuing and professional education students. Individual institutions contract for pest control services through private vendors. The data reports were 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 10 summarizes pesticide use by pesticide type. Table 11 lists all pesticide products used by CUNY in 2019.

**Table 10: Types of Pesticides Used by CUNY in 2019**

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.6	1.1%	50.1	43.3%	227	21.7%
Insecticide	55.7	98.9%	65.6	56.7%	821	78.3%
<b>Totals</b>	<b>56.3</b>		<b>115.7</b>		<b>1,048</b>	

**Table 11: Pesticide Products Used by CUNY in 2019 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
<b>Rodenticides</b>								
100-1055	WEATHERBLOK BAIT WITH BITREX	0.02	24.85	85	Brodifacoum	3	NO	NO
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.01	20.86	63	Difethialone	3	NO	NO
82744-2-56	JT EATON NECTUS SOFT BAIT 2G SECOND GENERATION RODENTICIDE	0.00	1.59	56	Bromadiolone	3	NO	NO
7173-297	BROMADIOLONE PASTE 0901	0.00	0.85	6	Bromadiolone	3	NO	NO
47629-17-499	PRESCRIPTION TREATMENT BRAND SOREXA PELLETT PLACE PACK	0.20	0.00	4	Difenacoum	3	NO	NO
7173-113	ROZOL TRACKING POWDER	0.00	0.63	4	Chlorophacinone	2	NO	NO
47629-16-499	PRESCRIPTION TREATMENT BRAND SOREXA BLOCKS	0.07	0.00	3	Difenacoum	3	NO	NO
7173-188	MAKI RAT AND MOUSE BAIT PACKS (PELLETS)	0.00	1.22	3	Bromadiolone	3	NO	NO
12455-86	CONTRAC RODENTICIDE PLACE PAC	0.28	0.00	1	Bromadiolone	3	NO	NO
47629-14-499	PRESCRIPTION TREATMENT BRAND SOREXA PELLETS	0.03	0.00	1	Difenacoum	3	NO	NO
12455-69	CONTRAC RODENTICIDE	0.00	0.13	1	Bromadiolone	3	NO	NO
<b>Insecticides</b>								
432-763	SUSPEND SC INSECTICIDE	0.66	0.00	121	Deltamethrin	3	NO	NO
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	5.11	104	Indoxacarb	3	NO	NO
279-3206	TALSTAR TC FLOWABLE TERMITICIDE/INSECTICIDE	0.19	0.00	52	Bifenthrin	3	YES	NO
432-1544	TEMPRID SC-F INSECTICIDE	0.07	0.00	50	Cyfluthrin, beta; Imidacloprid	3	NO	NO
1021-1828	MGK ROACH BAIT 2822	0.05	1.27	49	Avermectin	3	NO	NO
432-1363	TEMPO SC INSECTICIDE	0.00	2.56	43	Cyfluthrin, beta	3	NO	NO
64405-2	REDZONE BAIT	0.00	1.71	42	Boric acid	3	NO	NO
2724-351	ZOECON RF-259 EMULSIFIABLE CONCENTRATE	0.12	0.00	33	(7S)-Hydroprene	3	NO	NO
1021-1603	NYLAR 10EC	16.04	0.00	31	Pyriproxyfen	3	NO	NO
432-1262	MAXFORCE IBH10	0.97	0.02	23	Hydramethylnon	3	YES	YES
100-1066	DEMAND CS INSECTICIDE	0.19	0.00	22	Cyhalothrin, lambda	3	NO	NO
53883-335	N + P Regulator	0.36	0.00	21	Pyriproxyfen; Novaluron	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
73079-4	BORACTIN INSECTICIDE POWDER	0.00	10.38	21	Boric acid	3	NO	NO
1021-1177	PYROCIDE FOGGING CONCENTRATE 5628	0.00	25.25	20	Pyrethrins; Piperonyl butoxide; N-octyl bicycloheptene dicarboximide	3	YES	NO
64405-8	NIBOR BORATE INSECTICIDE AND FUNGICIDE	14.00	0.00	18	Disodium octaborate tetrahydrate	3	NO	NO
432-1255	MAXFORCE GRANULAR INSECT BAIT	0.51	0.00	15	Hydramethylnon	3	YES	YES
1021-2593	VENDETTA PLUS COCKROACH GEL BAIT	0.00	0.15	15	Avermectin; Pyriproxyfen	3	NO	NO
5481-8973	ORTHENE PCO FORMULA II	14.50	0.00	14	Acephate	3	YES	NO
73079-12	SILICIDE(TM)	0.00	1.75	12	Diatomaceous earth	3	NO	NO
6218-47	SUMMIT B.T.I. BRIQUETS	0.00	1.75	12	Bacillus thuringiensis subspecies israelensis strain BMP 144	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	0.65	12	Indoxacarb	3	NO	NO
89459-59	ENVI ACU CONTACT Insecticide	0.00	3.63	6	Phenylethyl propionate	3	NO	NO
100-1486	DUPONT ADVION COCKROACH BAIT ARENA	0.00	0.94	6	Indoxacarb	3	NO	NO
100-1501	DUPONT ARILON INSECTICIDE	5.00	0.00	5	Indoxacarb	3	NO	NO
1677-43	STER-BAC	2.50	0.00	5	Alkyl (60%C14, 25%C12, 15%C16) dimethylbenzyl ammonium chloride	1	NO	NO
432-1257	MAXFORCE ROACH BAIT F.05	0.21	0.06	5	Fipronil	3	YES	NO
2724-469	ZOECON (S)-HYDROPRENE ROACH CONTROL STATION II	0.00	0.00	5	(7S)-Hydroprene	3	NO	NO
1021-1424	PYROCIDE FOGGING CONCENTRATE 7338	0.00	6.19	5	Pyrethrins; Piperonyl butoxide; N-octyl bicycloheptene dicarboximide	3	YES	NO
432-1304	TEMPO 10 WP INSECTICIDE	0.00	0.09	5	Cyfluthrin, beta	3	NO	NO
432-1460	MAXFORCE FC ROACH KILLER BAIT GEL F.05	0.00	0.15	4	Fipronil	3	YES	NO
432-772	DELTA DUST	0.06	0.00	3	Deltamethrin	3	NO	NO
279-3443	D-FOAM INSECTICIDE	0.04	0.38	3	Deltamethrin	3	NO	NO
499-507	PRESCRIPTION TREATMENT BRAND ALPINE COCKROACH GEL BAIT RESERVOIR	0.02	0.00	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
73079-10	INVICT (TM) COCKROACH GEL	0.02	0.00	3	Imidacloprid	3	NO	NO
432-763-62719	SUSPEND SC	0.02	0.00	3	Deltamethrin	3	NO	NO
499-492	PRESCRIPTION TREATMENT BRAND 388B ADVANCE ANT GEL BAIT	0.02	0.00	3	Borax	3	NO	NO
432-1264	MAXFORCE FC ANT KILLER BAIT GEL	0.01	0.00	3	Fipronil	3	YES	NO
279-9554	CB INSECTICIDE WITH DELTAMETHRIN	0.00	1.38	3	Deltamethrin	3	NO	NO
499-496	PRESCRIPTION TREATMENT BRAND ADVANCE 360A DUAL CHOICE ANT BAIT STATIONS	0.02	0.00	2	Avermectin	3	NO	NO
432-1483	TEMPRID SC INSECTICIDE	0.00	0.00	2	Cyfluthrin, beta; Imidacloprid	3	NO	NO
100-1493	DUPONT E2Y45 0.1G LAWN & GARDEN INSECTIZIDE PLUS FERTILIZER	0.00	1.38	2	DPX-E2Y45	3	NO	NO
1021-2796	MGK Formula 3113	0.00	0.05	2	Clothianidin; Pyriproxyfen	0	NO	NO
499-515	MOTHEREARTH GRANULAR SCATTER BAIT	0.04	0.00	1	Boric acid	3	NO	NO
432-1526	BES0570 INSECTICIDE	0.02	0.00	1	Pyrethrins	3	YES	NO
73079-2	INTICE GRANULAR BAIT	0.02	0.00	1	Boric acid	3	NO	NO
149-8	TERRO ANT KILLER II	0.02	0.00	1	Borax	3	NO	NO
432-1254	MAXFORCE PROFESSIONAL INSECT CONTROL ROACH KILLER	0.01	0.00	1	Hydramethylnon	3	YES	YES
279-3206-346	ACTISHIELD LIQUID INSECTICIDE	0.01	0.00	1	Bifenthrin	3	YES	NO
432-1514	SUSPEND POLYZONE	0.00	0.00	1	Deltamethrin	3	NO	NO
432-1256	MAXFORCE FC ANT BAIT STATIONS	0.00	0.00	1	Fipronil	3	YES	NO
279-3393	CB-80-1 FOR INSECT CONTROL	0.00	0.27	1	Pyrethrins; Piperonyl butoxide	3	YES	NO
67425-14	ECOPCO ACU	0.00	0.19	1	Phenylethyl propionate	NUL L	NO	NO
432-1455	BES 0026 FLY SPOT BAIT	0.00	0.16	1	Imidacloprid; (Z)-9-Tricosene	3	NO	NO
67425-13	ECOPAC AR	0.00	0.13	1	Thymol; Phenylethyl propionate; Eugenol	3	NO	NO
73766-1	GOURMET ANT BAIT GEL	0.00	0.00	1	Disodium octaborate tetrahydrate	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 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 citywide contract for pest management services that city agencies can buy into. This contract was effective from May 1, 2017 to April 30, 2019. A new contractor has since replaced the previous citywide contractor. Several agencies are housed in DCAS managed buildings, and the DCAS report reflects these applications. Table 12 summarizes pesticide use by pesticide type. Table 13 lists all pesticide products used by DCAS in 2019.

**Table 12: Types of Pesticides Used by DCAS in 2019**

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	47.2	87.4%	211	72.0%
Insecticide	0.0	0.0%	6.8	12.6%	82	28.0%
<b>Totals</b>	<b>0.0</b>		<b>54.0</b>		<b>293</b>	

**Table 13: Pesticide Products Used by DCAS in 2019 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
<b>Rodenticides</b>								
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	29.61	152	Difethialone	3	NO	NO
7173-297	BROMADIOLONE PASTE 0901	0.00	13.33	47	Bromadiolone	3	NO	NO
12455-69	CONTRAC RODENTICIDE	0.00	0.71	7	Bromadiolone	3	NO	NO
12455-139	Final Soft Bait	0.00	3.54	5	Brodifacoum	3	NO	NO
<b>Insecticides</b>								
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	4.22	70	Indoxacarb	3	NO	NO
64405-2	REDZONE BAIT	0.00	2.38	9	Boric acid	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	0.19	3	Indoxacarb	3	NO	NO

## Correction, Department of

The Department of Correction (DOC) is responsible for New York City's inmates, housing the majority of them on Riker's Island. It oversees 44 facilities, including eleven correctional

facilities which 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 in maintaining certain facilities. Table 14 summarizes pesticide use by pesticide type. Table 15 lists all pesticide products used by DOC in 2019.

**Table 14: Types of Pesticides Used by DOC in 2019**

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	9.7	18.6%	422.3	68.3%	263	16.1%
Insecticide	42.6	81.4%	195.7	31.7%	1375	83.9%
<b>Totals</b>	<b>52.4</b>		<b>617.9</b>		<b>1,638</b>	

**Table 15: Pesticide Products Used by DOC in 2019 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
<b>Rodenticides</b>								
12455-79	CONTRAC ALL-WEATHER BLOX	0.00	161.05	82	Bromadiolone	3	NO	NO
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	97.65	80	Difethialone	3	NO	NO
7173-258-3282	D-CON BAIT PASTE POUCHES	9.72	67.38	44	Difethialone	3	NO	NO
12455-56	DITRAC TRACKING POWDER	0.00	8.11	26	Diphacinone	2	NO	NO
12455-78	DITRAC RAT AND MOUSE BAIT PLACE PAC	0.00	72.20	14	Diphacinone	3	NO	NO
12455-76	CONTRAC RODENTICIDE READY TO USE PLACE PAC	0.00	4.50	8	Bromadiolone	3	NO	NO
7173-218	GENERATION MINI BLOCKS	0.00	10.75	7	Difethialone	3	NO	NO
12455-61	LIQUA-TOX II	0.03	0.00	1	Diphacinone, sodium salt	3	NO	NO
12455-69	CONTRAC RODENTICIDE	0.00	0.63	1	Bromadiolone	3	NO	NO
<b>Insecticides</b>								
432-763-62719	SUSPEND SC	9.38	0.00	255	Deltamethrin	3	NO	NO
432-1363	TEMPO SC INSECTICIDE	12.98	0.00	252	Cyfluthrin, beta	3	NO	NO
1021-2593	VENDETTA PLUS COCKROACH GEL BAIT	0.00	9.86	158	Avermectin; Pyriproxyfen	3	NO	NO
64405-2	REDZONE BAIT	0.00	30.13	114	Boric acid	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	4.62	102	Indoxacarb	3	NO	NO
432-1455	BES 0026 FLY SPOT BAIT	10.22	47.71	100	Imidacloprid; (Z)-9-Tricosene	3	NO	NO
1021-2796	MGK Formula 3113	0.00	5.70	81	Clothianidin; Pyriproxyfen	0	NO	NO
499-507	PRESCRIPTION TREATMENT BRAND ALPINE COCKROACH GEL BAIT RESERVOIR	0.00	4.68	73	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
73079-4	BORACTIN INSECTICIDE POWDER	1.50	47.10	70	Boric acid	3	NO	NO
397-13	STERI-FAB	8.02	0.00	53	Phenothrin; Isopropyl alcohol; Alkyl (60%C14, 25%C12, 15%C16) dimethylbenzyl ammonium chloride; Didecyl dimethyl ammonium chloride	2	NO	NO
73049-429	VECTOMAX FG	0.00	7.34	27	Bacillus sphaericus; Bacillus thuringiensis, subsp. Israelensis, strain AM 65-52	3	NO	NO
73079-2	INTICE GRANULAR BAIT	0.00	22.25	26	Boric acid	3	NO	NO
73049-20	VECTOLEX CG BIOLOGICAL LARVICIDE	0.00	5.64	21	Bacillus sphaericus	3	NO	NO
73079-6	GREEN ZONE GRANULAR BAIT	0.13	0.75	17	Boric acid	3	NO	NO
432-1257	MAXFORCE ROACH BAIT F.05	0.00	4.68	8	Fipronil	3	YES	NO
432-1460	MAXFORCE FC ROACH KILLER BAIT GEL F.05	0.00	0.42	4	Fipronil	3	YES	NO
2724-274	GOLDEN MALRIN RF- 128 FLY KILLER	0.00	1.00	3	Methomyl; (Z)-9- Tricosene	3	NO	NO
432-1259	PRODUCT: RBF5	0.00	0.14	3	Fipronil	3	YES	NO
9688-255- 8845	SPECTRACIDE COMMERCIAL WASP & HORNET KILLER 3	0.41	0.00	2	Deltamethrin; S- Bioallethrin	3	YES	NO
64405-2- 39609	GARDEN SAFE BRAND ANT & ROACH KILLER	0.00	3.50	2	Boric acid	3	NO	NO
499-492	PRESCRIPTION TREATMENT BRAND 388B ADVANCE ANT GEL BAIT	0.00	0.11	2	Borax	3	NO	NO
64405-2- 74455	ECOLOGICAL ANT & INSECT BAIT	0.00	0.03	1	Boric acid	3	NO	NO
432-1304	TEMPO 10 WP INSECTICIDE	0.00	0.00	1	Cyfluthrin, beta	3	NO	NO

## ***Education, Department of***

The Department of Education (DOE) provides primary and secondary education to more than 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 approximately 20 in-house licensed pest management professionals who conduct monthly monitoring inspections and respond to pest problems for approximately 900 schools. DOE contracts with several pest management companies

to provide services for an additional 300 schools. NYS Department of Environmental Conservation (DEC) more strictly regulates pesticide use at schools. More information is available here: <https://www.dec.ny.gov/chemical/41822.html> Table 16 summarizes pesticide use by pesticide type. Table 17 lists all pesticide products used by DOE in 2019.

**Table 16: Types of Pesticides Used by DOE in 2019**

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	6090.6	73.6%	12153	45.3%
Insecticide	104.5	100.0%	2184.2	26.4%	14657	54.7%
<b>Totals</b>	<b>104.5</b>		<b>8,274.8</b>		<b>26,810</b>	

**Table 17: Pesticide Products Used by DOE in 2019 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
<b>Rodenticides</b>								
7173-258	DIFETHIALON E PASTE PLACE PACKS	0.00	3246.08	8567	Difethialone	3	NO	NO
12455-146	CONTRAC SOFT BAIT	0.00	865.44	2,281	Bromadiolone	3	NO	NO
12455-69	CONTRAC RODENTICIDE	0.00	1,256.66	764	Bromadiolone	3	NO	NO
87235-2-88689	EZ BLOCK BROMADIOLO NE ALL WEATHER BAIT BLOCK	0.00	134.19	278	Bromadiolone	3	NO	NO
12455-79	CONTRAC ALL-WEATHER BLOX	0.00	203.69	247	Bromadiolone	3	NO	NO
12455-148	Rat Ice	0.00	384.44	15	Carbon dioxide	2	NO	NO
7173-113	ROZOL TRACKING POWDER	0.00	0.13	1	Chlorophacinone	2	NO	NO
<b>Insecticides</b>								
73079-14	IMIDACLOPRID D GRANULAR BAIT	0.00	537.62	2659	Imidacloprid	3	NO	NO
64405-2	REDZONE BAIT	0.00	1443.60	2475	Boric acid	3	NO	NO
499-510	PRESCRIPTIO N TREATMENT BRAND ALPINE COCKROACH GEL BAIT PISTON CAN	0.00	13.15	2365	Dinotefuran	3	NO	NO
73766-1	GOURMET ANT BAIT GEL	0.00	21.92	1171	Disodium octaborate tetrahydrate	3	NO	NO
1021-2593	VENDETTA PLUS COCKROACH GEL BAIT	0.00	27.14	895	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
499-294	AVERT PRESCRIPTION TREATMENT 310	0.00	8.07	805	Avermectin	3	NO	NO
432-1257	MAXFORCE ROACH BAIT F.05	0.00	9.07	613	Fipronil	3	YES	NO
1021-2796	MGK Formula 3113	0.00	17.60	595	Clothianidin; Pyriproxyfen	0	NO	NO
432-1460	MAXFORCE FC ROACH KILLER BAIT GEL F.05	0.00	17.66	594	Fipronil	3	YES	NO
89459-84	RF2228 LH AEROSOL	27.96	0.00	582	Cyhalothrin, lambda; (7S)- Hydroprene	3	NO	NO
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	12.46	528	Indoxacarb	3	NO	NO
499-473	WHITMIRE MICRO-GEN TC 205 INJECTION SYSTEM	32.56	0.00	361	Cyhalothrin, lambda	3	NO	NO
89459-59	ENVI ACU CONTACT Insecticide	23.72	0.00	300	Phenylethyl propionate	3	NO	NO
6218-47	SUMMIT B.T.I. BRIQUETS	0.00	30.50	191	Bacillus thuringiensis subspecies Israelensis strain BMP 144	3	NO	NO
2724-484	RF 9707 AEROSOL	0.00	16.12	152	(7S)-Hydroprene	3	NO	NO
432-1506	MAXFORCE QUANTUM ANT BAIT	0.00	1.69	135	Imidacloprid	3	NO	NO
73079-6	GREEN ZONE GRANULAR BAIT	0.00	16.25	103	Boric acid	3	NO	NO
2724-469	ZOECON (S)- HYDROPRENE ROACH CONTROL STATION II	1.28	0.00	54	(7S)-Hydroprene	3	NO	NO
499-370	PT 370 ASCEND FIRE ANT STOPPER BAIT	0.00	3.81	40	Avermectin	3	NO	NO
432-1259	PRODUCT: RBF5	0.00	0.40	11	Fipronil	3	YES	NO
432-1455	BES 0026 FLY SPOT BAIT	19.00	0.00	6	Imidacloprid; (Z)-9- Tricosene	3	NO	NO
1021-1767	MULTICIDE LICE & DUST MITE SPRAY 27911	0.00	4.25	4	Phenothrin; N-octyl bicycloheptene dicarboximide	3	YES	NO
432-1544	TEMPRID SC-F INSECTICIDE	0.00	0.00	3	Cyfluthrin, beta; 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
432-763	SUSPEND SC INSECTICIDE	0.00	0.00	3	Deltamethrin	3	NO	NO
432-1483	TEMPRID SC INSECTICIDE	0.00	0.00	2	Cyfluthrin, beta; Imidacloprid	3	NO	NO
499-550	TC-323	0.00	1.50	2	Prallethrin	3	NO	NO
73079-12	SILICIDE(TM)	0.00	0.38	2	Diatomaceous earth	3	NO	NO
499-527	PRESCRIPTIO N TREATMENT BRAND ALPINE DUST INSECTICIDE	0.00	0.38	2	Dinotefuran; Diatomaceous earth	3	NO	NO
1021-1641-57076	CONQUER RESIDUAL INSECTICIDE CONCENTRAT E	0.00	0.00	2	Esfenvalerate	3	NO	NO
279-9554	CB INSECTICIDE WITH DELTAMETHRI N	0.00	0.50	1	Deltamethrin	3	NO	NO
499-470	WHITMIRE MICRO-GEN TC 198	0.00	0.13	1	Cyfluthrin	3	NO	NO

## Environmental Protection, Department of

The Department of Environmental Protection (DEP) has more than 1,700 facilities upstate and in NYC. 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 employs approximately 10 licensed applicators for maintenance of roadways and other infrastructure in the watershed. Table 18 summarizes pesticide use by pesticide type. Table 19 lists all pesticide products used by DEP in 2019.

**Table 18: Types of Pesticides Used by DEP in 2019**

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	2015.5	96.3%	2333	65.6%
Insecticide	59.4	95.3%	77.0	3.7%	1202	33.8%
Herbicide	2.9	4.7%	0.0	0.0%	19	0.5%
<b>Totals</b>	<b>62.3</b>		<b>2,092.5</b>		<b>3,554</b>	

**Table 19: Pesticide Products Used by DEP in 2019 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
<b>Rodenticides</b>								
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	2,015.53	2,333	Difethialone	3	NO	NO
<b>Insecticides</b>								
499-510	PRESCRIPTION TREATMENT BRAND ALPINE COCKROACH GEL BAIT PISTON CAN	0.00	6.18	697	Dinotefuran	3	NO	NO
432-763	SUSPEND SC INSECTICIDE	0.06	0.00	282	Deltamethrin	3	NO	NO
64405-2	REDZONE BAIT	0.00	54.61	88	Boric acid	3	NO	NO
9688-190-8845	SPECTRACIDE DESTROYER BRAND WASP & HORNET KILLER	2.14	0.00	47	Cyhalothrin, lambda; Prallethrin	3	NO	NO
1021-1641-57076	CONQUER RESIDUAL INSECTICIDE CONCENTRATE	0.00	0.05	30	Esfenvalerate	3	NO	NO
432-1455	BES 0026 FLY SPOT BAIT	57.06	0.00	25	Imidacloprid; (Z)-9-Tricosene	3	NO	NO
499-304	WHITMIRE OPTEM ME PT 600	0.00	4.75	10	Cyfluthrin	3	NO	NO
4822-472	RAID MAX ROACH BAIT V	0.00	1.00	4	Avermectin	3	NO	NO
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	0.00	3	Indoxacarb	3	NO	NO
499-496	PRESCRIPTION TREATMENT BRAND ADVANCE 360A DUAL CHOICE ANT BAIT STATIONS	0.02	0.00	2	Avermectin	3	NO	NO
149-8-64405	TERRO PCO LIQUID ANT BAIT	0.01	0.00	2	Borax	3	NO	NO
73079-4	BORACTIN INSECTICIDE POWDER	0.00	5.50	2	Boric acid	3	NO	NO
2724-484	RF 9707 AEROSOL	0.00	0.19	2	(7S)-Hydroprene	3	NO	NO
53883-279	TAURUS SC TERMITICIDE/INSECTICIDE	0.00	0.00	2	Fipronil	3	YES	NO
2724-786	RF2050 SPRAY	0.06	0.00	1	Tetramethrin; Ethofenprox; Piperonyl butoxide	3	YES	NO
432-1527	TEMPRID RTU	0.03	0.00	1	Cyfluthrin, beta; Imidacloprid	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
432-1255	MAXFORCE GRANULAR INSECT BAIT	0.02	0.00	1	Hydramethylnon	3	YES	YES
89459-60	ENVI AR-X MULTI-PURPOSE INSECTICIDE	0.00	2.13	1	Pyrethrins; Phenylethyl propionate	3	YES	NO
53883-195-149	TERRO ANT KILLER PLUS MULTIPURPOSE INSECT CONTROL 2	0.00	1.50	1	Cyhalothrin, lambda	3	NO	NO
499-550	TC-323	0.00	1.06	1	Prallethrin	3	NO	NO
<b>Herbicides</b>								
432-1229	FINALE HERBICIDE	1.76	0.00	9	Glufosinate-ammonium	2	NO	NO
62719-556	ACCORD XRT II	0.47	0.00	6	Glyphosate, dimethylammonium salt	3	NO	NO
42750-247	DUPONT KRENITE S BRUSH CONTROL AGENT	0.37	0.00	3	Fosamine, ammonium salt	3	NO	NO
7969-443	DERRINGER HERBICIDE	0.34	0.00	1	Glufosinate-ammonium	2	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. FDNY manages some 350 facilities throughout the City and contracts for pest control services. Table 20 summarizes pesticide use by pesticide type. Table 21 lists all pesticide products used by FDNY in 2019.

**Table 20: Types of Pesticides Used by FDNY in 2019**

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	18.6	79.6%	76	43.4%
Insecticide	0.0	100.0%	4.8	20.4%	99	56.6%
<b>Totals</b>	<b>0.0</b>		<b>23.4</b>		<b>175</b>	

**Table 21: Pesticide Products Used by FDNY in 2019 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
<b>Rodenticides</b>								
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	9.63	51	Difethialone	3	NO	NO
12455-139	Final Soft Bait	0.00	5.52	9	Brodifacoum	3	NO	NO
7173-297	BROMADIOLONE PASTE 0901	0.00	1.98	8	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
12455-69	CONTRAC RODENTICIDE	0.00	1.31	7	Bromadiolone	3	NO	NO
12455-146	CONTRAC SOFT BAIT	0.00	0.18	1	Bromadiolone	3	NO	NO
<b>Insecticides</b>								
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	1.07	57	Indoxacarb	3	NO	NO
64405-2	REDZONE BAIT	0.00	1.80	12	Boric acid	3	NO	NO
432-763	SUSPEND SC INSECTICIDE	0.01	0.00	5	Deltamethrin	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	0.22	5	Indoxacarb	3	NO	NO
1021-2796	MGK Formula 3113	0.00	0.04	5	Clothianidin; Pyriproxyfen	0	NO	NO
279-9554	CB INSECTICIDE WITH DELTAMETHRIN	0.00	0.25	3	Deltamethrin	3	NO	NO
100-1486	DUPONT ADVION COCKROACH BAIT ARENA	0.00	0.04	3	Indoxacarb	3	NO	NO
279-3443	D-FOAM INSECTICIDE	0.00	0.50	2	Deltamethrin	3	NO	NO
100-1066	DEMAND CS INSECTICIDE	0.00	0.00	1	Cyhalothrin, lambda	3	NO	NO
100-1483	ADVION INSECT GRANULE	0.00	0.50	1	Indoxacarb	3	NO	NO
73079-12	SILICIDE(TM)	0.00	0.25	1	Diatomaceous earth	3	NO	NO
499-370	PT 370 ASCEND FIRE ANT STOPPER BAIT	0.00	0.06	1	Avermectin	3	NO	NO
432-1531	BES0600 INSECTICIDE	0.00	0.03	1	Clothianidin	0	NO	NO
432-1506	MAXFORCE QUANTUM ANT BAIT	0.00	0.00	1	Imidacloprid	3	NO	NO
8033-114-279	ENDZONE INSECTICIDE STICKER	0.00	0.00	1	Acetamiprid	3	NO	NO

## **Health + Hospitals**

New York City Health + Hospitals (H+H) is an \$8.5 billion integrated healthcare delivery system with its own 522,000 member health plan, MetroPlus, and is the largest municipal healthcare organization in the country. H+H serves 1.1 million New Yorkers every year and more than 382,000 are uninsured. H+H provides comprehensive medical, mental health and substance abuse services through its more than 70 locations including 11 acute care hospitals, five skilled nursing facilities, and six large diagnostic and treatment centers. H+H Health and Home Care also provides in-home services for New Yorkers. Pest control protocols differ among facilities, because each is managed separately. A few facilities have pest control professionals on staff, but the

majority rely on outside contractors. Table 22 summarizes pesticide use by pesticide type. Table 23 lists products by pesticide types.

**Table 22: Types of Pesticides Used by H+H in 2019**

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	663.6	30.5%	737	12.8%
Insecticide	731.3	100.0%	1514.0	69.5%	5022	87.2%
Other	0.0	0.0%	1.3	0.1%	1	0.0%
<b>Totals</b>	<b>731.3</b>		<b>2,178.8</b>		<b>5,760</b>	

**Table 23: Pesticide Products Used by H+H in 2019 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
<b>Rodenticides</b>								
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	660.06	727	Difethialone	3	NO	NO
7173-113	ROZOL TRACKING POWDER	0.00	3.55	10	Chlorophacinone	2	NO	NO
<b>Insecticides</b>								
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	141.46	1,615	Indoxacarb	3	NO	NO
73079-4	BORACTIN INSECTICIDE POWDER	0.00	446.24	1,234	Boric acid	3	NO	NO
397-13	STERI-FAB	0.00	764.66	536	Phenothrin; Isopropyl alcohol; Alkyl (60%C14, 25%C12, 15%C16) dimethylbenzyl ammonium chloride; Didecyl dimethyl ammonium chloride	2	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	12.18	325	Indoxacarb	3	NO	NO
432-1363	TEMPO SC INSECTICIDE	39.21	0.00	182	Cyfluthrin, beta	3	NO	NO
100-1501	DUPONT ARILON INSECTICIDE	134.78	0.00	162	Indoxacarb	3	NO	NO
100-1066	DEMAND CS INSECTICIDE	60.21	0.00	161	Cyhalothrin, lambda	3	NO	NO
1021-1603	NYLAR 10EC	181.75	0.00	121	Pyriproxyfen	3	NO	NO
432-772	DELTA DUST	0.00	4.14	109	Deltamethrin	3	NO	NO
100-1483	ADVION INSECT GRANULE	0.00	25.84	100	Indoxacarb	3	NO	NO
64405-8	NIBOR BORATE INSECTICIDE AND FUNGICIDE	142.31	6.00	94	Disodium octaborate tetrahydrate	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
1677-43	STER-BAC	105.28	0.00	90	Alkyl (60%C14, 25%C12, 15%C16) dimethylbenzyl ammonium chloride	1	NO	NO
64405-2	REDZONE BAIT	0.00	101.44	86	Boric acid	3	NO	NO
432-1544	TEMPRID SC-F INSECTICIDE	12.17	0.00	77	Cyfluthrin, beta; Imidacloprid	3	NO	NO
432-1483	TEMPRID SC INSECTICIDE	10.07	0.00	66	Cyfluthrin, beta; Imidacloprid	3	NO	NO
432-1304	TEMPO 10 WP INSECTICIDE	23.34	0.00	23	Cyfluthrin, beta	3	NO	NO
5481-8973	ORTHENE PCO FORMULA II	21.75	0.00	21	Acephate	3	YES	NO
47000-73-1677	SSI-50 INSECTICIDE	0.00	9.88	6	Pyrethrins; Piperonyl butoxide; N-octyl bicycloheptene dicarboximide	3	YES	NO
100-1485	DUPONT ADVION ANT BAIT ARENA	0.00	0.36	4	Indoxacarb	3	NO	NO
6218-47	SUMMIT B.T.I. BRIQUETS	0.00	0.20	3	Bacillus thuringiensis subspecies israelensis strain BMP 144	3	NO	NO
5481-533-47000	PROZAP INSECT GUARD	0.00	0.09	2	DDVP	3	YES	NO
7969-210	TERMIDOR SC TERMITICIDE/INSECTICIDE	0.25	0.00	1	Fipronil	3	YES	NO
53883-335	N + P Regulator	0.13	0.00	1	Pyriproxyfen; Novaluron	3	NO	NO
432-1255	MAXFORCE GRANULAR INSECT BAIT	0.00	1.25	1	Hydramethylnon	3	YES	YES
279-3384	ROACH KIL COMMERCIAL	0.00	0.25	1	Boric acid	3	NO	NO
432-1460	MAXFORCE FC ROACH KILLER BAIT GEL F.05	0.00	0.01	1	Fipronil	3	YES	NO
<b>Other</b>								
55943-1	HOT FOOT BIRD REPELLENT	0.00	1.25	1	Polybutenes	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 approximately 40 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. The Healthy Homes Program uses a private contractor to provide high quality pest control in the homes of children with asthma. Pest management in facilities operated by 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 and outside contractors. Table 24 summarizes pesticide use by pesticide type. Table 25 lists all pesticide products used by DOHMH in 2019.

**Table 24 Types of Pesticides Used by DOHMH in 2019**

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	31477.3	34.3%	39955	43.9%
Insecticide	0.0	0.0%	60204.4	65.7%	51019	56.1%
<b>Totals</b>	<b>0.0</b>		<b>91,681.7</b>		<b>90,974</b>	

**Table 25 Pesticide Products Used by DOHMH in 2019 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
<b>Rodenticides</b>								
12455-90	FINAL RODENTICIDE	0.00	10429.44	13460	Brodifacoum	3	NO	NO
12455-69	CONTRAC RODENTICIDE	0.00	10282.06	12514	Bromadiolone	3	NO	NO
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	1072.91	3902	Difethialone	3	NO	NO
12455-133	CONTRAC WITH LUMITRACK	0.00	1355.06	3869	Bromadiolone	3	NO	NO
7173-297	BROMADIOLONE PASTE 0901	0.00	401.39	1,535	Bromadiolone	3	NO	NO
100-1055	WEATHERBLOK BAIT WITH BITREX	0.00	483.55	1,260	Brodifacoum	3	NO	NO
12455-36	CONTRAC RAT AND MOUSE BAIT	0.00	1,615.13	1,176	Bromadiolone	3	NO	NO
12455-146	CONTRAC SOFT BAIT	0.00	210.61	741	Bromadiolone	3	NO	NO
12455-139	Final Soft Bait	0.00	209.46	644	Brodifacoum	3	NO	NO
7173-304	BROMETHALIN SOFT BAIT	0.00	96.19	439	Bromethalin	3	NO	NO
12455-79	CONTRAC ALL-WEATHER BLOX	0.00	820.19	195	Bromadiolone	3	NO	NO
12455-148	Rat Ice	0.00	4,386.13	135	Carbon dioxide	2	NO	NO
7173-205	GENERATION PELLETS	0.00	106.94	73	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
12455-75	CONTRAC RAT AND MOUSE BAIT READY TO USE PLACE PAC	0.00	7.44	6	Bromadiolone	3	NO	NO
12455-86	CONTRAC RODENTICIDE PLACE PAC	0.00	0.80	6	Bromadiolone	3	NO	NO
<b>Insecticides</b>								
73049-429	VECTOMAX FG	0.00	3,361.32	50,211	Bacillus sphaericus; Bacillus thuringiensis, subsp. israelensis, strain AM 65-52	3	NO	NO
73049-20	VECTOLEX CG BIOLOGICAL LARVICIDE	0.00	16,981.06	338	Bacillus sphaericus	3	NO	NO
73049-10	VECTOBAC G BIOLOGICAL LARVICIDE GRANULES	0.00	37,039.73	281	Bacillus thuringiensis, subsp. israelensis, strain AM 65-52	3	NO	NO
432-1534	BES0668 Insecticide	0.00	1,658.08	87	Deltamethrin	3	NO	NO
73049-501	VBC-60394 FG BIOLOGICAL LARVICIDE FINE GRANULE	0.00	409.75	68	Bacillus thuringiensis, subsp. israelensis, strain AM 65-52	3	NO	NO
1021-1688-8329	ANVIL 10+10 ULV	0.00	754.48	34	Phenothrin; Piperonyl butoxide	3	YES	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, one facility – Preventative Assistance and Temporary Housing (PATH) – is an intake facility, and five adult facilities 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 26 summarizes pesticide use by pesticide type. Table 27 lists all pesticide products used by DHS in 2019.

**Table 26: Types of Pesticides Used by DHS in 2019**

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	434.3	99.9%	164	69.2%
Insecticide	2.3	100.0%	0.5	0.1%	73	30.8%
<b>Totals</b>	<b>2.3</b>		<b>434.8</b>		<b>237</b>	

**Table 27: Pesticide Products Used by DHS in 2019 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
<b>Rodenticides</b>								
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	20.42	77	Difethialone	3	NO	NO
12455-69	CONTRAC RODENTICIDE	0.00	388.24	67	Bromadiolone	3	NO	NO
12455-139	Final Soft Bait	0.00	17.03	11	Brodifacoum	3	NO	NO
7173-297	BROMADIOLONE PASTE 0901	0.00	5.77	7	Bromadiolone	3	NO	NO
12455-146	CONTRAC SOFT BAIT	0.00	2.87	2	Bromadiolone	3	NO	NO
<b>Insecticides</b>								
432-763	SUSPEND SC INSECTICIDE	2.31	0.00	58	Deltamethrin	3	NO	NO
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	0.34	14	Indoxacarb	3	NO	NO
432-1257	MAXFORCE ROACH BAIT F.05	0.00	0.17	1	Fipronil	3	YES	NO

### **Housing Authority**

The New York City Housing Authority (NYCHA) manages more than 2,200 residential buildings and more than 170,000 apartments, as well as office space and grounds that cover approximately 2,300 acres. NYCHA currently has a staff of more than 100 pest management professionals who 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 rodents, cockroaches and bedbugs, and exterior rats, and weeds. Mosquito control and supplemental treatments are done by vendor services. Table 28 summarizes pesticide use by pesticide type on NYCHA property. Table 29 lists the products used by NYCHA in 2019. Please note the data in the column marked Volume (Gals) in Tables 28 and 29 reflect the amount of liquid insecticide when diluted with one gallon of water, not the amount of insecticide used during each application.

**Table 28: Types of Pesticides Used by NYCHA in 2019**

Pesticide Type	Volume*		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.1	0.0%	29257.2	94.3%	39647	20.9%
Insecticide	1122.9	99.0%	1763.0	5.7%	150395	79.1%
Herbicide	11.2	1.0%	0.0	0.0%	17	0.0%
<b>Totals</b>	<b>1,134.2</b>		<b>31,020.2</b>		<b>190,059</b>	

**Table 29: Pesticide Products Used by NYCHA in 2019 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
<b>Rodenticides</b>								

EPA Reg. #	EPA Product Name	Volume (Gals)*	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	8,579.27	28,781	Difethialone	3	NO	NO
12455-69	CONTRAC RODENTICIDE	0.00	16,536.31	4,055	Bromadiolone	3	NO	NO
12455-86	CONTRAC RODENTICIDE PLACE PAC	0.00	1,737.92	2,720	Bromadiolone	3	NO	NO
12455-56	DITRAC TRACKING POWDER	0.00	233.78	1,331	Diphacinone	2	NO	NO
7173-297	BROMADIOLONE PASTE 0901	0.00	410.61	1,108	Bromadiolone	3	NO	NO
82744-2-56	JT EATON NECTUS SOFT BAIT 2G SECOND GENERATION RODENTICIDE	0.00	117.31	516	Bromadiolone	3	NO	NO
12455-79	CONTRAC ALL-WEATHER BLOX	0.00	711.12	360	Bromadiolone	3	NO	NO
12455-75	CONTRAC RAT AND MOUSE BAIT READY TO USE PLACE PAC	0.00	96.99	211	Bromadiolone	3	NO	NO
12455-108	FORMUS ALL-WEATHER BLOX	0.09	3.82	86	Brodifacoum	3	NO	NO
12455-80	DITRAC ALL-WEATHER BLOX	0.00	272.13	78	Diphacinone	3	NO	NO
87235-2-88689	EZ BLOCK BROMADIOLONE ALL WEATHER BAIT BLOCK	0.00	69.25	78	Bromadiolone	3	NO	NO
7173-304	BROMETHALIN SOFT BAIT	0.00	26.59	73	Bromethalin	3	NO	NO
12455-148	Rat Ice	0.00	368.00	69	Carbon dioxide	2	NO	NO
7173-208	MAKI RODENTICIDE BAIT PACKS (PELLETS)	0.00	14.72	59	Bromadiolone	3	NO	NO
12455-139	Final Soft Bait	0.00	6.34	56	Brodifacoum	3	NO	NO
56-42	BAIT BLOCK RODENTICIDE WITH PEANUT BUTTER FLAVORIZ	0.00	30.63	41	Diphacinone	3	NO	NO
7173-113	ROZOL TRACKING POWDER	0.00	3.75	14	Chlorophacino ne	2	NO	NO
12455-36	CONTRAC RAT AND MOUSE BAIT	0.00	38.53	9	Bromadiolone	3	NO	NO
12455-89	FINAL ALL-WEATHER BLOX	0.00	0.19	1	Brodifacoum	3	NO	NO
7969-382	Selontra Rodent Bait	0.00	0.00	1	Cholecalciferol	3	NO	NO
<b>Insecticides</b>								
432-763	SUSPEND SC INSECTICIDE	404.40	0.00	46,359	Deltamethrin	3	NO	NO
432-1483	TEMPRID SC INSECTICIDE	137.15	0.00	44,095	Cyfluthrin, beta; Imidacloprid	3	NO	NO
432-1257	MAXFORCE ROACH BAIT F.05	0.00	323.34	9,967	Fipronil	3	YES	NO
432-1259	PRODUCT: RBF5	0.00	362.70	9,866	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
1021-2593	VENDETTA PLUS COCKROACH GEL BAIT	0.00	272.85	9,841	Avermectin; Pyriproxyfen	3	NO	NO
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	301.04	7,150	Indoxacarb	3	NO	NO
432-1460	MAXFORCE FC ROACH KILLER BAIT GEL F.05	0.00	142.65	5,527	Fipronil	3	YES	NO
2724-351	ZOECON RF-259 EMULSIFIABLE CONCENTRATE	32.49	0.00	4,159	(7S)-Hydroprene	3	NO	NO
499-304	WHITMIRE OPTEM ME PT 600	31.92	0.00	4,088	Cyfluthrin	3	NO	NO
397-13	STERI-FAB	437.40	0.00	3,468	Phenothrin; Isopropyl alcohol; Alkyl (60%C14, 25%C12, 15%C16) dimethylbenzyl ammonium chloride; Didecyl dimethyl ammonium chloride	2	NO	NO
432-1544	TEMPRID SC-F INSECTICIDE	34.65	0.00	2,081	Cyfluthrin, beta; Imidacloprid	3	NO	NO
1021-2796	MGK Formula 3113	0.00	45.64	1,686	Clothianidin; Pyriproxyfen	0	NO	NO
279-9554	CB INSECTICIDE WITH DELTAMETHRIN	12.84	59.38	273	Deltamethrin	3	NO	NO
64405-2-74455	ECOLOGICAL ANT & INSECT BAIT	0.05	40.77	261	Boric acid	3	NO	NO
73079-4	BORACTIN INSECTICIDE POWDER	0.00	57.36	246	Boric acid	3	NO	NO
64405-2	REDZONE BAIT	0.00	27.59	204	Boric acid	3	NO	NO
1021-1603	NYLAR 10EC	0.74	0.00	192	Pyriproxyfen	3	NO	NO
100-1486	DUPONT ADVION COCKROACH BAIT ARENA	0.00	56.71	189	Indoxacarb	3	NO	NO
100-1290	OPTIGARD COCKROACH GEL BAIT	0.00	5.28	123	Emamectin, benzoate	3	NO	NO
67425-14	ECOPCO ACU	19.54	0.00	116	Phenylethyl propionate	3	NO	NO
432-1531	BES0600 INSECTICIDE	0.00	3.82	110	Clothianidin	0	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	4.02	77	Indoxacarb	3	NO	NO
432-1375	PRE-EMPT FLY BAIT	0.00	20.07	73	Imidacloprid; (Z)-9-Tricosene	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
1021-2569	MULTICIDE SPRAY 29511	7.97	0.00	44	Imidacloprid; Phenothrin; N-octyl bicycloheptene dicarboximide	0	YES	NO
2724-351-50809	ZOECON GENCOR 9% EMULSIFIABLE CONCENTRATE	0.30	0.00	39	(7S)-Hydroprene	3	NO	NO
499-362	WHITMIRE PT 515 WASP FREEZE	2.59	0.00	28	D-trans Allethrin; Phenothrin	3	YES	NO
241-313-9444	SIEGE PBS GEL INSECTICIDE	0.00	3.96	26	Hydramethylnon	3	YES	YES
1021-1815	EVERCIDE ESFENVALERATE 6.4% CS	0.39	0.00	23	Esfenvalerate	3	NO	NO
73766-1	GOURMET ANT BAIT GEL	0.00	29.28	21	Disodium octaborate tetrahydrate	3	NO	NO
279-3206	TALSTAR TC FLOWABLE TERMITICIDE/INSECTICIDE	0.05	0.00	14	Bifenthrin	3	YES	NO
499-406	AVERT PRESCRIPTION TREATMENT TC 93A BAIT	0.00	0.39	9	Avermectin	3	NO	NO
432-1455	BES 0026 FLY SPOT BAIT	0.19	0.27	8	Imidacloprid; (Z)-9-Tricosene	3	NO	NO
100-1483	ADVION INSECT GRANULE	0.00	0.69	5	Indoxacarb	3	NO	NO
499-467	WHITMIRE AVERT TC 181	0.00	0.09	5	Avermectin	3	NO	NO
279-3393	CB-80-1 FOR INSECT CONTROL	0.00	2.55	4	Pyrethrins; Piperonyl butoxide	3	YES	NO
73079-6	GREEN ZONE GRANULAR BAIT	0.00	2.00	4	Boric acid	3	NO	NO
100-1485	DUPONT ADVION ANT BAIT ARENA	0.00	0.31	4	Indoxacarb	3	NO	NO
89459-59	ENVI ACU CONTACT Insecticide	0.20	0.00	3	Phenylethyl propionate	3	NO	NO
100-1066	DEMAND CS INSECTICIDE	0.00	0.00	2	Cyhalothrin, lambda	3	NO	NO
1001-73	ECOLOGIX COCKROACH BAIT	0.00	0.11	2	Xanthine; Oxypurinol	3	NO	NO
73079-8	INTICE GELANIMO ANT BAIT	0.00	0.08	2	Borax	3	NO	NO
73049-20	VECTOLEX CG BIOLOGICAL LARVICIDE	0.00	0.02	1	Bacillus sphaericus	3	NO	NO
<b>Herbicides</b>								
71995-33	ROUNDUP WEED & GRASS KILLER READY-TO-USE PLUS	0.67	0.00	11	Glyphosate, isopropylamine salt; Nonanoic 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
524-536	MON 78473 HERBICIDE	9.50	0.00	5	Glyphosate, isopropylamine alt	3	NO	NO
42750-61	GLYPHOSATE 41% PLUS	1.00	0.00	1	Glyphosate, isopropylamine salt	3	NO	NO

\*NOTE: The data reflect the amount of liquid insecticide when diluted with one gallon of water, not the amount of insecticide used during each application.

## Housing Preservation and Development

Housing Preservation and Development (HPD) oversees occupied and vacant residential and commercial buildings, vacant lots, and a limited number of agency offices. In addition, its Emergency Repair Program occasionally encounters and responds to rats and fleas in occupied private buildings. HPD has no certified applicators on staff and contracts for pest management services. Table 30 summarizes pesticide use by pesticide type. Table 31 lists all pesticide products used by HPD in 2019.

**Table 30: Types of Pesticides Used by HPD in 2019**

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.8	93.5%	173.7	99.9%	98	18.9%
Insecticide	0.1	6.5%	0.1	0.1%	420	81.1%
<b>Totals</b>	<b>0.8</b>		<b>173.8</b>		<b>518</b>	

**Table 31: Pesticide Products Used by HPD in 2019**

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
<b>Rodenticides</b>								
7173-202	MAKI MINI BLOCKS	0.79	173.69	98	Bromadiolone	3	NO	NO
<b>Insecticides</b>								
432-1363	TEMPO SC INSECTICIDE	0.05	0.11	417	Cyfluthrin, beta	3	NO	NO
432-763	SUSPEND SC INSECTICIDE	0.01	0.00	3	Deltamethrin	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 32 summarizes pesticide use by pesticide type. Table 33 lists the products used by HRA/DSS in 2019.

**Table 32: Types of Pesticides Used by HRA in 2019**

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	0.8	84.4%	1	20.0%
Insecticide	0.0	0.0%	0.1	15.6%	4	80.0%
<b>Totals</b>	<b>0.0</b>		<b>0.9</b>		<b>5</b>	

**Table 33: Pesticide Products Used by HRA in 2019 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
<b>Rodenticides</b>								
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	0.79	1	Difethialone	3	NO	NO
<b>Insecticides</b>								
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	0.11	3	Indoxacarb	3	NO	NO
432-1257	MAXFORCE ROACH BAIT F.05	0.00	0.03	1	Fipronil	3	YES	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 2019.

## ***Parks and Recreation***

New York City has 28,000 acres of parks, playgrounds, athletic fields, natural areas, recreational facilities, comfort stations, beaches, historic buildings, and parkways maintained by the Department of Parks and Recreation (DPR). 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.

DPR reports include pesticides applied on all city-owned golf courses. Local Law 37 exempts these locations from pesticide prohibitions. These tables also include data from sister organizations that operate on DPR property, such as zoos, conservancies, and botanic gardens. Table 34 summarizes pesticide use by pesticide type. Table 35 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 34: Types of Pesticides Used by DPR in 2019**

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	12769.7	24.5%	3600	56.0%
Insecticide	405.9	8.5%	1396.9	2.7%	570	8.9%
Herbicide	620.7	12.9%	30257.2	58.1%	1175	18.3%
Fungicide	3605.8	75.2%	7630.1	14.7%	1002	15.6%
Other	164.5	3.4%	2.4	0.0%	85	1.3%
<b>Totals</b>	<b>4796.8</b>		<b>52056.2</b>		<b>6,432</b>	

**Table 35: Ten Most Frequently Applied Pesticide Products by DPR in 2019 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
<b>Rodenticides</b>								
12455-148	Rat Ice	0.00	10,637.25	1,612	Carbon dioxide	2	NO	NO
12455-69	CONTRAC RODENTICIDE	0.00	945.17	699	Bromadiolone	3	NO	NO
12455-36	CONTRAC RAT AND MOUSE BAIT	0.00	360.38	428	Bromadiolone	3	NO	NO
7173-187	MAKI PARAFFINIZED PELLETS	0.00	368.25	240	Bromadiolone	3	NO	NO
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	20.48	96	Difethialone	3	NO	NO
7173-218	GENERATION MINI BLOCKS	0.00	42.25	82	Difethialone	3	NO	NO
7173-297	BROMADIOLONE PASTE 0901	0.00	21.17	76	Bromadiolone	3	NO	NO
12455-86	CONTRAC RODENTICIDE PLACE PAC	0.00	92.35	75	Bromadiolone	3	NO	NO
12455-79	CONTRAC ALL-WEATHER BLOX	0.00	36.94	75	Bromadiolone	3	NO	NO
7173-238	GENERATION MEAL	0.00	118.31	74	Difethialone	3	NO	NO
<b>Insecticides</b>								
70506-24	UP-STAR GOLD INSECTICIDE	46.81	0.00	30	Bifenthrin	3	YES	NO
9688-190-8845	SPECTRACIDE DESTROYER BRAND WASP & HORNET KILLER	1.34	37.19	30	Cyhalothrin, lambda; Prallethrin	3	NO	NO
70506-121	UPI-2005 EXP-06 RUP INSECTICIDE	10.54	7.38	27	Cyhalothrin, lambda	2	NO	NO
48813-1-68539	SUFFOIL-X	5.55	0.00	22	Petroleum distillates	3	NO	NO
70051-2-59807	TRIACT 70	2.94	0.00	21	Neem oil	3	NO	NO
100-1489	DUPONT ACELEPRYN INSECTICIDE	15.83	0.00	20	DPX-E2Y45	0	NO	NO
86203-11-59639	SAFARI 20SG INSECTICIDE	0.00	5.82	18	Dinotefuran	3	NO	NO
432-1312-67760	GARANT T&O 2F	18.92	0.00	17	Imidacloprid	3	NO	NO
432-1369-59807	MARATHON II GREENHOUSE AND NURSERY INSECTICIDE	0.06	0.00	16	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
73049-39	DIPEL DF DRY FLOWABLE BIOLOGICAL INSECTICIDE	0.00	1.80	16	Bacillus thuringiensis, subsp. Kurstaki, strain ABTS-351, fermentation solids and solubles	3	NO	NO
<b>Herbicides</b>								
62719-324	GLYPRO	66.67	0.00	239	Glyphosate, isopropylamine salt	3	NO	NO
524-579	ROUNDUP PROMAX	60.59	0.03	227	Glyphosate, potassium salt	3	NO	NO
62719-527	GARLON 4 ULTRA	29.51	0.00	104	Triclopyr	2	NO	NO
62719-556	ACCORD XRT II	6.67	0.00	74	Glyphosate, dimethylammonium salt	3	NO	NO
62719-542	DIMENSION 2EW	31.68	0.00	47	Dithiopyr	2	NO	NO
100-937	PRIMO MAXX	20.65	0.00	46	Trinexapac-ethyl	3	NO	NO
62719-176	PATHFINDER II	33.40	0.00	42	Triclopyr, butoxyethyl ester	3	NO	NO
524-529	ROUNDUP PRO CONCENTRATE	39.28	0.00	41	Glyphosate, isopropylamine salt	3	NO	NO
241-437-67690	CLEARCAST HERBICIDE	14.43	0.00	29	Imazamox	3	NO	NO
89442-7	TRIN-PAC SELECT	49.81	0.00	28	Trinexapac-ethyl	3	NO	NO
<b>Fungicides</b>								
100-1364	DACONIL ACTION	431.85	0.00	67	Acibenzolar-S-methyl; Chlorothalonil	2	YES	NO
71065-3	COMPANION LIQUID BIOLOGICAL FUNGICIDE	333.57	0.00	55	Bacillus subtilis GBO3	3	NO	NO
53883-353	QUALI-PRO T-NEX	26.44	51.00	55	Trinexapac-ethyl	3	NO	NO
53883-323-86064	ARMOR TECH TMI 2020XL	196.00	87.50	44	Thiophanate-methyl; Iprodione	3	YES	YES
432-942	BANOL TURF AND ORNAMENTAL FUNGICIDE	71.30	59.38	44	Propamocarb hydrochloride	3	NO	NO
100-1093	HERITAGE FUNGICIDE	0.00	86.35	35	Azoxystrobin	3	NO	NO
60063-7-10404	LESCO MANICRUE 6FL	200.75	0.00	27	Chlorothalonil	2	YES	NO
432-1541	12ESP705 FUNGICIDE	0.00	1,311.61	25	Fosetyl-AI	3	NO	NO
50534-202-100	MANICURE ULTREX TURF & ORNAMENTAL	0.00	790.60	25	Chlorothalonil	1	YES	NO
84059-3-87865	REGALIA PTO BIOFUNGICIDE FOR USE ON TURF AND ORNAMENTALS	51.94	0.00	23	Reynoutria sachalinensis	3	NO	NO
<b>Other</b>								
52483-1	HYPOCHLORITE SOLUTION	83.50	0.00	42	Sodium hypochlorite	1	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
14802-8-74466	MICROBE LIFE ALGAWAY 5.4 ALGAEICIDE FOR PONDS	5.00	0.00	14	Poly(oxyethylene) (dimethylimino) ethylene (dimethylimino) ethylene dichloride	3	NO	NO
2693-193	OPTIMA-BLUE	12.00	0.00	9	Copper oxide (ous)	2	NO	NO
2693-172	AQUARIUS ANTIFOULING BOTTOM PAINT 568 NAVY BLUE	10.00	0.00	9	Copper oxide (ous)	2	NO	NO
59807-4	HORMODIN 1	0.00	0.18	4	IBA	3	NO	NO
67702-3-54705	NEU1165M SLUG AND SNAIL BAIT	0.00	2.19	2	Iron phosphate	3	NO	NO
63838-5	BROMMAX 7.1	50.00	0.00	1	Sodium bromide; Sodium hypochlorite	1	NO	NO
44891-9	MONTEREY WATER-BASED ANTIFOULING COATING	2.00	0.00	1	Copper oxide (ous)	2	NO	NO
60061-14	WOOLSEY/Z*SPAR SUPER TOX ANTI-FOULING FINISH B-74	1.00	0.00	1	Copper oxide (ous)	2	NO	NO
60061-71	PETTIT MARINE PAINT PREMIUM SINGLE SEASON ABLATIVE	1.00	0.00	1	Copper oxide (ous)	2	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, 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 36 summarizes pesticide use by pesticide type. Table 37 lists all pesticide products used by NYPD in 2019.

**Table 36 Types of Pesticides Used by NYPD in 2019**

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	8.2	78.1%	36	47.4%
Insecticide	0.0	0.0%	2.3	21.9%	40	52.6%
<b>Totals</b>	<b>0.0</b>		<b>10.5</b>		<b>76</b>	

**Table 37: Pesticide Products Used by NYPD in 2019 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
<b>Rodenticides</b>								
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	6.19	22	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
12455-69	CONTRAC RODENTICIDE	0.00	0.38	10	Bromadiolone	3	NO	NO
7173-297	BROMADIOLONE PASTE 0901	0.00	1.59	4	Bromadiolone	3	NO	NO
<b>Insecticides</b>								
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	0.89	28	Indoxacarb	3	NO	NO
64405-2	REDZONE BAIT	0.00	1.25	5	Boric acid	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	0.15	5	Indoxacarb	3	NO	NO
432-763	SUSPEND SC INSECTICIDE	0.00	0.00	2	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 38 summarizes pesticide use by pesticide type. Table 39 lists all pesticide products used by QPL in 2019.

**Table 38: Types of Pesticides Used by QPL in 2019**

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0	0.0%	56.7	99.4%	87	84.5%
Insecticide	0.0	0.0%	0.4	0.6%	16	15.5%
<b>Totals</b>	<b>0.0</b>		<b>57.1</b>		<b>103</b>	

**Table 39: Pesticide Products Used by QPL in 2019**

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
<b>Rodenticides</b>								
12455-89	FINAL ALL-WEATHER BLOX	0.00	56.75	87	Brodifacoum	3	NO	NO
<b>Insecticides</b>								
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
1021-2796	MGK Formula 3113	0.00	0.04	2	Clothianidin; Pyriproxyfen	0	NO	NO
100-1485	DUPONT ADVION ANT BAIT ARENA	0.00	0.03	2	Indoxacarb	3	NO	NO
100-1501	DUPONT ARILON INSECTICIDE	0.00	0.01	2	Indoxacarb	3	NO	NO
100-1502	INDOXACARB ANT GEL	0.00	0.01	2	Indoxacarb	3	NO	NO

## Sanitation, Department of

The Department of Sanitation (DSNY) manages garages, office buildings, transfer stations, and various publicly-owned lots throughout the city. Because of the nature of the agency's work – managing garbage – pest problems are endemic at some facilities, so DSNY employs two certified pesticide applicators who make routine visits to facilities and respond to emergency calls. DSNY also contracts for weed control on some of the City's rights-of-way. Table 40 summarizes pesticide use by pesticide type. Table 41 lists the products used by DSNY.

**Table 40: Types of Pesticides Used by DSNY in 2019**

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.3%	222.3	98.8%	291	33.9%
Insecticide	3.1	99.7%	2.8	1.2%	567	66.1%
<b>Totals</b>	<b>3.1</b>		<b>225.1</b>		<b>858</b>	

**Table 41: List of Pesticides Applied by DSNY in 2019**

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
<b>Rodenticides</b>								
12455-76	CONTRAC RODENTICIDE READY TO USE PLACE PAC	0.01	163.58	217	Bromadiolone	3	NO	NO
12455-89	FINAL ALL-WEATHER BLOX	0.00	57.83	69	Brodifacoum	3	NO	NO
12455-79	CONTRAC ALL-WEATHER BLOX	0.00	0.44	2	Bromadiolone	3	NO	NO
12455-76-48718	TERMINATOR II	0.00	0.00	1	Bromadiolone	3	NO	NO
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	0.33	1	Difethialone	3	NO	NO
12455-69	CONTRAC RODENTICIDE	0.00	0.13	1	Bromadiolone	3	NO	NO
<b>Insecticides</b>								
100-1066	DEMAND CS INSECTICIDE	2.69	0.66	422	Cyhalothrin, lambda	3	NO	NO
432-1363	TEMPO SC INSECTICIDE	0.35	0.00	126	Cyfluthrin, beta	3	NO	NO
73766-1	GOURMET ANT BAIT GEL	0.00	2.10	16	Disodium octaborate tetrahydrate	3	NO	NO
9444-168-1270	ZEP TOTAL CONTROL TOTAL RELEASE FOGGER TOTAL CONTROL SYSTEMS	0.04	0.00	1	Esfenvalerate; Prallethrin; Pyriproxyfen	3	NO	NO
499-370-70627	JOHNSON WAX PROFESSIONAL BRAND GRANULAR ANT BAIT	0.00	0.00	1	Avermectin	3	NO	NO
432-1257	MAXFORCE ROACH BAIT F.05	0.00	0.05	1	Fipronil	3	YES	NO



## Taxi and Limousine Commission

The Taxi and Limousine Commission (TLC) licenses and regulates more than 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 citywide contract administered by DCAS. TLC reported no pesticide applications in 2019.

## Transportation, Department of

The Department of Transportation (DOT) has a staff of more than 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 42 summarizes pesticide use by pesticide type. Table 43 lists all pesticide products used by DOT in 2019.

**Table 42: Types of Pesticides Used by DOT in 2019**

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	6.8	17.9%	45	3.3%
Insecticide	0.0	0.0%	1.8	4.7%	11	0.8%
Herbicide	175.4	100.0%	29.4	77.4%	1293	95.8%
<b>Totals</b>	<b>175.4</b>		<b>38.0</b>		<b>1,349</b>	

**Table 43: Pesticide Products Used by DOT in 2019**

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
<b>Rodenticides</b>								
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	5.38	31	Difethialone	3	NO	NO
7173-297	BROMADIOLONE PASTE 0901	0.00	0.79	12	Bromadiolone	3	NO	NO
12455-69	CONTRAC RODENTICIDE	0.00	0.63	2	Bromadiolone	3	NO	NO
<b>Insecticides</b>								
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	0.62	6	Indoxacarb	3	NO	NO
64405-2	REDZONE BAIT	0.00	1.13	4	Boric acid	3	NO	NO
432-1257	MAXFORCE ROACH BAIT F.05	0.00	0.04	1	Fipronil	3	YES	NO
<b>Herbicides</b>								

<b>EPA Reg. #</b>	<b>EPA Product Name</b>	<b>Volume (Gals)</b>	<b>Weight (Lbs)</b>	<b>No. Appl's.</b>	<b>Active Ingredient(s)</b>	<b>EPA Tox Cat</b>	<b>EPA Carcin</b>	<b>CA Dev. Toxin</b>
228-397	RIVERDALE VANQUISH HERBICIDE	39.85	6.25	294	Dicamba, diglycolamine salt	3	NO	NO
62719-556	ACCORD XRT II	61.18	0.00	293	Glyphosate, dimethylammonium salt	3	NO	NO
432-1580	DUPONT VIEWPOINT HERBICIDE	0.08	23.19	292	Aminocyclopyrachlor; Imazapyr; Metsulfuron-methyl	3	NO	NO
432-1516	ESPLANADE 200 SC	5.08	0.00	290	Indaziflam	3	NO	NO
62719-176	PATHFINDER II	69.16	0.00	124	Triclopyr, butoxyethyl ester	3	NO	NO

## APPENDIX 1: Complete Listing of Pesticide Products Used by New York City Agencies by Pesticide Type in 2019

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox. Cat.	EPA Carc in	CA Dev. Toxin
<b>Rodenticides</b>								
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.01	15,865.32	45294	Difethialone	3	NO	NO
12455-69	CONTRAC RODENTICIDE	0.00	29,412.41	18130	Bromadiolone	3	NO	NO
12455-90	FINAL RODENTICIDE	0.00	10,429.44	13460	Brodifacoum	3	NO	NO
12455-133	CONTRAC WITH LUMITRACK	0.00	1,355.06	3869	Bromadiolone	3	NO	NO
12455-146	CONTRAC SOFT BAIT	0.00	1,082.53	3027	Bromadiolone	3	NO	NO
7173-297	BROMADIOLONE PASTE 0901	0.00	857.49	2803	Bromadiolone	3	NO	NO
12455-86	CONTRAC RODENTICIDE PLACE PAC	0.28	1,831.07	2802	Bromadiolone	3	NO	NO
12455-148	Rat Ice	0.00	15,775.81	1831	Carbon dioxide	2	NO	NO
12455-36	CONTRAC RAT AND MOUSE BAIT	0.00	2,014.03	1613	Bromadiolone	3	NO	NO
12455-56	DITRAC TRACKING POWDER	0.00	242.50	1395	Diphacinone	2	NO	NO
100-1055	WEATHERBLOK BAIT WITH BITREX	0.02	508.40	1345	Brodifacoum	3	NO	NO
12455-79	CONTRAC ALL-WEATHER BLOX	0.00	1,933.42	961	Bromadiolone	3	NO	NO
12455-139	Final Soft Bait	0.00	244.07	730	Brodifacoum	3	NO	NO
82744-2-56	JT EATON NECTUS SOFT BAIT 2G SECOND GENERATION RODENTICIDE	0.00	118.90	572	Bromadiolone	3	NO	NO
7173-304	BROMETHALIN SOFT BAIT	0.00	122.77	512	Bromethalin	3	NO	NO
87235-2-88689	EZ BLOCK BROMADIOLONE ALL WEATHER BAIT BLOCK	0.00	203.44	356	Bromadiolone	3	NO	NO
7173-187	MAKI PARAFFINIZED PELLETS	0.00	368.25	240	Bromadiolone	3	NO	NO
12455-76	CONTRAC RODENTICIDE READY TO USE PLACE PAC	0.01	168.08	225	Bromadiolone	3	NO	NO
12455-75	CONTRAC RAT AND MOUSE BAIT READY TO USE PLACE PAC	0.00	104.42	217	Bromadiolone	3	NO	NO
7173-202	MAKI MINI BLOCKS	0.79	188.15	160	Bromadiolone	3	NO	NO
12455-89	FINAL ALL-WEATHER BLOX	0.00	114.76	157	Brodifacoum	3	NO	NO
7173-205	GENERATION PELLETS	0.00	213.75	143	Difethialone	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
7173-218	GENERATION MINI BLOCKS	0.00	53.18	91	Difethialone	3	NO	NO
12455-108	FORMUS ALL-WEATHER BLOX	0.09	3.82	86	Brodifacoum	3	NO	NO
12455-80	DITRAC ALL-WEATHER BLOX	0.00	272.13	78	Diphacinone	3	NO	NO
7173-238	GENERATION MEAL	0.00	118.31	74	Difethialone	3	NO	NO
7173-208	MAKI RODENTICIDE BAIT PACKS (PELLETS)	0.00	14.72	59	Bromadiolone	3	NO	NO
7173-258-3282	D-CON BAIT PASTE POUCHES	9.72	67.38	44	Difethialone	3	NO	NO
56-42	BAIT BLOCK RODENTICIDE WITH PEANUT BUTTER FLAVORIZ	0.00	30.63	41	Diphacinone	3	NO	NO
7173-113	ROZOL TRACKING POWDER	0.00	14.55	41	Chlorophacinone	2	NO	NO
12455-78	DITRAC RAT AND MOUSE BAIT PLACE PAC	0.00	72.20	14	Diphacinone	3	NO	NO
7173-188	MAKI RAT AND MOUSE BAIT PACKS (PELLETS)	0.00	1.56	5	Bromadiolone	3	NO	NO
47629-17-499	PRESCRIPTION TREATMENT BRAND SOREXA PELLET PLACE PACK	0.20	0.00	4	Difenacoum	3	NO	NO
47629-16-499	PRESCRIPTION TREATMENT BRAND SOREXA BLOCKS	0.07	0.00	3	Difenacoum	3	NO	NO
67517-95-56	ANSWER KILLS MICE WITH REFILLABLE BALT STATION	0.00	0.07	2	Bromethalin	3	NO	NO
47629-14-499	PRESCRIPTION TREATMENT BRAND SOREXA PELLETS	0.03	0.00	1	Difenacoum	3	NO	NO
12455-61	LIQUA-TOX II	0.03	0.00	1	Diphacinone, sodium salt	3	NO	NO
12455-76-48718	TERMINATOR II	0.00	0.00	1	Bromadiolone	3	NO	NO
36488-63	DIFENACOUM RAT AND MOUSE BLOCK IV	0.00	0.13	1	Difenacoum	3	NO	NO
7969-382	Selontra Rodent Bait	0.00	0.00	1	Cholecalciferol	3	NO	NO
<b>Insecticides</b>								
73049-429	VECTOMAX FG	0.00	3,368.66	50,238	Bacillus sphaericus; Bacillus thuringiensis, subsp. Israelensis, strain AM 65-52	3	NO	NO
432-763	SUSPEND SC INSECTICIDE	408.69	0.00	46,885	Deltamethrin	3	NO	NO
432-1483	TEMPRID SC INSECTICIDE	147.22	0.00	44,165	Cyfluthrin, beta; Imidacloprid	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
1021-2593	VENDETTA PLUS COCKROACH GEL BAIT	0.00	310.03	10,911	Avermectin; Pyriproxyfen	3	NO	NO
432-1257	MAXFORCE ROACH BAIT F.05	0.21	337.44	10,597	Fipronil	3	YES	NO
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	471.22	9,883	Indoxacarb	3	NO	NO
432-1259	PRODUCT: RBF5	0.00	363.24	9,880	Fipronil	3	YES	NO
432-1460	MAXFORCE FC ROACH KILLER BAIT GEL F.05	0.00	160.92	6,130	Fipronil	3	YES	NO
2724-351	ZOECON RF-259 EMULSIFIABLE CONCENTRATE	32.61	0.00	4,192	(7S)-Hydroprene	3	NO	NO
499-304	WHITMIRE OPTEM ME PT 600	31.92	4.75	4,098	Cyfluthrin	3	NO	NO
397-13	STERI-FAB	445.42	764.66	4,057	Phenothrin; Isopropyl alcohol; Alkyl (60%C14, 25%C12, 15%C16) dimethylbenzyl ammonium chloride; Didecyl dimethyl ammonium chloride	2	NO	NO
64405-2	REDZONE BAIT	0.00	1,837.50	3,660	Boric acid	3	NO	NO
499-510	PRESCRIPTION TREATMENT BRAND ALPINE COCKROACH GEL BAIT PISTON CAN	0.00	19.34	3,062	Dinotefuran	3	NO	NO
73079-14	IMIDACLOPRID GRANULAR BAIT	0.00	537.62	2,659	Imidacloprid	3	NO	NO
1021-2796	MGK Formula 3113	0.00	69.07	2,371	Clothianidin; Pyriproxyfen	0	NO	NO
432-1544	TEMPRID SC-F INSECTICIDE	46.90	0.00	2,215	Cyfluthrin, beta; Imidacloprid	3	NO	NO
73079-4	BORACTIN INSECTICIDE POWDER	1.50	566.57	1,573	Boric acid	3	NO	NO
73766-1	GOURMET ANT BAIT GEL	0.00	53.29	1,209	Disodium octaborate tetrahydrate	3	NO	NO
432-1363	TEMPO SC INSECTICIDE	53.22	2.67	1,022	Cyfluthrin, beta	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	26.84	822	Indoxacarb	3	NO	NO
499-294	AVERT PRESCRIPTION TREATMENT 310	0.00	8.07	805	Avermectin	3	NO	NO
100-1066	DEMAND CS INSECTICIDE	63.09	0.66	608	Cyhalothrin, lambda	3	NO	NO
89459-84	RF2228 LH AEROSOL	27.96	0.00	582	Cyhalothrin, lambda; (7S)-Hydroprene	3	NO	NO
499-473	WHITMIRE MICRO-GEN TC 205 INJECTION SYSTEM	32.56	0.00	361	Cyhalothrin, lambda	3	NO	NO
73049-20	VECTOLEX CG BIOLOGICAL LARVICIDE	0.00	16,986.73	360	Bacillus sphaericus	3	NO	NO
1021-1603	NYLAR 10EC	198.53	0.00	344	Pyriproxyfen	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
279-9554	CB INSECTICIDE WITH DELTAMETHRIN	12.84	75.13	316	Deltamethrin	3	NO	NO
89459-59	ENVI ACU CONTACT Insecticide	23.92	3.63	309	Phenylethyl propionate	3	NO	NO
73049-10	VECTOBAC G BIOLOGICAL LARVICIDE GRANULES	0.00	37,039.73	281	Bacillus thuringiensis, subsp. Israelensis, strain AM 65-52	3	NO	NO
64405-2-74455	ECOLOGICAL ANT & INSECT BAIT	0.05	40.80	262	Boric acid	3	NO	NO
432-763-62719	SUSPEND SC	9.42	0.00	259	Deltamethrin	3	NO	NO
6218-47	SUMMIT B.T.I. BRIQUETS	0.00	33.86	207	Bacillus thuringiensis subspecies Israelensis strain BMP 144	3	NO	NO
100-1486	DUPONT ADVION COCKROACH BAIT ARENA	0.00	57.69	198	Indoxacarb	3	NO	NO
100-1501	DUPONT ARILON INSECTICIDE	139.78	0.01	169	Indoxacarb	3	NO	NO
2724-484	RF 9707 AEROSOL	0.00	16.31	154	(7S)-Hydroprene	3	NO	NO
432-1506	MAXFORCE QUANTUM ANT BAIT	0.00	1.91	147	Imidacloprid	3	NO	NO
432-1455	BES 0026 FLY SPOT BAIT	86.47	48.14	140	Imidacloprid; (Z)-9-Tricosene	3	NO	NO
73079-6	GREEN ZONE GRANULAR BAIT	0.13	19.25	125	Boric acid	3	NO	NO
100-1290	OPTIGARD COCKROACH GEL BAIT	0.00	5.28	123	Emamectin, benzoate	3	NO	NO
67425-14	ECOPCO ACU	19.54	0.19	117	Phenylethyl propionate	3	NO	NO
432-772	DELTA DUST	0.06	4.76	114	Deltamethrin	3	NO	NO
64405-8	NIBOR BORATE INSECTICIDE AND FUNGICIDE	156.31	6.00	112	Disodium octaborate tetrahydrate	3	NO	NO
432-1531	BES0600 INSECTICIDE	0.00	3.85	111	Clothianidin	0	NO	NO
100-1483	ADVION INSECT GRANULE	0.00	27.03	106	Indoxacarb	3	NO	NO
1677-43	STER-BAC	107.78	0.00	95	Alkyl (60%C14, 25%C12, 15%C16) dimethylbenzyl ammonium chloride	1	NO	NO
432-1534	BES0668 Insecticide	0.00	1,658.08	87	Deltamethrin	3	NO	NO
9688-190-8845	SPECTRACIDE DESTROYER BRAND WASP & HORNET KILLER	3.47	37.19	77	Cyhalothrin, lambda; Prallethrin	3	NO	NO
499-507	PRESCRIPTION TREATMENT BRAND ALPINE COCKROACH GEL BAIT RESERVOIR	0.02	4.68	76	Dinotefuran	3	NO	NO
432-1375	PRE-EMPT FLY BAIT	0.00	20.07	73	Imidacloprid; (Z)-9-Tricosene	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
73049-501	VBC-60394 FG BIOLOGICAL LARVICIDE FINE GRANULE	0.00	409.75	68	Bacillus thuringiensis, subsp. Israelensis, strain AM 65-52	3	NO	NO
279-3206	TALSTAR TC FLOWABLE TERMITICIDE/INSECTICIDE	0.25	0.00	66	Bifenthrin	3	YES	NO
2724-469	ZOECON (S)-HYDROPRENE ROACH CONTROL STATION II	1.28	0.00	59	(7S)-Hydroprene	3	NO	NO
1021-1828	MGK ROACH BAIT 2822	0.05	1.27	49	Avermectin	3	NO	NO
2724-351-50809	ZOECON GENCOR 9% EMULSIFIABLE CONCENTRATE	0.64	0.16	45	(7S)-Hydroprene	3	NO	NO
1021-2569	MULTICIDE SPRAY 29511	7.97	0.00	44	Imidacloprid; Phenothrin; N-octyl bicycloheptene dicarboximide	0	YES	NO
100-1485	DUPONT ADVION ANT BAIT ARENA	0.00	1.44	44	Indoxacarb	3	NO	NO
499-370	PT 370 ASCEND FIRE ANT STOPPER BAIT	0.00	5.13	43	Avermectin	3	NO	NO
5481-8973	ORTHENE PCO FORMULA II	36.25	0.00	35	Acephate	3	YES	NO
1021-1641-57076	CONQUER RESIDUAL INSECTICIDE CONCENTRATE	0.00	0.05	34	Esfenvalerate	3	NO	NO
1021-1688-8329	ANVIL 10+10 ULV	0.00	754.48	34	Phenothrin; Piperonyl butoxide	3	YES	NO
70506-24	UP-STAR GOLD INSECTICIDE	46.81	0.00	30	Bifenthrin	3	YES	NO
432-1304	TEMPO 10 WP INSECTICIDE	23.34	0.10	29	Cyfluthrin, beta	3	NO	NO
1021-1815	EVERCIDE ESFENVALERATE 6.4% CS	2.90	0.00	28	Esfenvalerate	3	NO	NO
499-362	WHITMIRE PT 515 WASP FREEZE	2.59	0.00	28	D-trans Allethrin; Phenothrin	3	YES	NO
70506-121	UPI-2005 EXP-06 RUP INSECTICIDE	10.54	7.38	27	Cyhalothrin, lambda	2	NO	NO
73079-2	INTICE GRANULAR BAIT	0.02	22.25	27	Boric acid	3	NO	NO
241-313-9444	SIEGE PBS GEL INSECTICIDE	0.00	3.96	26	Hydramethylnon	3	YES	YES
432-1262	MAXFORCE IBH10	0.97	0.02	23	Hydramethylnon	3	YES	YES
48813-1-68539	SUFFOIL-X	5.55	0.00	22	Petroleum distillates	3	NO	NO
53883-335	N + P Regulator	0.49	0.00	22	Pyriproxyfen; Novaluron	3	NO	NO
70051-2-59807	TRIACT 70	2.94	0.00	21	Neem oil	3	NO	NO
100-1489	DUPONT ACELEPRYN INSECTICIDE	15.83	0.00	20	DPX-E2Y45	0	NO	NO
1021-1177	PYROCID FOGGING CONCENTRATE 5628	0.00	25.25	20	Pyrethrins; Piperonyl butoxide; N-octyl bicycloheptene dicarboximide	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
86203-11-59639	SAFARI 20SG INSECTICIDE	0.00	5.82	18	Dinotefuran	3	NO	NO
432-1312-67760	GARANT T&O 2F	18.92	0.00	17	Imidacloprid	3	NO	NO
432-1255	MAXFORCE GRANULAR INSECT BAIT	0.52	1.25	17	Hydramethylnon	3	YES	YES
432-1369-59807	MARATHON II GREENHOUSE AND NURSERY INSECTICIDE	0.06	0.00	16	Imidacloprid	3	NO	NO
73049-39	DIPEL DF DRY FLOWABLE BIOLOGICAL INSECTICIDE	0.00	1.80	16	Bacillus thuringiensis, subsp. Kurstaki, strain ABTS-351, fermentation solids and solubles	3	NO	NO
53883-244-66222	QUALI-PRO LAMBDA GC-0	4.61	0.00	15	Cyhalothrin, lambda	2	NO	NO
73079-12	SILICIDE(TM)	0.00	2.38	15	Diatomaceous earth	3	NO	NO
100-1543	MAINSRING GH & N	0.29	0.00	14	Cyantraniliprole	0	NO	NO
69526-17	CIVITAS ONE	60.00	0.00	13	Mineral oil	3	NO	NO
100-1088	SCIMITAR GC INSECTICIDE	2.22	0.00	13	Cyhalothrin, lambda	3	NO	NO
55809-3	CRC WASP & HORNET KILLER PLUS	0.84	0.0	13	Tetramethrin; Phenothrin	3	YES	NO
2724-476	ENSTAR II INSECT GROWTH REGULATOR (ENSTAR 5E)	0.55	0.00	13	(S)-Kinoprene	2	NO	NO
70051-9-59807	AZATIN O BIOLOGICAL INSECTICIDE	0.11	0.00	13	Azadirachtin	3	NO	NO
66222-19-1386	CHLORPYRIFOS 4E	30.38	0.00	11	Chlorpyrifos	2	NO	NO
83100-6-88975	PRIMERAONE IMIDACLOPRID 2F INSECTICIDE	2.19	0.00	11	Imidacloprid	3	NO	NO
66222-40-400	PEDESTAL	0.12	0.00	10	Novaluron	3	NO	NO
62719-523	BLACKHAWK	0.00	65.38	10	Spinosad	3	NO	NO
432-1312	MERIT 2F INSECTICIDE	8.68	0.00	9	Imidacloprid	3	NO	NO
4-62	BONIDE HORTICULTURAL AND DORMANT SPRAY OIL	1.09	0.00	9	Mineral oil	3	NO	NO
10163-324	M-PEDE INSECTICIDE/FUNGICIDE	0.14	0.00	9	Potassium laurate	2	NO	NO
100-1487	PROVAUNT	0.00	41.50	9	Indoxacarb	3	NO	NO
499-406	AVERT PRESCRIPTION TREATMENT TC 93A BAIT	0.00	0.39	9	Avermectin	3	NO	NO
62719-291	CONSERVE SC TURF AND ORNAMENTAL	2.62	0.00	8	Spinosad	3	NO	NO
8033-106-1001	TRISTAR 8.5 SL INSECTICIDE	1.15	0.00	8	Acetamiprid	3	NO	NO
432-1312-73220	QUALI-PRO IMIDACLOPRID 2F	14.19	0.00	7	Imidacloprid	3	NO	NO
100-1551	Ference	6.36	0.00	7	Cyantraniliprole	0	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
53883-366	QUALI-PRO BIFENTHRIN GOLF & NURSERY 7 9F	6.01	0.00	7	Bifenthrin	3	YES	NO
1381-237	ABAMECTIN .15EC	0.07	0.00	7	Avermectin	2	NO	NO
432-1471-59807	KONTOS	0.07	0.00	6	Spirotetramat	3	NO	NO
47000-73-1677	SSI-50 INSECTICIDE	0.00	9.88	6	Pyrethrins; Piperonyl butoxide; N-octyl bicycloheptene dicarboximide	3	YES	NO
73049-38	VECTOBAC 12AS BIOLOGICAL LARVICIDE	0.00	0.12	6	Bacillus thuringiensis, subsp. Israelensis, strain AM 65-52	3	NO	NO
279-3457	TRIPLE CROWN GOLF INSECTICIDE	11.82	0.00	5	Bifenthrin; Cypermethrin, zeta; Imidacloprid	2	YES	NO
59639-96	DISTANCE INSECT GROWTH REGULATOR	0.17	0.00	5	Pyriproxyfen	3	NO	NO
71711-4-67690	SEPRO AKARI 5SC MITICIDE/INSECTICIDE	0.11	0.00	5	Fenpyroximate	2	NO	NO
279-3443	D-FOAM INSECTICIDE	0.04	0.88	5	Deltamethrin	3	NO	NO
499-492	PRESCRIPTION TREATMENT BRAND 388B ADVANCE ANT GEL BAIT	0.02	0.11	5	Borax	3	NO	NO
1021-1424	PYROCID FOGGING CONCENTRATE 7338	0.00	6.19	5	Pyrethrins; Piperonyl butoxide; N-octyl bicycloheptene dicarboximide	3	YES	NO
279-3393	CB-80-1 FOR INSECT CONTROL	0.00	2.82	5	Pyrethrins; Piperonyl butoxide	3	YES	NO
499-467	WHITMIRE AVERT TC 181	0.00	0.09	5	Avermectin	3	NO	NO
69526-5	PURESpray SPRAY OIL 10E	21.75	0.00	4	Mineral oil	3	NO	NO
279-3155	TALSTAR NURSERY FLOWABLE INSECTICIDE/MITICIDE	8.07	0.00	4	Bifenthrin	3	YES	NO
83529-2-86064	AMORTECH IMD 2 SC	3.57	0.00	4	Imidacloprid	3	NO	NO
10163-326	CAPTIVA	0.38	0.00	4	Garlic; Resins, oleo-, capsicum; Soybean oil	3	NO	NO
499-496	PRESCRIPTION TREATMENT BRAND ADVANCE 360A DUAL CHOICE ANT BAIT STATIONS	0.04	0.00	4	Avermectin	3	NO	NO
432-1514	SUSPEND POLYZONE	0.02	0.00	4	Deltamethrin	3	NO	NO
66222-19	CHLORPYRIFOS 4E AG	0.00	32.38	4	Chlorpyrifos	2	NO	NO
432-1318	MERIT 75 WSP	0.00	27.00	4	Imidacloprid	3	NO	NO
1021-1767	MULTICIDE LICE & DUST MITE SPRAY 27911	0.00	4.25	4	Phenothrin; N-octyl bicycloheptene dicarboximide	3	YES	NO
4822-472	RAID MAX ROACH BAIT V	0.00	1.00	4	Avermectin	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
432-1227-10404	LESCO SEVIN SL	20.00	0.00	3	Carbaryl	3	YES	NO
228-588	MALLET 75 WP	0.26	0.80	3	Imidacloprid	3	NO	NO
73079-10	INVICT (TM) COCKROACH GEL	0.02	0.00	3	Imidacloprid	3	NO	NO
432-1264	MAXFORCE FC ANT KILLER BAIT GEL	0.01	0.00	3	Fipronil	3	YES	NO
432-1308	DYLOX 6.2 GRANULAR INSECTICIDE	0.00	840.00	3	Trichlorfon	3	NO	NO
228-501	MALLET 0.5 G INSECTICIDE	0.00	270.00	3	Imidacloprid	3	NO	NO
432-1318-10404	LESCO SYSTEMIC INSECTICIDE CONTAINS MERIT IN WATER SOLUBLE PACKETS	0.00	4.20	3	Imidacloprid	3	NO	NO
499-550	TC-323	0.00	2.56	3	Prallethrin	3	NO	NO
432-1457	MERIT FXT TABLET INSECTICIDE	0.00	1.73	3	Imidacloprid	3	NO	NO
2724-274	GOLDEN MALRIN RF-128 FLY KILLER	0.00	1.00	3	Methomyl; (Z)-9-Tricosene	3	NO	NO
432-1464	DYLOX 420 SL TURF AND ORNAMENTAL INSECTICIDE	49.15	0.00	2	Trichlorfon	3	NO	NO
53883-145	LAMBDA 9.7 EW INSECTICIDE	2.19	0.00	2	Cyhalothrin, lambda	2	NO	NO
228-624	NUFARM CHLORPYRIFOS SPC 4 INSECTICIDE	1.50	0.00	2	Chlorpyrifos	2	NO	NO
42697-60	SAFER BRAND O-INSECTICIDAL SOAP CONCENTRATE	1.00	8.00	2	Potassium laurate	2	NO	NO
9688-255-8845	SPECTRACIDE COMMERCIAL WASP & HORNET KILLER 3	0.41	0.00	2	Deltamethrin; S-Bioallethrin	3	YES	NO
7969-210	TERMIDOR SC TERMITICIDE/INSECTICIDE	0.28	0.00	2	Fipronil	3	YES	NO
400-508	FLORAMITE SC	0.03	0.00	2	Bifenazate	3	NO	NO
149-8-64405	TERRO PCO LIQUID ANT BAIT	0.01	0.00	2	Borax	3	NO	NO
91813-31	IMIDACLOPRID 2F MUP INSECTICIDE	0.00	45.00	2	Imidacloprid	3	NO	NO
64405-2-39609	GARDEN SAFE BRAND ANT & ROACH KILLER	0.00	3.50	2	Boric acid	3	NO	NO
100-1493	DUPONT E2Y45 0.1G LAWN & GARDEN INSECTIZIDE PLUS FERTILIZER	0.00	1.38	2	DPX-E2Y45	3	NO	NO
499-527	PRESCRIPTION TREATMENT BRAND ALPINE DUST INSECTICIDE	0.00	0.38	2	Dinotefuran; Diatomaceous earth	3	NO	NO
1001-73	ECOLOGIX COCKROACH BAIT	0.00	0.11	2	Xanthine; Oxypurinol	3	NO	NO
5481-533-47000	PROZAP INSECT GUARD	0.00	0.09	2	DDVP	3	YES	NO
73079-8	INTICE GELANIMO ANT BAIT	0.00	0.08	2	Borax	3	NO	NO
100-1502	INDOXACARB ANT GEL	0.00	0.01	2	Indoxacarb	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
85306-1	SELECT TCS	0.00	0.01	2	Fipronil	3	YES	NO
53883-279	TAURUS SC TERMITICIDE/INSECTICIDE	0.00	0.00	2	Fipronil	3	YES	NO
432-1227	SEVIN SL CARBARYL INSECTICIDE	35.94	0.00	1	Carbaryl	3	YES	NO
66222-19-73220	QUALI-PRO CHLOPYRIFOS 4E	1.00	0.00	1	Chlorpyrifos	2	NO	NO
432-1338	TEMPO 20 WP GOLF COURSE INSECTICIDE	0.32	0.00	1	Cyfluthrin	3	NO	NO
81880-29-10163	Sanmite SC Miticide Insecticide	0.11	0.00	1	Pyridaben	3	NO	NO
100-1611	Divanem	0.11	0.00	1	Avermectin	2	NO	NO
2724-786	RF2050 SPRAY	0.06	0.00	1	Tetramethrin; Ethofenprox; Piperonyl butoxide	3	YES	NO
9444-168-1270	ZEP TOTAL CONTROL TOTAL RELEASE FOGGER TOTAL CONTROL SYSTEMS	0.04	0.00	1	Esfenvalerate; Prallethrin; Pyriproxyfen	3	NO	NO
499-515	MOTHEREARTH GRANULAR SCATTER BAIT	0.04	0.00	1	Boric acid	3	NO	NO
432-1527	TEMPRID RTU	0.03	0.00	1	Cyfluthrin, beta; Imidacloprid	0	NO	NO
432-1526	BES0570 INSECTICIDE	0.02	0.00	1	Pyrethrins	3	YES	NO
149-8	TERRO ANT KILLER II	0.02	0.00	1	Borax	3	NO	NO
432-1254	MAXFORCE PROFESSIONAL INSECT CONTROL ROACH KILLER	0.01	0.00	1	Hydramethylnon	3	YES	YES
279-3206-346	ACTISHIELD LIQUID INSECTICIDE	0.01	0.00	1	Bifenthrin	3	YES	NO
432-1256	MAXFORCE FC ANT BAIT STATIONS	0.00	0.00	1	Fipronil	3	YES	NO
499-370-70627	JOHNSON WAX PROFESSIONAL BRAND GRANULAR ANT BAIT	0.00	0.00	1	Avermectin	3	NO	NO
100-1636	Provaunt WDG	0.00	4.72	1	Indoxacarb	3	NO	NO
89459-60	ENVI AR-X MULTI-PURPOSE INSECTICIDE	0.00	2.13	1	Pyrethrins; Phenylethyl propionate	3	YES	NO
53883-195-149	TERRO ANT KILLER PLUS MULTIPURPOSE INSECT CONTROL 2	0.00	1.50	1	Cyhalothrin, lambda	3	NO	NO
279-3384	ROACH KIL COMMERCIAL	0.00	0.25	1	Boric acid	3	NO	NO
499-470	WHITMIRE MICRO-GEN TC 198	0.00	0.13	1	Cyfluthrin	3	NO	NO
67425-13	ECOPAC AR	0.00	0.13	1	Thymol; Phenylethyl propionate; Eugenol	3	NO	NO
8033-114-279	ENDZONE INSECTICIDE STICKER	0.00	0.00	1	Acetamiprid	3	NO	NO
<b>Herbicides</b>								

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	68.32	0.00	373	Glyphosate, dimethylammonium salt	3	NO	NO
228-397	RIVERDALE VANQUISH HERBICIDE	39.85	14.28	296	Dicamba, diglycolamine salt	3	NO	NO
432-1580	DUPONT VIEWPOINT HERBICIDE	0.08	23.19	292	Aminocyclopyrachlor; Imazapyr; Metsulfuron-methyl	3	NO	NO
432-1516	ESPLANADE 200 SC	5.08	0.00	290	Indaziflam	3	NO	NO
62719-324	GLYPRO	66.67	0.00	239	Glyphosate, isopropylamine salt	3	NO	NO
524-579	ROUNDUP PROMAX	60.59	0.03	227	Glyphosate, potassium salt	3	NO	NO
62719-176	PATHFINDER II	102.57	0.00	166	Triclopyr, butoxyethyl ester	3	NO	NO
62719-527	GARLON 4 ULTRA	29.51	0.00	104	Triclopyr	2	NO	NO
62719-542	DIMENSION 2EW	31.68	0.00	47	Dithiopyr	2	NO	NO
100-937	PRIMO MAXX	20.65	0.00	46	Trinexapac-ethyl	3	NO	NO
524-529	ROUNDUP PRO CONCENTRATE	39.28	0.00	41	Glyphosate, isopropylamine salt	3	NO	NO
241-437-67690	CLEARCAST HERBICIDE	14.43	0.00	29	Imazamox	3	NO	NO
89442-7	TRIN-PAC SELECT	49.81	0.00	28	Trinexapac-ethyl	3	NO	NO
53883-373	QUALI-PRO T-NEX 1 AQ	13.86	0.00	26	Trinexapac-ethyl	3	NO	NO
1001-91	GWN-6010 PLANT GROWTH REGULATOR	0.40	3.99	15	Prohexadione calcium	3	NO	NO
62719-560	EF-1343	0.56	0.00	14	Florasulam	3	NO	NO
279-3265	F8426 HERBICIDE	0.21	0.00	14	Carfentrazone-ethyl	3	NO	NO
10163-325	SCYTHE HERBICIDE	20.28	1.48	13	Nonanoic acid	2	NO	NO
9198-213	THE ANDERSONS 0.25% GRANULAR DITHIOPYR HERBICIDE	0.00	3,728.50	13	Dithiopyr	3	NO	NO
352-401	DUPONT OUST HERBICIDE	0.00	0.10	12	Sulfometuron methyl	3	NO	NO
71995-33	ROUNDUP WEED & GRASS KILLER READY-TO-USE PLUS	0.67	0.00	11	Glyphosate, isopropylamine salt; Nonanoic acid	3	NO	NO
62719-305	LONTREL TURF AND ORNAMENTAL	3.37	0.00	10	Clopyralid	3	NO	NO
524-326	ACCORD HERBICIDE	0.85	0.00	10	Glyphosate, isopropylamine salt	3	NO	NO
62719-566	TURFLON ESTER ULTRA	4.64	0.00	9	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
432-1229	FINALE HERBICIDE	1.76	0.00	9	Glufosinate-ammonium	2	NO	NO
432-950	ACCLAIM EXTRA HERBICIDE	1.34	0.00	9	Fenoxaprop-P (+)	3	NO	NO
100-1267	TENACITY	0.49	0.00	9	Mesotrione	3	NO	NO
7969-327	PYLEX HERBICIDE	0.28	0.00	9	Topramezone	3	NO	NO
70299-23	AXXE BROAD SPECTRUM HERBICIDE	3.09	0.00	8	Nonanoic acid, ammonium salt	2	NO	NO
86064-3	ARMOR TECH PGR 113 MC	2.20	0.00	8	Trinexapac-ethyl	3	NO	NO
100-1014	PACLOBUTRAZOL 2SC	5.63	0.00	7	Paclobutrazol	3	NO	NO
62719-445	DIMENSION* ULTRA 40WP	0.00	111.13	7	Dithiopyr	3	NO	NO
432-1230	PROXY GROWTH REGULATOR	54.94	0.00	6	Ethephon	1	NO	NO
2217-833	SPEED ZONE BROADLEAF HERBICIDE	31.65	0.00	6	2,4-D, 2-ethylhexyl ester; Carfentrazone-ethyl; Dicamba; Mecroprop-p	3	YES	NO
7969-272	DRIVE XLR8 HERBICIDE	9.36	0.00	6	Quinclorac	3	NO	NO
62097-24-53883	PAC-LOW	6.12	0.00	6	Paclobutrazol	3	NO	NO
92967-1	AVENGER WEED KILLER CONCENTRATE	1.41	0.00	6	Limonene	3	NO	NO
53883-336	QUINCLORAC 1.5 L	1.04	0.00	6	Quinclorac, Dimethylamine Salt	3	NO	NO
62719-687	VASTLAN	0.97	0.00	6	Triclopyr, choline salt	2	NO	NO
86068-3-84009	HDX WEED & GRASS KILLER CONCENTRATE	0.04	0.00	6	Glyphosate, isopropylamine salt	2	NO	NO
524-536	MON 78473 HERBICIDE	9.50	0.00	5	Glyphosate, isopropylamine salt	3	NO	NO
228-711	NUFARM PROSEGE SELECTIVE HERBICIDE2	0.00	0.23	5	Halosulfuron-methyl	3	NO	NO
100-1139	BARRICADE 4FL	22.98	0.00	4	Prodiamine	3	YES	NO
228-409	TRIPLET LOW ODOR PREMIUM SELECTIVE HERBICIDE	11.50	0.00	4	2,4-D, triisopropanolamine salt; Dicamba; MCPP-P, dimethylamine salt	1	NO	NO
66222-151	ETHEPHON 2SL	10.00	125.00	4	Ethephon	1	NO	NO
524-535	ROUNDUP QUIKPRO HERBICIDE	0.00	18.75	4	Glyphosate, monoammonium salt; Diquat dibromide	3	NO	NO
81880-1-10163	SEGEHAMMER	0.00	0.29	4	Halosulfuron-methyl	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
53883-379	QUALI-PRO PRODIAMINE 4L	17.68	0.00	3	Prodiamine	3	YES	NO
62719-92	CONFRONT	2.44	0.00	3	Clopyralid, triethanolamine; Triclopyr, triethylamine salt	1	NO	NO
42750-247	DUPONT KRENITE S BRUSH CONTROL AGENT	0.37	0.00	3	Fosamine, ammonium salt	3	NO	NO
89442-22	TRIAD SELECT HERBICIDE	0.00	112.50	3	Dicamba, dimethylamine salt; 2,4-D; MCPA, dimethylamine salt	2	NO	NO
53883-399	Quali Pro Dithiopyr L	7.40	0.00	2	Dithiopyr	2	NO	NO
10404-43	LESCO THREE-WAY SELECTIVE HERBICIDE	4.69	0.00	2	2,4-D, dimethylamine salt; Dicamba, dimethylamine salt; MCPP-P, dimethylamine salt	1	NO	NO
42519-1	TARGET 6.6	3.44	0.00	2	MSMA	3	NO	NO
62719-483-87245	CHOICE TURF PREMIUM LAWN CARE FERTILIZER WITH DIMENSION 0.125% HERBICI	0.00	5,930.00	2	Dithiopyr	3	NO	NO
2217-696	BETAMEC 4 PRE-EMERGENCE GRASS KILLER	20.00	0.00	1	Bensulide	3	NO	NO
86064-5	ARMORTECH (R) THREESOME(TM)	3.92	0.00	1	2,4-D, dimethylamine salt; Dicamba, dimethylamine salt; MCPP-P, dimethylamine salt	1	NO	NO
42750-61	GLYPHOSATE 41% PLUS	1.00	0.00	1	Glyphosate, isopropylamine salt	3	NO	NO
524-475	ROUNDUP ULTRA HERBICIDE	0.75	0.00	1	Glyphosate, isopropylamine salt	3	NO	NO
7969-443	DERRINGER HERBICIDE	0.34	0.00	1	Glufosinate-ammonium	2	NO	NO
228-366	RAZOR HERBICIDE	0.24	0.00	1	Glyphosate, isopropylamine salt	3	NO	NO
80697-4-86064	ARMOR TECH PAC 223	0.13	0.00	1	Paclobutrazol	3	NO	NO
62097-34	SHORTSTOP 2SC	0.04	0.00	1	Paclobutrazol	3	NO	NO
62719-40	GARLON 4	0.04	0.00	1	Triclopyr, butoxyethyl ester	3	NO	NO
10404-86	LESCO DIMENSION 0.15% PLUS FERTILIZER	0.00	8,000.00	1	Dithiopyr	3	NO	NO
961-360	LEBANON FERTILIZER WITH DIMENSION (0.13%) CRABGRAS	0.00	6,450.00	1	Dithiopyr	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox. Cat.	EPA Carc in	CA Dev. Toxin
62719-504-961	LEBANON PROSCAPE FERTILIZER WITH DIMENSION 0.15% FG TURF AND ORNAMENTA	0.00	5,500.00	1	Dithiopyr	3	NO	NO
9198-176	ANDERSON'S GOOSE/CRABGRASS CONTROL	0.00	252.00	1	Bensulide; Oxadiazon	2	YES	YES
81927-38	ALLIGARE 2,4-D AMINE	0.00	12.00	1	2,4-D, dimethylamine salt	1	NO	NO
53883-374-86064	ARMORTECH CGC 40 WSP	0.00	3.13	1	Dithiopyr	3	NO	NO
<b>Fungicides</b>								
100-1364	DACONIL ACTION	431.85	0.00	67	Acibenzolar-S-methyl; Chlorothalonil	2	YES	NO
71065-3	COMPANION LIQUID BIOLOGICAL FUNGICIDE	333.57	0.00	55	Bacillus subtilis GBO3	3	NO	NO
53883-353	QUALI-PRO T-NEX	26.44	51.00	55	Trinexapac-ethyl	3	NO	NO
53883-323-86064	ARMOR TECH TMI 2020XL	196.00	87.50	44	Thiophanate-methyl; Iprodione	3	YES	YES
432-942	BANOL TURF AND ORNAMENTAL FUNGICIDE	71.30	59.38	44	Propamocarb hydrochloride	3	NO	NO
100-1093	HERITAGE FUNGICIDE	0.00	86.35	35	Azoxystrobin	3	NO	NO
60063-7-10404	LESCO MANICRUE 6FL	200.75	0.00	27	Chlorothalonil	2	YES	NO
432-1541	12ESP705 FUNGICIDE	0.00	1,311.61	25	Fosetyl-Al	3	NO	NO
50534-202-100	MANICURE ULTREX TURF & ORNAMENTAL	0.00	790.60	25	Chlorothalonil	1	YES	NO
84059-3-87865	REGALIA PTO BIOFUNGICIDE FOR USE ON TURF AND ORNAMENTALS	51.94	0.00	23	Reynoutria sachalinensis	3	NO	NO
66222-117-86064	ARMOR TECH TEB360 XL	57.88	183.56	22	Tebuconazole	3	YES	NO
432-1445	BAYLETON FLO TURF AND ORNAMENTAL FUNGICIDE	28.29	0.00	22	Triadimefon	3	YES	YES
432-1505	CHIPCO 26019T FUNGICIDE	122.03	0.32	20	Iprodione; Trifloxystrobin	3	YES	NO
70127-2	NOVOZYMES BIOFUNGICIDE GREEN RELEAF 710-140	94.80	0.00	20	Bacillus licheniformis SB3086; IBA	3	NO	NO
86064-1	ARMORTECH CLT 825 DF	0.00	949.00	19	Chlorothalonil	2	YES	NO
68539-3	T-22G BIOLOGICAL PLANT PROTECTANT GRANULES	0.00	61.00	19	Trichoderma harzianum rifai strain KRL-AG2	3	NO	NO
7969-349	Xzemplar Fungicide	13.51	0.00	18	Fluxapyroxad	3	NO	NO
264-1155	RHAPSODY AS0	180.40	0.00	16	QST 713 strain of dried Bacillus subtilis	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
432-1446	TARTAN FLO FUNGICIDE	24.09	93.75	16	Triadimefon; Trifloxystrobin	3	YES	YES
53883-433	QUALI-PRO MEFENOXAM 2AQ	11.87	0.00	16	Mefenoxam	2	NO	NO
53883-343	AZOXYSTROBIN 50 WG	0.00	20.68	16	Azoxystrobin	3	NO	NO
228-633	NUFARM PROPICONAZOLE SPC EC FUNGICIDE	17.20	0.00	15	Propiconazole	2	YES	NO
432-890	ALIETTE WDG BRAND FUNGICIDE	0.00	499.13	15	Fosetyl-Al	3	NO	NO
53883-310	QUALI-PRO CHLOROTHALONIL 720 SFT	160.19	0.00	14	Chlorothalonil	2	YES	NO
432-888-10404	LESCO 18 PLUS TURF & ORNAMENTAL FUNGICIDE	48.64	0.00	14	Iprodione	3	YES	NO
228-626	NUFARM T-METHYL PRO 4.5 F FUNGICIDE	52.57	0.00	13	Thiophanate-methyl	3	YES	YES
432-1529	TEBUCONAZOLE SC TURF AND ORNAMENTAL FUNGICIDE	30.82	0.00	13	Tebuconazole	3	YES	NO
66222-117	ORIUS 3.6F	22.39	0.00	12	Tebuconazole	3	YES	NO
432-888	CHIPCO 26019 FLO BRAND FUNGICIDE	232.19	98.00	11	Iprodione	3	YES	NO
59639-144	V-10116 VPP FUNGICIDE	0.00	107.04	11	Metconazole	3	NO	NO
86064-4	ARMOR TECH PPZ 143 MC	40.06	70.00	10	Propiconazole	2	YES	NO
71512-20-100	SECURE	21.00	0.00	10	Fluazinam	2	YES	NO
7969-290	INSIGNIA SC INTRINSIC BRAND FUNGICIDE	16.35	0.00	10	Pyraclostrobin	2	NO	NO
228-623-10404	LESCO SPECTATOR ULTRA 1.3 FUNGICIDE	14.06	0.00	9	Propiconazole	2	YES	NO
70506-272	PEGASUS DFX	0.00	380.00	9	Chlorothalonil	1	YES	NO
68173-3-1001	AFFIRM WDG	0.00	35.66	9	Polyoxin D zinc salt	3	NO	NO
66222-154-73220	QUALI-PRO CHLOROTHALONIL 720 SFT	205.00	0.00	8	Chlorothalonil	2	NO	NO
70299-12	ZEROTOL 2.0	4.51	0.00	8	Peroxyacetic acid; Hydrogen peroxide	1	NO	NO
228-684	NUFARM IPRDIONE SPC FUNGICIDE	33.49	173.25	7	Iprodione	3	YES	NO
100-892	ARBOTECT 20-S FUNGICIDE	7.09	0.00	7	Thiabendazole	3	YES	NO
71512-13-2217	SEGWAY FUNGICIDE	4.51	0.00	7	Cyazofamid	3	NO	NO
71512-13-279	SEGWAY FUNGICIDE	2.75	11.25	7	Cyazofamid	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
66222-134	THIOPHANATE METHYL 4.5 F	164.43	0.00	6	Thiophanate-methyl	3	YES	YES
89442-1	TEBUCONAZOLE 3.6 SELECT	43.67	0.00	6	Tebuconazole	3	YES	NO
100-1633	Secure Action	23.68	0.00	6	Acibenzolar-S-methyl; Fluazinam	3	YES	NO
55260-9	PROPLANT TURF AND ORNAMENTAL FUNGICIDE	16.00	0.00	6	Propamocarb hydrochloride	3	NO	NO
100-1433	BRISKWAY	9.51	0.00	6	Azoxystrobin; Difenoconazole	3	YES	NO
7969-350	LEXICON INTRINSIC BRAND FUNGICIDE	4.26	0.00	6	Fluxapyroxad; Pyraclostrobin	3	NO	NO
7969-255	HONOR FUNGICIDE	0.00	94.57	6	Nicobifen; Pyraclostrobin	3	YES	NO
432-1223	PROSTAR 70 WP	0.00	4.48	6	Flutolanil	3	NO	NO
70506-234	MANZATE PRO-STICK FUNGICIDE	20.00	120.00	5	Mancozeb	3	YES	NO
1001-69	3336 F	13.83	0.00	5	Thiophanate-methyl	3	YES	YES
264-1155-68539	CEASE	6.00	0.00	5	QST 713 strain of dried Bacillus subtilis	3	NO	NO
62719-463	EAGLE 20EW	0.07	0.00	5	Myclobutanil	3	NO	YES
89442-37	Fluazinam 40SC Select	0.00	29.00	5	Fluazinam	3	YES	NO
4-62	BONIDE SULPHUR PLANT FUNGICIDE MICRONIZED SPRAY OR DUST	0.00	11.88	5	Sulfur	3	NO	NO
100-1347	CONCERT II	55.00	0.00	4	Propiconazole	1	YES	NO
67702-2-67690	CAMELOT O FUNGICIDE/BACTERICIDE	16.38	0.00	4	Copper octanoate	3	NO	NO
432-1522	ES TC006A	14.00	0.00	4	Mono- and di-potassium salts of phosphorous acid	0	NO	NO
89442-17	PROPICONAZOLE 14.3 SELECT	13.50	0.00	4	Propiconazole	3	YES	NO
70051-107-59807	TRIATHLON BA	7.50	0.00	4	Bacillus subtilis var. amyloliquefaciens strain D747	3	NO	NO
228-623-88975	PRIMERAONE PROPICONAZOLE 14.3	6.88	0.00	4	Propiconazole	2	YES	NO
71962-1-54705	AGRI-FOS SYSTEMIC FUNGICIDE	0.22	0.00	4	Mono- and di-potassium salts of phosphorous acid	3	NO	NO
228-739	NUP-15014 Fungicide	23.92	0.00	3	Tebuconazole; Fluazinam	3	YES	NO
42750-99	TEBUCONAZOLE 3.6FL	16.51	0.00	3	Tebuconazole	3	YES	NO
100-1326	BANNER MAXX II	16.25	0.00	3	Propiconazole	3	YES	NO
228-630-10404	LESCO TWOSOME FUNGICIDE	5.92	0.00	3	Iprodione; Thiophanate-methyl	3	YES	YES
100-796	SUBDUE MAXX	0.01	0.00	3	Mefenoxam	3	NO	NO
89442-28	IPRODIONE 2F SELECT	51.00	0.00	2	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
70299-1	ZEROTOL ALGAECIDE/FUNGICIDE	50.00	0.00	2	Hydrogen peroxide	1	NO	NO
5481-619	EQUUS 720 SST FUNGICIDE	47.05	0.00	2	Chlorothalonil	2	YES	NO
86064-2	ARMOR TECH CLT 720 FL	35.00	0.00	2	Chlorothalonil	2	YES	NO
100-1451	APPEAR	17.06	0.00	2	Mono- and di-potassium salts of phosphorous acid	3	NO	NO
69361-27	TEBUCONAZOLE 3.6F FUNGICIDE	11.00	0.00	2	Tebuconazole	3	YES	NO
53883-375-86064	ARMORTECH IP 233 XL	9.00	0.00	2	Iprodione	3	YES	NO
66222-216	QUALI-PRO MEFENOXAM 2AQ	1.19	0.00	2	Mefenoxam	2	NO	NO
7969-184	Insignia Fungicide	0.97	0.00	2	Pyraclostrobin	3	NO	NO
42750-292	AZOXY 11% + TEB 26% FL	0.86	0.00	2	Azoxystrobin; Tebuconazole	3	YES	NO
70506-114	TEBUCONAZOLE 3.6 F FUNGICIDE	0.84	0.00	2	Tebuconazole	3	YES	NO
70252-11-73220	QUALI-PRO MEFENOXAM 2 AQ	0.69	0.00	2	Mefenoxam	3	NO	NO
9198-115	THE ANDERSONS TURF FUNGICIDE WITH 5.0% DACONIL	0.00	1,360.00	2	Chlorothalonil	1	YES	NO
5481-617	EQUUS DF	0.00	270.00	2	Chlorothalonil	2	YES	NO
70644-1-74697	NUTROL	0.00	244.00	2	Phosphoric acid, monopotassium salt	3	NO	NO
70299-15	GC PRO	0.00	200.00	2	Sodium percarbonate	1	NO	NO
62719-402-10404	LESCO MANCOZEB DG TURF AND ORNAMENTAL FUNGICIDE	0.00	97.50	2	Mancozeb	3	YES	NO
66222-161-73220	QUALI-PRO FOSETYL - AL 80 WDG	0.00	9.50	2	Fosetyl-Al	3	NO	NO
464-693-63288	CHEMICAR 15	75.00	0.00	1	Glutaraldehyde	1	NO	NO
53883-309	QUALI-PRO ENCLAVE 5.3F	21.43	0.00	1	Chlorothalonil; Thiophanate-methyl; Iprodione; Tebuconazole	3	YES	YES
48234-12-73220	QUALI-PRO TM 4.5	11.00	0.00	1	Thiophanate-methyl	3	YES	YES
62719-396-10404	LESCO 4 FLOWABLE MANCOZEB	10.75	0.00	1	Mancozeb	0	YES	NO
50534-211-100	DACONIL ZN FLOWABLE FUNGICIDE	6.00	0.00	1	Chlorothalonil	2	YES	NO
3377-78	STABROM PLUS BIOCID	5.00	0.00	1	Sodium N-bromosulfamate, mixture with sodium N-chlorosulfamate, potassium N-bromosulfamate, and potassium N-chlorosulfamate	1	NO	NO
53883-375	QUALI-PRO IPRO 2SE	4.03	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
2217-1019	EF-714 FUNGICIDE	4.00	0.00	1	Tebuconazole; Isofetamid	3	YES	NO
73512-1	KEYPLEX 350	2.50	0.00	1	Brewer's yeast extract hydrolysate from Saccharomyces cerevisiae	3	NO	NO
228-737	NUP-15013 Fungicide	2.04	0.00	1	Fluazinam	3	YES	NO
432-1536	FLU+TFS SC 32.5	1.25	0.00	1	Trifloxystrobin; Fluopyram	3	NO	NO
7969-257	TRINITY FUNGICIDE	1.20	0.00	1	Triticonazole	3	NO	NO
73806-1	K-PHITE 7LP FUNGICIDE	0.70	0.00	1	Mono- and di-potassium salts of phosphorous acid	3	NO	NO
42750-290	AZOXYSTROBIN 7.0% + PROPICONAZOLE 11.7% SE	0.69	0.00	1	Azoxystrobin; Propiconazole	2	YES	NO
100-741	ALAMO FUNGICIDE	0.47	0.00	1	Propiconazole	2	YES	NO
70506-251	T-BIRD 4.5L	0.00	50.00	1	Thiophanate-methyl	3	NO	NO
432-890-10404	LESCO PRODIGY SIGNATURE	0.00	27.50	1	Fosetyl-Al	3	NO	NO
60063-3	ECHO 825	0.00	20.00	1	Chlorothalonil	2	YES	NO
7969-224	CURALAN EG	0.00	10.80	1	Vinclozolin	3	YES	YES
100-1550	HERITAGE ACTION	0.00	9.80	1	Acibenzolar-S-methyl; Azoxystrobin	3	NO	NO
53883-343-89442	AZOXY 50 WDG SELECT FUNGICIDE	0.00	2.00	1	Azoxystrobin	3	NO	NO
100-1434	MEDALLION WDG	0.00	0.00	1	Fludioxonil	3	NO	NO
<b>Other (Repellents, Biochemical Pesticides, Etc.)</b>								
52483-1	HYPOCHLORITE SOLUTION	83.50	0.00	42	Sodium hypochlorite	1	NO	NO
14802-8-74466	MICROBE LIFE ALGAWAY 5.4 ALGAECIDE FOR PONDS	5.00	0.00	14	Poly(oxyethylene) (dimethylimino) ethylene (dimethylimino) ethylene dichloride	3	NO	NO
2693-193	OPTIMA-BLUE	12.00	0.00	9	Copper oxide (ous)	2	NO	NO
2693-172	AQUARIUS ANTIFOULING BOTTOM PAINT 568 NAVY BLUE	10.00	0.00	9	Copper oxide (ous)	2	NO	NO
59807-4	HORMODIN 1	0.00	0.18	4	IBA	3	NO	NO
67702-3-54705	NEU1165M SLUG AND SNAIL BAIT	0.00	2.19	2	Iron phosphate	3	NO	NO
63838-5	BROMMAX 7.1	50.00	0.00	1	Sodium bromide; Sodium hypochlorite	1	NO	NO
44891-9	MONTEREY WATER-BASED ANTIFOULING COATING	2.00	0.00	1	Copper oxide (ous)	2	NO	NO
60061-14	WOOLSEY/Z*SPAR SUPER TOX ANTI-FOULING FINISH B-74	1.00	0.00	1	Copper oxide (ous)	2	NO	NO

<b>EPA Reg. #</b>	<b>EPA Product Name</b>	<b>Volume (Gals)</b>	<b>Weight (Lbs)</b>	<b>No. Appl's.</b>	<b>Active Ingredient(s)</b>	<b>EPA Tox. Cat.</b>	<b>EPA Carc in</b>	<b>CA Dev. Toxin</b>
60061-71	PETTIT MARINE PAINT PREMIUM SINGLE SEASON ABLATIVE	1.00	0.00	1	Copper oxide (ous)	2	NO	NO
73049-15	PROGIBB 4% PLANT GROWTH REGULATOR SOLUTION	0.00	0.00	1	Gibberellins	2	NO	NO
55943-1	HOT FOOT BIRD REPELLENT	0.00	1.25	1	Polybutenes	3	NO	NO

## APPENDIX 2: Complete Listing of Pesticide Products Used by the Department of Parks and Recreation in 2019

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
<b>Rodenticides</b>								
12455-148	Rat Ice	0.00	10,637.25	1,612	Carbon dioxide	2	NO	NO
12455-69	CONTRAC RODENTICIDE	0.00	945.17	699	Bromadiolone	3	NO	NO
12455-36	CONTRAC RAT AND MOUSE BAIT	0.00	360.38	428	Bromadiolone	3	NO	NO
7173-187	MAKI PARAFFINIZED PELLETS	0.00	368.25	240	Bromadiolone	3	NO	NO
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	20.48	96	Difethialone	3	NO	NO
7173-218	GENERATION MINI BLOCKS	0.00	42.25	82	Difethialone	3	NO	NO
7173-297	BROMADIOLONE PASTE 0901	0.00	21.17	76	Bromadiolone	3	NO	NO
12455-86	CONTRAC RODENTICIDE PLACE PAC	0.00	92.35	75	Bromadiolone	3	NO	NO
12455-79	CONTRAC ALL-WEATHER BLOX	0.00	36.94	75	Bromadiolone	3	NO	NO
7173-238	GENERATION MEAL	0.00	118.31	74	Difethialone	3	NO	NO
7173-205	GENERATION PELLETS	0.00	106.81	70	Difethialone	3	NO	NO
7173-202	MAKI MINI BLOCKS	0.00	14.45	62	Bromadiolone	3	NO	NO
12455-139	Final Soft Bait	0.00	1.88	4	Brodifacoum	3	NO	NO
12455-146	CONTRAC SOFT BAIT	0.00	3.44	2	Bromadiolone	3	NO	NO
7173-188	MAKI RAT AND MOUSE BAIT PACKS (PELLETS)	0.00	0.34	2	Bromadiolone	3	NO	NO
67517-95-56	ANSWER KILLS MICE WITH REFILLABLE BALT STATION	0.00	0.07	2	Bromethalin	3	NO	NO
36488-63	DIFENACOUM RAT AND MOUSE BLOCK IV	0.00	0.13	1	Difenacoum	3	NO	NO
<b>Insecticides</b>								
70506-24	UP-STAR GOLD INSECTICIDE	46.81	0.00	30	Bifenthrin	3	YES	NO
9688-190-8845	SPECTRACIDE DESTROYER BRAND WASP & HORNET KILLER	1.34	37.19	30	Cyhalothrin, lambda; Prallethrin	3	NO	NO
70506-121	UPI-2005 EXP-06 RUP INSECTICIDE	10.54	7.38	27	Cyhalothrin, lambda	2	NO	NO
48813-1-68539	SUFFOIL-X	5.55	0.00	22	Petroleum distillates	3	NO	NO
70051-2-59807	TRIACT 70	2.94	0.00	21	Neem oil	3	NO	NO
100-1489	DUPONT ACELEPRYN INSECTICIDE	15.83	0.00	20	DPX-E2Y45	0	NO	NO
86203-11-59639	SAFARI 20SG INSECTICIDE	0.00	5.82	18	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
432-1312-67760	GARANT T&O 2F	18.92	0.00	17	Imidacloprid	3	NO	NO
432-1369-59807	MARATHON II GREENHOUSE AND NURSERY INSECTICIDE	0.06	0.00	16	Imidacloprid	3	NO	NO
73049-39	DIPEL DF DRY FLOWABLE BIOLOGICAL INSECTICIDE	0.00	1.80	16	Bacillus thuringiensis, subsp. Kurstaki, strain ABTS-351, fermentation solids and solubles	3	NO	NO
53883-244-66222	QUALI-PRO LAMBDA GC-0	4.61	0.00	15	Cyhalothrin, lambda	2	NO	NO
100-1543	MAINSRING GH & N	0.29	0.00	14	Cyantraniliprole	0	NO	NO
69526-17	CIVITAS ONE	60.00	0.00	13	Mineral oil	3	NO	NO
100-1088	SCIMITAR GC INSECTICIDE	2.22	0.00	13	Cyhalothrin, lambda	3	NO	NO
55809-3	CRC WASP & HORNET KILLER PLUS	0.84	0.00	13	Tetramethrin; Phenothrin	3	YES	NO
2724-476	ENSTAR II INSECT GROWTH REGULATOR (ENSTAR 5E)	0.55	0.00	13	(S)-Kinoprene	2	NO	NO
70051-9-59807	AZATIN O BIOLOGICAL INSECTICIDE	0.11	0.00	13	Azadirachtin	3	NO	NO
66222-19-1386	CHLORPYRIFOS 4E	30.38	0.00	11	Chlorpyrifos	2	NO	NO
83100-6-88975	PRIMERAONE IMIDACLOPRID 2F INSECTICIDE	2.19	0.00	11	Imidacloprid	3	NO	NO
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	0.60	11	Indoxacarb	3	NO	NO
432-763	SUSPEND SC INSECTICIDE	1.20	0.00	10	Deltamethrin	3	NO	NO
66222-40-400	PEDESTAL	0.12	0.00	10	Novaluron	3	NO	NO
62719-523	BLACKHAWK	0.00	65.38	10	Spinosad	3	NO	NO
432-1312	MERIT 2F INSECTICIDE	8.68	0.00	9	Imidacloprid	3	NO	NO
4-62	BONIDE HORTICULTURAL AND DORMANT SPRAY OIL	1.09	0.00	9	Mineral oil	3	NO	NO
10163-324	M-PEDE INSECTICIDE/FUNGICIDE	0.14	0.00	9	Potassium laurate	2	NO	NO
100-1487	PROVAUNT	0.00	41.50	9	Indoxacarb	3	NO	NO
62719-291	CONSERVE SC TURF AND ORNAMENTAL	2.62	0.00	8	Spinosad	3	NO	NO
8033-106-1001	TRISTAR 8.5 SL INSECTICIDE	1.15	0.00	8	Acetamiprid	3	NO	NO
432-1312-73220	QUALI-PRO IMIDACLOPRID 2F	14.19	0.00	7	Imidacloprid	3	NO	NO
100-1551	Ference	6.36	0.00	7	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
53883-366	QUALI-PRO BIFENTHRIN GOLF & NURSERY 7 9F	6.01	0.00	7	Bifenthrin	3	YES	NO
1381-237	ABAMECTIN .15EC	0.07	0.00	7	Avermectin	2	NO	NO
2724-351-50809	ZOECON GENCOR 9% EMULSIFIABLE CONCENTRATE	0.34	0.16	6	(7S)-Hydroprene	3	NO	NO
432-1471-59807	KONTOS	0.07	0.00	6	Spirotetramat	3	NO	NO
73049-38	VECTOBAC 12AS BIOLOGICAL LARVICIDE	0.00	0.12	6	Bacillus thuringiensis, subsp. Israelensis, strain AM 65-52	3	NO	NO
279-3457	TRIPLE CROWN GOLF INSECTICIDE	11.82	0.00	5	Bifenthrin; Cypermethrin, zeta; Imidacloprid	2	YES	NO
1021-1815	EVERCIDE ESFENVALERATE 6.4% CS	2.50	0.00	5	Esfenvalerate	3	NO	NO
59639-96	DISTANCE INSECT GROWTH REGULATOR	0.17	0.00	5	Pyriproxyfen	3	NO	NO
71711-4-67690	SEPRO AKARI 5SC MITICIDE/INSECTICIDE	0.11	0.00	5	Fenpyroximate	2	NO	NO
69526-5	PURESPRAY SPRAY OIL 10E	21.75	0.00	4	Mineral oil	3	NO	NO
279-3155	TALSTAR NURSERY FLOWABLE INSECTICIDE/MITICIDE	8.07	0.00	4	Bifenthrin	3	YES	NO
83529-2-86064	AMORTECH IMD 2 SC	3.57	0.00	4	Imidacloprid	3	NO	NO
10163-326	CAPTIVA	0.38	0.00	4	Garlic; Resins, oleo-, capsicum; Soybean oil	3	NO	NO
66222-19	CHLORPYRIFOS 4E AG	0.00	32.38	4	Chlorpyrifos	2	NO	NO
432-1318	MERIT 75 WSP	0.00	27.00	4	Imidacloprid	3	NO	NO
432-1227-10404	LESCO SEVIN SL	20.00	0.00	3	Carbaryl	3	YES	NO
228-588	MALLET 75 WP	0.26	0.80	3	Imidacloprid	3	NO	NO
432-1514	SUSPEND POLYZONE	0.02	0.00	3	Deltamethrin	3	NO	NO
432-1308	DYLOX 6.2 GRANULAR INSECTICIDE	0.00	840.00	3	Trichlorfon	3	NO	NO
228-501	MALLET 0.5 G INSECTICIDE	0.00	270.00	3	Imidacloprid	3	NO	NO
432-1318-10404	LESCO SYSTEMIC INSECTICIDE CONTAINS MERIT IN WATER SOLUBLE PACKETS	0.00	4.20	3	Imidacloprid	3	NO	NO
432-1457	MERIT FXT TABLET INSECTICIDE	0.00	1.73	3	Imidacloprid	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	0.02	3	Indoxacarb	3	NO	NO
432-1464	DYLOX 420 SL TURF AND ORNAMENTAL INSECTICIDE	49.15	0.00	2	Trichlorfon	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
53883-145	LAMBDA 9.7 EW INSECTICIDE	2.19	0.00	2	Cyhalothrin, lambda	2	NO	NO
228-624	NUFARM CHLORPYRIFOS SPC 4 INSECTICIDE	1.50	0.00	2	Chlorpyrifos	2	NO	NO
42697-60	SAFER BRAND O-INSECTICIDAL SOAP CONCENTRATE	1.00	8.00	2	Potassium laurate	2	NO	NO
432-1363	TEMPO SC INSECTICIDE	0.63	0.00	2	Cyfluthrin, beta	3	NO	NO
400-508	FLORAMITE SC	0.03	0.00	2	Bifenazate	3	NO	NO
91813-31	IMIDACLOPRID 2F MUP INSECTICIDE	0.00	45.00	2	Imidacloprid	3	NO	NO
499-370	PT 370 ASCEND FIRE ANT STOPPER BAIT	0.00	1.25	2	Avermectin	3	NO	NO
85306-1	SELECT TCS	0.00	0.01	2	Fipronil	3	YES	NO
432-1227	SEVIN SL CARBARYL INSECTICIDE	35.94	0.00	1	Carbaryl	3	YES	NO
66222-19-73220	QUALI-PRO CHLOPYRIFOS 4E	1.00	0.00	1	Chlorpyrifos	2	NO	NO
432-1338	TEMPO 20 WP GOLF COURSE INSECTICIDE	0.32	0.00	1	Cyfluthrin	3	NO	NO
81880-29-10163	Sanmite SC Miticide Insecticide	0.11	0.00	1	Pyridaben	3	NO	NO
100-1611	Divanem	0.11	0.00	1	Avermectin	2	NO	NO
7969-210	TERMIDOR SC TERMITICIDE/INSECTICIDE	0.03	0.00	1	Fipronil	3	YES	NO
432-763-62719	SUSPEND SC	0.02	0.00	1	Deltamethrin	3	NO	NO
100-1636	Provaunt WDG	0.00	4.72	1	Indoxacarb	3	NO	NO
6218-47	SUMMIT B.T.I. BRIQUETS	0.00	1.40	1	Bacillus thuringiensis subspecies israelensis strain BMP 144	3	NO	NO
73079-6	GREEN ZONE GRANULAR BAIT	0.00	0.25	1	Boric acid	3	NO	NO
64405-2	REDZONE BAIT	0.00	0.19	1	Boric acid	3	NO	NO
432-1506	MAXFORCE QUANTUM ANT BAIT	0.00	0.02	1	Imidacloprid	3	NO	NO
<b>Herbicides</b>								
62719-324	GLYPRO	66.67	0.00	239	Glyphosate, isopropylamine salt	3	NO	NO
524-579	ROUNDUP PROMAX	60.59	0.03	227	Glyphosate, potassium salt	3	NO	NO
62719-527	GARLON 4 ULTRA	29.51	0.00	104	Triclopyr	2	NO	NO
62719-556	ACCORD XRT II	6.67	0.00	74	Glyphosate, dimethylammonium salt	3	NO	NO
62719-542	DIMENSION 2EW	31.68	0.00	47	Dithiopyr	2	NO	NO
100-937	PRIMO MAXX	20.65	0.00	46	Trinexapac-ethyl	3	NO	NO
62719-176	PATHFINDER II	33.40	0.00	42	Triclopyr, butoxyethyl ester	3	NO	NO
524-529	ROUNDUP PRO CONCENTRATE	39.28	0.00	41	Glyphosate, isopropylamine 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
241-437-67690	CLEARCAST HERBICIDE	14.43	0.00	29	Imazamox	3	NO	NO
89442-7	TRIN-PAC SELECT	49.81	0.00	28	Trinexapac-ethyl	3	NO	NO
53883-373	QUALI-PRO T-NEX 1 AQ	13.86	0.00	26	Trinexapac-ethyl	3	NO	NO
1001-91	GWN-6010 PLANT GROWTH REGULATOR	0.40	3.99	15	Prohexadione calcium	3	NO	NO
62719-560	EF-1343	0.56	0.00	14	Florasulam	3	NO	NO
279-3265	F8426 HERBICIDE	0.21	0.00	14	Carfentrazone-ethyl	3	NO	NO
10163-325	SCYTHE HERBICIDE	20.28	1.48	13	Nonanoic acid	2	NO	NO
9198-213	THE ANDERSONS 0.25% GRANULAR DITHIOPYR HERBICIDE	0.00	3,728.50	13	Dithiopyr	3	NO	NO
352-401	DUPONT OUST HERBICIDE	0.00	0.10	12	Sulfometuron methyl	3	NO	NO
62719-305	LONTREL TURF AND ORNAMENTAL	3.37	0.00	10	Clopyralid	3	NO	NO
524-326	ACCORD HERBICIDE	0.85	0.00	10	Glyphosate, isopropylamine salt	3	NO	NO
62719-566	TURFLON ESTER ULTRA	4.64	0.00	9	Triclopyr, butoxyethyl ester	3	NO	NO
432-950	ACCLAIM EXTRA HERBICIDE	1.34	0.00	9	Fenoxaprop-P (+)	3	NO	NO
100-1267	TENACITY	0.49	0.00	9	Mesotrione	3	NO	NO
7969-327	PYLEX HERBICIDE	0.28	0.00	9	Topramezone	3	NO	NO
70299-23	AXXE BROAD SPECTRUM HERBICIDE	3.09	0.00	8	Nonanoic acid, ammonium salt	2	NO	NO
86064-3	ARMOR TECH PGR 113 MC	2.20	0.00	8	Trinexapac-ethyl	3	NO	NO
100-1014	PACLOBUTRAZOL 2SC	5.63	0.00	7	Paclobutrazol	3	NO	NO
62719-445	DIMENSION* ULTRA 40WP	0.00	111.13	7	Dithiopyr	3	NO	NO
432-1230	PROXY GROWTH REGULATOR	54.94	0.00	6	Ethephon	1	NO	NO
2217-833	SPEED ZONE BROADLEAF HERBICIDE	31.65	0.00	6	2,4-D, 2-ethylhexyl ester; Carfentrazone-ethyl; Dicamba; Mecroprop-p	3	YES	NO
7969-272	DRIVE XLR8 HERBICIDE	9.36	0.00	6	Quinclorac	3	NO	NO
62097-24-53883	PAC-LOW	6.12	0.00	6	Paclobutrazol	3	NO	NO
92967-1	AVENGER WEED KILLER CONCENTRATE	1.41	0.00	6	Limonene	3	NO	NO
53883-336	QUINCLORAC 1.5 L	1.04	0.00	6	Quinclorac, Dimethylamine Salt	3	NO	NO
62719-687	VASTLAN	0.97	0.00	6	Triclopyr, choline salt	2	NO	NO
86068-3-84009	HDX WEED & GRASS KILLER CONCENTRATE	0.04	0.00	6	Glyphosate, isopropylamine salt	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
228-711	NUFARM PROSEGE SELECTIVE HERBICIDE2	0.00	0.23	5	Halosulfuron-methyl	3	NO	NO
100-1139	BARRICADE 4FL	22.98	0.00	4	Prodiamine	3	YES	NO
228-409	TRIPLET LOW ODOR PREMIUM SELECTIVE HERBICIDE	11.50	0.00	4	2,4-D, triisopropanolamine salt; Dicamba; MCP-P, dimethylamine salt	1	NO	NO
66222-151	ETHEPHON 2SL	10.00	125.00	4	Ethephon	1	NO	NO
524-535	ROUNDUP QUIKPRO HERBICIDE	0.00	18.75	4	Glyphosate, monoammonium salt; Diquat dibromide	3	NO	NO
81880-1-10163	SEDGEHAMMER	0.00	0.29	4	Halosulfuron-methyl	3	NO	NO
53883-379	QUALI-PRO PRODIAMINE 4L	17.68	0.00	3	Prodiamine	3	YES	NO
62719-92	CONFRONT	2.44	0.00	3	Clopyralid, triethanolamine; Triclopyr, triethylamine salt	1	NO	NO
89442-22	TRIAD SELECT HERBICIDE	0.00	112.50	3	Dicamba, dimethylamine salt; 2,4-D; MCPA, dimethylamine salt	2	NO	NO
53883-399	Quali Pro Dithiopyr L	7.40	0.00	2	Dithiopyr	2	NO	NO
10404-43	LESCO THREE-WAY SELECTIVE HERBICIDE	4.69	0.00	2	2,4-D, dimethylamine salt; Dicamba, dimethylamine salt; MCP-P, dimethylamine salt	1	NO	NO
42519-1	TARGET 6.6	3.44	0.00	2	MSMA	3	NO	NO
62719-483-87245	CHOICE TURF PREMIUM LAWN CARE FERTILIZER WITH DIMENSION 0.125% HERBICI	0.00	5,930.00	2	Dithiopyr	3	NO	NO
228-397	RIVERDALE VANQUISH HERBICIDE	0.00	8.03	2	Dicamba, diglycolamine salt	3	NO	NO
2217-696	BETAMEC 4 PRE-EMERGENCE GRASS KILLER	20.00	0.00	1	Bensulide	3	NO	NO
86064-5	ARMORTECH (R) THREESOME(TM)	3.92	0.00	1	2,4-D, dimethylamine salt; Dicamba, dimethylamine salt; MCP-P, dimethylamine salt	1	NO	NO
524-475	ROUNDUP ULTRA HERBICIDE	0.75	0.00	1	Glyphosate, isopropylamine 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
228-366	RAZOR HERBICIDE	0.24	0.00	1	Glyphosate, isopropylamine salt	3	NO	NO
80697-4-86064	ARMOR TECH PAC 223	0.13	0.00	1	Paclobutrazol	3	NO	NO
62097-34	SHORTSTOP 2SC	0.04	0.00	1	Paclobutrazol	3	NO	NO
62719-40	GARLON 4	0.04	0.00	1	Triclopyr, butoxyethyl ester	3	NO	NO
10404-86	LESCO DIMENSION 0.15% PLUS FERTILIZER	0.00	8,000.00	1	Dithiopyr	3	NO	NO
961-360	LEBANON FERTILIZER WITH DIMENSION (0.13%) CRABGRAS	0.00	6,450.00	1	Dithiopyr	3	NO	NO
62719-504-961	LEBANON PROSCAPE FERTILIZER WITH DIMENSION 0.15% FG TURF AND ORNAMENTA	0.00	5,500.00	1	Dithiopyr	3	NO	NO
9198-176	ANDERSON'S GOOSE/CRABGRASS CONTROL	0.00	252.00	1	Bensulide; Oxadiazon	2	YES	YES
81927-38	ALLIGARE 2,4-D AMINE	0.00	12.00	1	2,4-D, dimethylamine salt	1	NO	NO
53883-374-86064	ARMORTECH CGC 40 WSP	0.00	3.13	1	Dithiopyr	3	NO	NO
<b>Fungicides</b>								
100-1364	DACONIL ACTION	431.85	0.00	67	Acibenzolar-S-methyl; Chlorothalonil	2	YES	NO
71065-3	COMPANION LIQUID BIOLOGICAL FUNGICIDE	333.57	0.00	55	Bacillus subtilis GBO3	3	NO	NO
53883-353	QUALI-PRO T-NEX	26.44	51.00	55	Trinexapac-ethyl	3	NO	NO
53883-323-86064	ARMOR TECH TMI 2020XL	196.00	87.50	44	Thiophanate-methyl; Iprodione	3	YES	YES
432-942	BANOL TURF AND ORNAMENTAL FUNGICIDE	71.30	59.38	44	Propamocarb hydrochloride	3	NO	NO
100-1093	HERITAGE FUNGICIDE	0.00	86.35	35	Azoxystrobin	3	NO	NO
60063-7-10404	LESCO MANICRUE 6FL	200.75	0.00	27	Chlorothalonil	2	YES	NO
432-1541	12ESP705 FUNGICIDE	0.00	1,311.61	25	Fosetyl-Al	3	NO	NO
50534-202-100	MANICURE ULTREX TURF & ORNAMENTAL	0.00	790.60	25	Chlorothalonil	1	YES	NO
84059-3-87865	REGALIA PTO BIOFUNGICIDE FOR USE ON TURF AND ORNAMENTALS	51.94	0.00	23	Reynoutria sachalinensis	3	NO	NO
66222-117-86064	ARMOR TECH TEB360 XL	57.88	183.56	22	Tebuconazole	3	YES	NO
432-1445	BAYLETON FLO TURF AND ORNAMENTAL FUNGICIDE	28.29	0.00	22	Triadimefon	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
432-1505	CHIPCO 26019T FUNGICIDE	122.03	0.32	20	Iprodione; Trifloxystrobin	3	YES	NO
70127-2	NOVOZYMES BIOFUNGICIDE GREEN RELEAF 710-140	94.80	0.00	20	Bacillus licheniformis SB3086; IBA	3	NO	NO
86064-1	ARMORTECH CLT 825 DF	0.00	949.00	19	Chlorothalonil	2	YES	NO
68539-3	T-22G BIOLOGICAL PLANT PROTECTANT GRANULES	0.00	61.00	19	Trichoderma harzianum rifai strain KRL-AG2	3	NO	NO
7969-349	Xzemplar Fungicide	13.51	0.00	18	Fluxapyroxad	3	NO	NO
264-1155	RHAPSODY ASO	180.40	0.00	16	QST 713 strain of dried Bacillus subtilis	3	NO	NO
432-1446	TARTAN FLO FUNGICIDE	24.09	93.75	16	Triadimefon; Trifloxystrobin	3	YES	YES
53883-433	QUALI-PRO MEFENOXAM 2AQ	11.87	0.00	16	Mefenoxam	2	NO	NO
53883-343	AZOXYSTROBIN 50 WG	0.00	20.68	16	Azoxystrobin	3	NO	NO
228-633	NUFARM PROPICONAZOLE SPC EC FUNGICIDE	17.20	0.00	15	Propiconazole	2	YES	NO
432-890	ALIETTE WDG BRAND FUNGICIDE	0.00	499.13	15	Fosetyl-Al	3	NO	NO
53883-310	QUALI-PRO CHLOROTHALONIL 720 SFT	160.19	0.00	14	Chlorothalonil	2	YES	NO
432-888-10404	LESCO 18 PLUS TURF & ORNAMENTAL FUNGICIDE	48.64	0.00	14	Iprodione	3	YES	NO
228-626	NUFARM T-METHYL PRO 4.5 F FUNGICIDE	52.57	0.00	13	Thiophanate-methyl	3	YES	YES
432-1529	TEBUCONAZOLE SC TURF AND ORNAMENTAL FUNGICIDE	30.82	0.00	13	Tebuconazole	3	YES	NO
66222-117	ORIU 3.6F	22.39	0.00	12	Tebuconazole	3	YES	NO
432-888	CHIPCO 26019 FLO BRAND FUNGICIDE	232.19	98.00	11	Iprodione	3	YES	NO
59639-144	V-10116 VPP FUNGICIDE	0.00	107.04	11	Metconazole	3	NO	NO
86064-4	ARMOR TECH PPZ 143 MC	40.06	70.00	10	Propiconazole	2	YES	NO
71512-20-100	SECURE	21.00	0.00	10	Fluazinam	2	YES	NO
7969-290	INSIGNIA SC INTRINSIC BRAND FUNGICIDE	16.35	0.00	10	Pyraclostrobin	2	NO	NO
228-623-10404	LESCO SPECTATOR ULTRA 1.3 FUNGICIDE	14.06	0.00	9	Propiconazole	2	YES	NO
70506-272	PEGASUS DFX	0.00	380.00	9	Chlorothalonil	1	YES	NO
68173-3-1001	AFFIRM WDG	0.00	35.66	9	Polyoxin D zinc salt	3	NO	NO
66222-154-73220	QUALI-PRO CHLOROTHALONIL 720 SFT	205.00	0.00	8	Chlorothalonil	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
70299-12	ZEROTOL 2.0	4.51	0.00	8	Peroxyacetic acid; Hydrogen peroxide	1	NO	NO
228-684	NUFARM IPRDIONE SPC FUNGICIDE	33.49	173.25	7	Iprodione	3	YES	NO
100-892	ARBOTECT 20-S FUNGICIDE	7.09	0.00	7	Thiabendazole	3	YES	NO
71512-13-2217	SEGWAY FUNGICIDE	4.51	0.00	7	Cyazofamid	3	NO	NO
71512-13-279	SEGWAY FUNGICIDE	2.75	11.25	7	Cyazofamid	3	NO	NO
66222-134	THIOPHANATE METHYL 4.5 F	164.43	0.00	6	Thiophanate-methyl	3	YES	YES
89442-1	TEBUCONAZOLE 3.6 SELECT	43.67	0.00	6	Tebuconazole	3	YES	NO
100-1633	Secure Action	23.68	0.00	6	Acibenzolar-S-methyl; Fluazinam	3	YES	NO
55260-9	PROPLANT TURF AND ORNAMENTAL FUNGICIDE	16.00	0.00	6	Propamocarb hydrochloride	3	NO	NO
100-1433	BRISKWAY	9.51	0.00	6	Azoxystrobin; Difenconazole	3	YES	NO
7969-350	LEXICON INTRINSIC BRAND FUNGICIDE	4.26	0.00	6	Fluxapyroxad; Pyraclostrobin	3	NO	NO
7969-255	HONOR FUNGICIDE	0.00	94.57	6	Nicobifen; Pyraclostrobin	3	YES	NO
432-1223	PROSTAR 70 WP	0.00	4.48	6	Flutolanil	3	NO	NO
70506-234	MANZATE PRO-STICK FUNGICIDE	20.00	120.00	5	Mancozeb	3	YES	NO
1001-69	3336 F	13.83	0.00	5	Thiophanate-methyl	3	YES	YES
264-1155-68539	CEASE	6.00	0.00	5	QST 713 strain of dried Bacillus subtilis	3	NO	NO
62719-463	EAGLE 20EW	0.07	0.00	5	Myclobutanil	3	NO	YES
89442-37	Fluazinam 40SC Select	0.00	29.00	5	Fluazinam	3	YES	NO
4-62	BONIDE SULPHUR PLANT FUNGICIDE MICRONIZED SPRAY OR DUST	0.00	11.88	5	Sulfur	3	NO	NO
100-1347	CONCERT II	55.00	0.00	4	Propiconazole	1	YES	NO
67702-2-67690	CAMELOT O FUNGICIDE/BACTERICIDE	16.38	0.00	4	Copper octanoate	3	NO	NO
432-1522	ES TC006A	14.00	0.00	4	Mono- and di-potassium salts of phosphorous acid	0	NO	NO
89442-17	PROPICONAZOLE 14.3 SELECT	13.50	0.00	4	Propiconazole	3	YES	NO
70051-107-59807	TRIATHLON BA	7.50	0.00	4	Bacillus subtilis var. amyloliquefaciens strain D747	3	NO	NO
228-623-88975	PRIMERAONE PROPICONAZOLE 14.3	6.88	0.00	4	Propiconazole	2	YES	NO
71962-1-54705	AGRI-FOS SYSTEMIC FUNGICIDE	0.22	0.00	4	Mono- and di-potassium salts of phosphorous 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
228-739	NUP-15014 Fungicide	23.92	0.00	3	Tebuconazole; Fluazinam	3	YES	NO
42750-99	TEBUCONAZOLE 3.6FL	16.51	0.00	3	Tebuconazole	3	YES	NO
100-1326	BANNER MAXX II	16.25	0.00	3	Propiconazole	3	YES	NO
228-630-10404	LESCO TWOSOME FUNGICIDE	5.92	0.00	3	Iprodione; Thiophanate-methyl	3	YES	YES
100-796	SUBDUE MAXX	0.01	0.00	3	Mefenoxam	3	NO	NO
89442-28	IPRODIONE 2F SELECT	51.00	0.00	2	Iprodione	3	YES	NO
70299-1	ZEROTOL ALGAECIDE/FUNGICIDE	50.00	0.00	2	Hydrogen peroxide	1	NO	NO
5481-619	EQUUS 720 SST FUNGICIDE	47.05	0.00	2	Chlorothalonil	2	YES	NO
86064-2	ARMOR TECH CLT 720 FL	35.00	0.00	2	Chlorothalonil	2	YES	NO
100-1451	APPEAR	17.06	0.00	2	Mono- and di-potassium salts of phosphorous acid	3	NO	NO
69361-27	TEBUCONAZOLE 3.6F FUNGICIDE	11.00	0.00	2	Tebuconazole	3	YES	NO
53883-375-86064	ARMORTECH IP 233 XL	9.00	0.00	2	Iprodione	3	YES	NO
66222-216	QUALI-PRO MEFENOXAM 2AQ	1.19	0.00	2	Mefenoxam	2	NO	NO
7969-184	Insignia Fungicide	0.97	0.00	2	Pyraclostrobin	3	NO	NO
42750-292	AZOXY 11% + TEB 26% FL	0.86	0.00	2	Azoxystrobin; Tebuconazole	3	YES	NO
70506-114	TEBUCONAZOLE 3.6 F FUNGICIDE	0.84	0.00	2	Tebuconazole	3	YES	NO
70252-11-73220	QUALI-PRO MEFENOXAM 2 AQ	0.69	0.00	2	Mefenoxam	3	NO	NO
9198-115	THE ANDERSONS TURF FUNGICIDE WITH 5.0% DACONIL	0.00	1,360.00	2	Chlorothalonil	1	YES	NO
5481-617	EQUUS DF	0.00	270.00	2	Chlorothalonil	2	YES	NO
70644-1-74697	NUTROL	0.00	244.00	2	Phosphoric acid, monopotassium salt	3	NO	NO
70299-15	GC PRO	0.00	200.00	2	Sodium percarbonate	1	NO	NO
62719-402-10404	LESCO MANCOZEB DG TURF AND ORNAMENTAL FUNGICIDE	0.00	97.50	2	Mancozeb	3	YES	NO
66222-161-73220	QUALI-PRO FOSETYL -AL 80 WDG	0.00	9.50	2	Fosetyl-AI	3	NO	NO
464-693-63288	CHEMICAR 15	75.00	0.00	1	Glutaraldehyde	1	NO	NO
53883-309	QUALI-PRO ENCLAVE 5.3F	21.43	0.00	1	Chlorothalonil; Thiophanate-methyl; Iprodione; Tebuconazole	3	YES	YES
48234-12-73220	QUALI-PRO TM 4.5	11.00	0.00	1	Thiophanate-methyl	3	YES	YES
62719-396-10404	LESCO 4 FLOWABLE MANCOZEB	10.75	0.00	1	Mancozeb	0	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
50534-211-100	DACONIL ZN FLOWABLE FUNGICIDE	6.00	0.00	1	Chlorothalonil	2	YES	NO
3377-78	STABROM PLUS BIOCID	5.00	0.00	1	Sodium N-bromosulfamate, mixture with sodium N-chlorosulfamate, potassium N-bromosulfamate, and potassium N-chlorosulfamate	1	NO	NO
53883-375	QUALI-PRO IPRO 2SE	4.03	0.00	1	Iprodione	3	YES	NO
2217-1019	EF-714 FUNGICIDE	4.00	0.00	1	Tebuconazole; Isfetamid	3	YES	NO
73512-1	KEYPLEX 350	2.50	0.00	1	Brewer's yeast extract hydrolysate from Saccharomyces cerevisiae	3	NO	NO
228-737	NUP-15013 Fungicide	2.04	0.00	1	Fluazinam	3	YES	NO
432-1536	FLU+TFS SC 32.5	1.25	0.00	1	Trifloxystrobin; Fluopyram	3	NO	NO
7969-257	TRINITY FUNGICIDE	1.20	0.00	1	Triticonazole	3	NO	NO
73806-1	K-PHITE 7LP FUNGICIDE	0.70	0.00	1	Mono- and di-potassium salts of phosphorous acid	3	NO	NO
42750-290	AZOXYSTROBIN 7.0% + PROPICONAZOLE 11.7% SE	0.69	0.00	1	Azoxystrobin; Propiconazole	2	YES	NO
100-741	ALAMO FUNGICIDE	0.47	0.00	1	Propiconazole	2	YES	NO
70506-251	T-BIRD 4.5L	0.00	50.00	1	Thiophanate-methyl	3	NO	NO
432-890-10404	LESCO PRODIGY SIGNATURE	0.00	27.50	1	Fosetyl-Al	3	NO	NO
60063-3	ECHO 825	0.00	20.00	1	Chlorothalonil	2	YES	NO
7969-224	CURALAN EG	0.00	10.80	1	Vinclozolin	3	YES	YES
100-1550	HERITAGE ACTION	0.00	9.80	1	Acibenzolar-S-methyl; Azoxystrobin	3	NO	NO
53883-343-89442	AZOXY 50 WDG SELECT FUNGICIDE	0.00	2.00	1	Azoxystrobin	3	NO	NO
100-1434	MEDALLION WDG	0.00	0.00	1	Fludioxonil	3	NO	NO
<b>Other (Repellents, Biochemical Pesticides, Etc.)</b>								
52483-1	HYPOCHLORITE SOLUTION	83.50	0.00	42	Sodium hypochlorite	1	NO	NO
14802-8-74466	MICROBE LIFE ALGAWAY 5.4 ALGAEICIDE FOR PONDS	5.00	0.00	14	Poly(oxyethylene) (dimethylimino) ethylene (dimethylimino) ethylene dichloride	3	NO	NO
2693-193	OPTIMA-BLUE	12.00	0.00	9	Copper oxide (ous)	2	NO	NO
2693-172	AQUARIUS ANTIFOULING BOTTOM PAINT 568 NAVY BLUE	10.00	0.00	9	Copper oxide (ous)	2	NO	NO
59807-4	HORMODIN 1	0.00	0.18	4	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
67702-3-54705	NEU1165M SLUG AND SNAIL BAIT	0.00	2.19	2	Iron phosphate	3	NO	NO
63838-5	BROMMAX 7.1	50.00	0.00	1	Sodium bromide; Sodium hypochlorite	1	NO	NO
44891-9	MONTEREY WATER-BASED ANTIFOULING COATING	2.00	0.00	1	Copper oxide (ous)	2	NO	NO
60061-14	WOOLSEY/Z*SPAR SUPER TOX ANTI-FOULING FINISH B-74	1.00	0.00	1	Copper oxide (ous)	2	NO	NO
60061-71	PETTIT MARINE PAINT PREMIUM SINGLE SEASON ABLATIVE	1.00	0.00	1	Copper oxide (ous)	2	NO	NO
73049-15	PROGIBB 4% PLANT GROWTH REGULATOR SOLUTION	0.00	0.00	1	Gibberellins	2	NO	NO



## APPENDIX 3: Complete Listing of “Best Management Practices” Insecticides Used Citywide in 2019

EPA Reg. #	EPA Prod Name	Volume in Gallons	Weight in Pounds	Total Applications	Active Ingredient Data
73049-429	VECTOMAX FG	0.00	3368.66	50,238	Bacillus sphaericus; Bacillus thuringiensis, subsp. Israelensis, strain AM 65-52
1021-2593	VENDETTA PLUS COCKROACH GEL BAIT	0.00	310.03	10,911	Avermectin; Pyriproxyfen
432-1257	MAXFORCE ROACH BAIT F.05	0.21	337.44	10,597	Fipronil
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	471.22	9,883	Indoxacarb
432-1259	PRODUCT: RBF5	0.00	363.24	9,880	Fipronil
432-1460	MAXFORCE FC ROACH KILLER BAIT GEL F.05	0.00	160.71	6,128	Fipronil
64405-2	REDZONE BAIT	0.00	1837.50	3,660	Boric acid
73079-14	IMIDACLOPRID GRANULAR BAIT	0.00	537.62	2,659	Imidacloprid
1021-2796	MGK Formula 3113	0.00	69.07	2,371	Clothianidin; Pyriproxyfen
73079-4	BORACTIN INSECTICIDE POWDER	1.50	566.57	1,573	Boric acid
73766-1	GOURMET ANT BAIT GEL	0.00	53.29	1,209	Disodium octaborate tetrahydrate
100-1498	DUPONT ADVION ANT GEL	0.00	26.84	822	Indoxacarb
73049-20	VECTOLEX CG BIOLOGICAL LARVICIDE	0.00	16986.73	360	Bacillus sphaericus
1021-1603	NYLAR 10EC	198.53	0.00	344	Pyriproxyfen
89459-59	ENVI ACU CONTACT Insecticide	23.92	3.63	309	Phenylethyl propionate
73049-10	VECTOBAC G BIOLOGICAL LARVICIDE GRANULES	0.00	37039.73	281	Bacillus thuringiensis, subsp. Israelensis, strain AM 65-52
64405-2	ECOLOGICAL ANT & INSECT BAIT	0.05	40.80	262	Boric acid
6218-47	SUMMIT B.T.I. BRIQUETS	0.00	33.86	207	Bacillus thuringiensis subspecies Israelensis strain BMP 144
100-1486	DUPONT ADVION COCKROACH BAIT ARENA	0.00	57.69	198	Indoxacarb
100-1501	DUPONT ARILON INSECTICIDE	139.78	0.01	169	Indoxacarb
432-1506	MAXFORCE QUANTUM ANT BAIT	0.00	1.91	147	Imidacloprid
432-1455	BES 0026 FLY SPOT BAIT	86.47	48.14	140	Imidacloprid; (Z)-9-Tricosene
73079-6	GREEN ZONE GRANULAR BAIT	0.13	19.25	125	Boric acid
100-1290	OPTIGARD COCKROACH GEL BAIT	0.00	5.28	123	Emamectin, benzoate
64405-8	NIBOR BORATE INSECTICIDE AND FUNGICIDE	156.31	6.00	112	Disodium octaborate tetrahydrate
100-1483	ADVION INSECT GRANULE	0.00	27.03	106	Indoxacarb
432-1375	PRE-EMPT FLY BAIT	0.00	20.07	73	Imidacloprid; (Z)-9-Tricosene
73049-501	VBC-60394 FG BIOLOGICAL LARVICIDE FINE GRANULE	0.00	409.75	68	Bacillus thuringiensis, subsp. Israelensis, strain AM 65-52
1021-1828	MGK ROACH BAIT 2822	0.05	1.27	49	Avermectin
100-1485	DUPONT ADVION ANT BAIT ARENA	0.00	1.44	44	Indoxacarb
499-370	PT 370 ASCEND FIRE ANT STOPPER BAIT	0.00	5.13	43	Avermectin
73079-2	INTICE GRANULAR BAIT	0.02	22.25	27	Boric acid
241-313	SIEGE PBS GEL INSECTICIDE	0.00	3.96	26	Hydramethylnon
432-1262	MAXFORCE IBH10	0.97	0.21	25	Hydramethylnon
48813-1	SUFFOIL-X	5.55	0.00	22	Petroleum distillates
53883-335	N + P Regulator	0.49	0.00	22	Pyriproxyfen; Novaluron
70051-2	TRIACT 70	2.94	0.00	21	Neem oil

432-1255	MAXFORCE GRANULAR INSECT BAIT	0.52	1.25	17	Hydramethylnon
73049-39	DIPEL DF DRY FLOWABLE BIOLOGICAL INSECTICIDE	0.00	1.80	16	Bacillus thuringiensis, subsp. Kurstaki, strain ABTS-351, fermentation solids and solubles
73079-12	SILICIDE(TM)	0.00	2.38	15	Diatomaceous earth
62719-523	BLACKHAWK	0.00	65.38	10	Spinosad
10163-324	M-PEDE INSECTICIDE/FUNGICIDE	0.14	0.00	9	Potassium laurate
100-1487	PROVAUNT	0.00	41.50	9	Indoxacarb
499-406	AVERT PRESCRIPTION TREATMENT TC 93A BAIT	0.00	0.39	9	Avermectin
62719-291	CONSERVE SC TURF AND ORNAMENTAL	2.62	0.00	8	Spinosad
73049-38	VECTOBAC 12AS BIOLOGICAL LARVICIDE	0.00	0.12	6	Bacillus thuringiensis, subsp. Israelensis, strain AM 65-52
59639-96	DISTANCE INSECT GROWTH REGULATOR	0.17	0.00	5	Pyriproxyfen
4822-472	RAID MAX ROACH BAIT V	0.00	1.00	4	Avermectin
73079-10	INVICT (TM) COCKROACH GEL	0.02	0.00	3	Imidacloprid
432-1264	MAXFORCE FC ANT KILLER BAIT GEL	0.01	0.00	3	Fipronil
42697-60	SAFER BRAND O-INSECTICIDAL SOAP CONCENTRATE	1.00	8.00	2	Potassium laurate
7969-210	TERMIDOR SC TERMITICIDE/INSECTICIDE	0.28	0.00	2	Fipronil
64405-2	GARDEN SAFE BRAND ANT & ROACH KILLER	0.00	3.50	2	Boric acid
499-527	PRESCRIPTION TREATMENT BRAND ALPINE DUST INSECTICIDE	0.00	0.38	2	Dinotefuran; Diatomaceous earth
73079-8	INTICE GELANIMO ANT BAIT	0.00	0.08	2	Borax
100-1502	INDOXACARB ANT GEL	0.00	0.01	2	Indoxacarb
85306-1	SELECT TCS	0.00	0.01	2	Fipronil
53883-279	TAURUS SC TERMITICIDE/INSECTICIDE	0.00	0.00	2	Fipronil
499-515	MOTHEREARTH GRANULAR SCATTER BAIT	0.04	0.00	1	Boric acid
432-1254	MAXFORCE PROFESSIONAL INSECT CONTROL ROACH KILLER	0.01	0.00	1	Hydramethylnon
432-1256	MAXFORCE FC ANT BAIT STATIONS	0.00	0.00	1	Fipronil
499-370	JOHNSON WAX PROFESSIONAL BRAND GRANULAR ANT BAIT	0.00	0.00	1	Avermectin
100-1636	Provaunt WDG	0.00	4.72	1	Indoxacarb
279-3384	ROACH KIL COMMERCIAL	0.00	0.25	1	Boric acid
67425-13	ECOPAC AR	0	0.125	1	Thymol; Phenylethyl propionate; Eugenol