



Pesticide Use by New York City Agencies in 2020

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EXECUTIVE SUMMARY

Local Law 54 of 2007 requires the New York City Department of Health and Mental Hygiene (DOHMH) to summarize pesticide use by City agencies annually. New York City agencies account for a small fraction of pesticides used in the city. New York State receives pesticide use data from all commercial applicators. New York City agencies' use in 2017 (the last year for which New York State data has been processed) accounted for an estimated 2% of the total volume of liquid pesticides, and 15% of the total pounds of solid pesticides applied within the five boroughs of New York City.

In 2020, 30 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 636,238 times by New York City agencies in 2020. Agencies used 8,303 gallons of liquid and 148,836 pounds of solid pesticide products. The increase in number of applications was due to a broad citywide mosquito larvae catch basin treatment program that was not accompanied by a corresponding increase in product use by weight (Table 1).
- Due to the citywide catch basin larvaciding program, mosquitoes were the most commonly targeted pests in 2020, with cockroaches, rats, mice, and bed bugs making up the top 5 targets (by total number of applications in descending order) (Table 3).
- Most liquid pesticide products (52% by volume) used by City Agencies were insecticides, and most solid products (40% by weight) were insecticides (Table 1). Excluding DOHMH mosquito larviciding conducted to prevent spread of West Nile Virus and other mosquito-borne diseases, rodenticides made up the largest percentage of solid pesticide products used (46% by weight).
- Insecticides
 - Insecticides were the most frequently applied type of pesticide, accounting for 86% of all applications (Table 1).
 - The volume of liquid insecticides increased 69% in 2020, compared with 2019 (Figure 2). This increase was due to a large volume of insect growth regulator applications targeting a broad range of pests at NYCHA (Figure 6).
 - Liquid pyrethroid products targeting cockroaches decreased 25% from 2019 to 2020, continuing a downward trend. However, treatments targeting bedbugs increased by 6% (Figure 6).
 - In spite of the increase in number of mosquito larvicide applications, use of these solid products overall decreased 14% by weight, compared with 2019, 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 92% of insecticide applications in 2020 versus 50% in 2019. This increase was mainly due to multiple citywide applications of mosquito larvicide in sewer catch basins. BMP application amounts by weight to treat cockroaches increased by 62% adding to a strong upward trend since 2015. (Figure 4).
- Herbicides
 - Liquid herbicide product use remained low in 2020, relative to other liquid pesticides (Figure 2). Volume decreased by 5%, with a large 48% decline in the use of glyphosate products, continuing a steady downward trend in use since 2014 (Figure 3). The Parks Department is continuing to phase out the use of glyphosate products in areas of parks accessible to the public.
 - The use of solid herbicide products in 2020 increased 15% compared with 2019, 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 decreased 46% by weight and 14% in the number of applications citywide, compared with 2019 (Figure 1). The declines reflect a reduction in the number of inspections DOHMH conducted due to the COVID-19 pandemic.

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I. BACKGROUND

When Local Law 37 was enacted on May 9, 2005, New York City became the largest municipality in the nation to regulate the use of pesticides on City-owned and -leased property. Local Law 37 established new requirements 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 2020, 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 2020.

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 2020 due to continued increased use of the NYCPURS system with input standardization and consistent formatting.

In 2020, 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 2020, Parks, NYCHA, and DOE continued using dry ice (frozen CO₂) 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 2020 were: Contrac All-Weather Blox®, Contrac Rodenticide®, Weatherblok Bait with Bitrex® and Difethialone Paste Place Packs®.

In 2020, a total of 45,345 pounds of rodenticides were applied by City agencies, accounting for 30% by weight of solid pesticides applied, and 46% by weight when excluding mosquito larvicides, which are a significant proportion of insecticides by weight (Table 1).

Insecticides

A total of 4,284 gallons and 59,666 pounds of insecticides were applied by New York City agencies in 2020, accounting for 52% by volume, and 40% by weight of the total applications. Biological insecticides applied to target mosquito larvae account for 84% of insecticides by weight (Table 1). When those products are excluded, 9,649 pounds of insecticides by weight were applied, making up 10% of solid pesticides applied. Insecticides used by NYC agencies in 2020 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 2020 include Whitmire 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 2020 for 38% of total liquid insecticides applied by volume and 1% of solid insecticides by weight – 9% by weight when excluding mosquito larvicides. These products made up 6% of the total number of insecticide applications. There was a 14% increase in pyrethroids applied by volume in 2020.

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 has also allowed the registrations for several carbamates to lapse.

The main organophosphate active ingredients used in 2020 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 2020 were carbaryl and methomyl. Organophosphate and carbamate products applied by agencies in 2020 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 2020, the use of organophosphates and carbamates accounted for only 4% of total liquid insecticides applied by agencies by volume – a decrease from 2019 levels – and <1% of total solids by weight, and only 2% 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 2020, 51% of the total insecticides applied by volume, and 98% by weight, were insecticidal dusts, gels and baits, insect growth regulators, or biological larvicides. Excluding mosquito larvicides, the totals equal 89% of solid insecticide products by weight. These BMP products made up 91% of the total number of insecticide applications, a 339% increase in the number of applications compared with 2019, mostly due to citywide larvaciding in sewer catch basins.

Herbicides

New York City agencies used herbicides in 2020 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 773 gallons and 34,743 pounds of herbicides were applied in 2020, accounting for 9% of total pesticide volume and 23% of total pesticide weight overall, or 35% when excluding mosquito larviciding. (Table 1)

Glyphosate

Though recent use by NYC agencies has been declining, glyphosates remain a commonly used liquid herbicide in the US. These are 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.”¹ 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 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 has been declining since 2013. In 2020, 17% 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

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

dinitroanilines are classified by EPA as suspected human carcinogens. Dinitroaniline herbicides break down slowly. Common dinitroaniline active ingredients are pendimethalin, trifluralin, benefin, benfluralin and prodiamine. Agencies used only dinitroaniline products containing prodiamine in 2020 including Barricade 4FL ® applied on city golf courses. 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 2020 were Riverdale Vanquish Herbicide® and Lesco Three-Way Selective Herbicide®. In 2020, 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 chronic exposure may pose some 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 2020 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 2020 were Sedgehammer®, Dupont Viewpoint Herbicide® and Nufarm Prosedge Selective Herbicide ®. In 2020, 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, which are exempt from Local Law 37 prohibitions.

The active ingredients of fungicides commonly used in NYC in 2020 were chlorothalonil, thiophanate-methyl, propiconazole, azoxystrobin, iprodione and triadimefon. Common fungicide products applied in 2020 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 2020, but they made up 37% of total volume of liquid pesticides applied, 6% of total weight of solid

products, and 9% 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 one of 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 several 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 636,238 times by New York City agencies in 2020, 92% more than in 2019 due to an increase in larvicide applications, although amounts per application were small. In addition, there was 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. Insecticides were the most heavily used solid products (40% by weight), and insecticides were also the most heavily used liquid (52% by volume). In 2020, 98% 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, 10% of total solid pesticides by weight were insecticides and 46% 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 2020, by Pesticide Type

Pesticide Type	Volume		Weight			Times Applied	
	Gallons	% of Total	Pounds	% of Total	% wo larvicide	Number	% of Total
Rodenticide	5	0.1%	45,345	30.5%	45.9%	86,819	13.6%
Insecticide	4,284	51.6%	59,666	40.1%	9.8%	546,473	85.9%
Herbicide	773	9.3%	34,743	23.3%	35.2%	1,890	0.3%
Fungicide	3,047	36.7%	9,076	6.1%	9.2%	965	0.2%
Other	194	2.3%	6	0.0%	0.0%	91	0.0%
	8,303		148,836			636,238	

Table 2 lists the ten most frequently used products for each pesticide type on New York City owned or leased property in 2020. 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 2020 by Type

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Rodenticides								
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	17,780.02	59757	Difethialone	3	NO	NO
12455-69	CONTRAC RODENTICIDE	0.00	12,585.74	11094	Bromadiolone	3	NO	NO
12455-90	FINAL RODENTICIDE	0.00	2,239.90	2652	Brodifacoum	3	NO	NO
12455-56	DITRAC TRACKING POWDER	0.00	328.22	2576	Diphacinone	2	NO	NO
12455-86	CONTRAC RODENTICIDE PLACE PAC	0.00	1,743.54	2163	Bromadiolone	3	NO	NO
12455-146	CONTRAC SOFT BAIT	0.00	650.09	1709	Bromadiolone	3	NO	NO
7173-297	BROMADIOLONE PASTE 0901	0.00	690.82	1131	Bromadiolone	3	NO	NO
12455-133	CONTRAC WITH LUMITRACK	0.00	419.23	994	Bromadiolone	3	NO	NO
12455-79	CONTRAC ALL-WEATHER BLOX	5.00	865.89	732	Bromadiolone	3	NO	NO
12455-148	Rat Ice	0.00	5,343.00	569	Carbon dioxide	2	NO	NO
Insecticides								
73049-429	VECTOMAX FG	0.00	31,159.96	419,640	Bacillus sphaericus; Bacillus thuringiensis, subsp. Israelensis, strain AM 65-52	3	NO	NO
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	1,100.29	29,767	Indoxacarb	3	NO	NO
73079-14	IMIDACLOPRID GRANULAR BAIT	0.00	2,070.21	11,669	Imidacloprid	3	NO	NO
499-510	PRESCRIPTION TREATMENT BRAND ALPINE COCKROACH GEL BAIT PISTON CAN	0.00	51.53	10,684	Dinotefuran	3	NO	NO
1021-2593	VENDETTA PLUS COCKROACH GEL BAIT	0.00	270.95	8,950	Avermectin; Pyriproxyfen	3	NO	NO
432-763	SUSPEND SC INSECTICIDE	8.92	56.85	7,235	Deltamethrin	3	NO	NO
432-1483	TEMPRID SC INSECTICIDE	9.65	0.00	7,020	Cyfluthrin, beta; Imidacloprid	3	NO	NO
64405-2	REDZONE BAIT	0.00	2,951.48	6,745	Boric acid	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
397-13	STERI-FAB	729.17	690.93	5,214	Phenothrin; Isopropyl alcohol; Alkyl (60%C14, 25%C12, 15%C16) dimethylbenzyl ammonium chloride; Didecyl dimethyl ammonium chloride	2	NO	NO
1021-2796	MGK Formula 3113	0.00	115.89	4,621	Clothianidin; Pyriproxyfen	0	NO	NO
Herbicides								
62719-176	PATHFINDER II	152.46	0.00	308	Triclopyr, butoxyethyl ester	3	NO	NO
62719-556	ACCORD XRT II	48.92	0.00	234	Glyphosate, dimethylammonium salt	3	NO	NO
228-397	RIVERDALE VANQUISH HERBICIDE	25.87	7.00	176	Dicamba, diglycolamine salt	3	NO	NO
432-1580	DUPONT VIEWPOINT HERBICIDE	0.87	22.58	173	Aminocyclopyrachlor; Imazapyr; Metsulfuron-methyl	3	NO	NO
62719-527	GARLON 4 ULTRA	45.64	0.00	112	Triclopyr	2	NO	NO
432-1516	ESPLANADE 200 SC	3.83	0.00	106	Indaziflam	3	NO	NO
62719-324	GLYPRO	16.94	0.00	88	Glyphosate, isopropylamine salt	3	NO	NO
524-579	ROUNDUP PROMAX	22.45	0.00	75	Glyphosate, potassium salt	3	NO	NO
62719-566	TURFLON ESTER ULTRA	6.47	0.00	74	Triclopyr, butoxyethyl ester	3	NO	NO
100-937	PRIMO MAXX	34.26	0.00	71	Trinexapac-ethyl	3	NO	NO
Fungicides								
100-1364	DACONIL ACTION	577.75	0.00	78	Acibenzolar-S-methyl; Chlorothalonil	2	YES	NO
94485-1	COMPANION LIQUID BIOLOGICAL FUNGICIDE	377.65	0.00	65	Bacillus subtilis GBO3	3	NO	NO
432-942	BANOL TURF AND ORNAMENTAL FUNGICIDE	134.54	144.52	61	Propamocarb hydrochloride	3	NO	NO
432-1541	12ESP705 FUNGICIDE	0.00	2,249.75	43	Fosetyl-Al	3	NO	NO
53883-323-86064	ARMOR TECH TMI 2020XL	121.00	200.13	37	Thiophanate-methyl; Iprodione	3	YES	YES
100-1093	HERITAGE FUNGICIDE	8.29	66.91	37	Azoxystrobin	3	NO	NO
53883-353	QUALI-PRO T-NEX	30.57	2.88	34	Trinexapac-ethyl	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
70299-12	ZEROTOL 2.0	8.74	0.00	26	Peroxyacetic acid; Hydrogen peroxide	1	NO	NO
432-1445	BAYLETON FLO TURF AND ORNAMENTAL FUNGICIDE	42.36	0.00	21	Triadimefon	3	YES	YES
70127-2	NOVOZYMES BIOFUNGICIDE GREEN RELEAF 710-140	95.60	0.00	20	Bacillus licheniformis SB3086; IBA	3	NO	NO
Other								
4238-29	HYPOCHLORITE SOLUTION	105.00	0.00	45	Sodium hypochlorite	1	NO	NO
14802-8-74466	MICROBE LIFE ALGAWAY 5.4 ALGAECIDE FOR PONDS	5.94	0.00	21	Poly(oxyethylene) (dimethylimino) ethylene (dimethylimino) ethylene dichloride	3	NO	NO
60061-142	PETTIT NEPTUNE 5 HARD HYBRID ABLATIVE ANTIFOULING PAINT	11.50	0.00	12	Copper oxide (ous)	2	NO	NO
59807-4	HORMODIN 1	0.00	0.26	6	IBA	3	NO	NO
2693-193	OPTIMA-BLUE	2.00	0.00	2	Copper oxide (ous)	2	NO	NO
73049-15	PROGIBB 4% PLANT GROWTH REGULATOR SOLUTION	0.00	0.00	2	Gibberellins	2	NO	NO
67702-3-54705	NEU1165M SLUG AND SNAIL BAIT	0.00	6.00	2	Iron phosphate	3	NO	NO
63838-5	BROMMAX 7.1	70.00	0.00	1	Sodium bromide; Sodium hypochlorite	1	NO	NO

C. CHANGES IN PESTICIDE USE

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

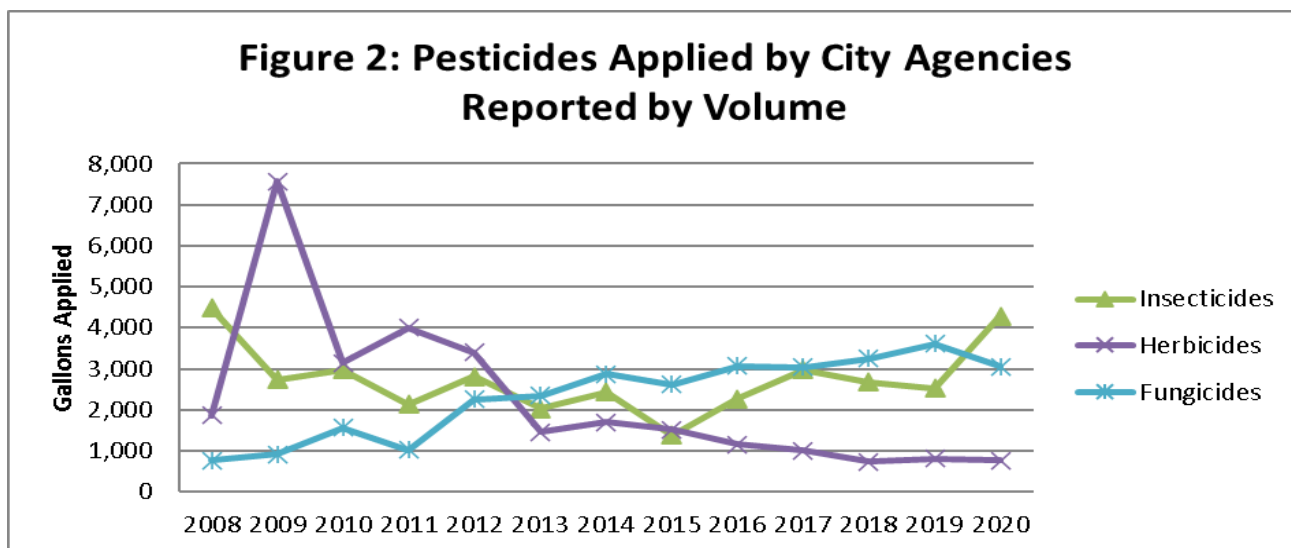
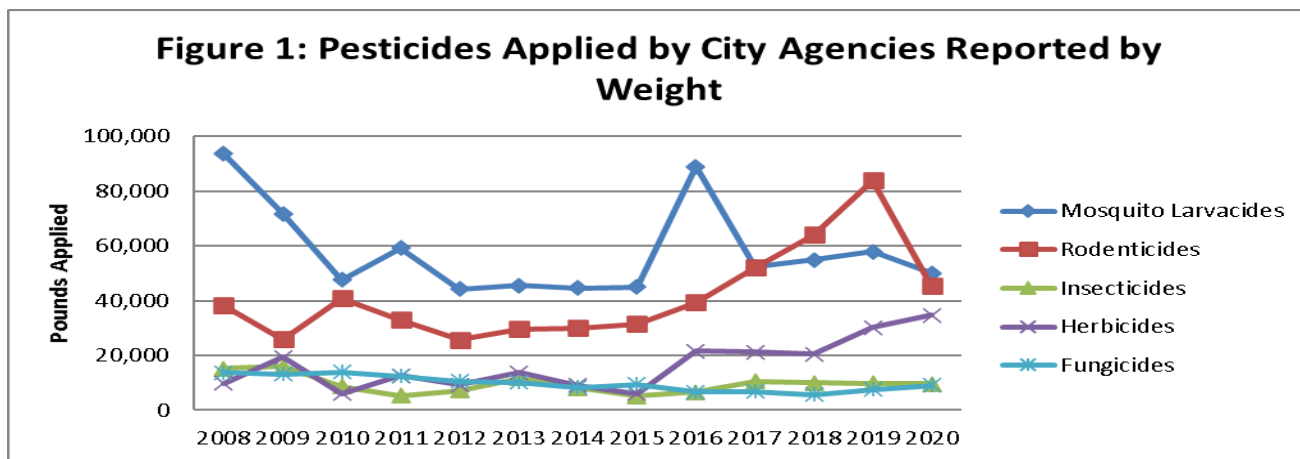
Table 3: Complete listing of pesticide applications by New York City Agencies by Target Pest, 2020

Target Pest	Volume in Gallons	Weight in Pounds	Total Applications	% of Total Applications
Mosquitoes	332	50,000	420,374	66%
Roaches	908	7,786	108,270	17%
Rats	12	32,963	44,109	7%
Mice	13	12,772	43,424	7%
Bedbugs	1,634	367	4,860	1%
Ants	48	227	3,928	1%
Other Pests	388	137	3,134	<1%
Flying Insects	380	450	2,833	<1%
Other Crawling Insects	768	315	2,451	<1%
Weeds, vines, or grasses	773	34,743	1,890	<1%
Fungal Disease or Infestation	3,047	9,076	965	<1%
Totals	8,303	148,836	636,238	

Pesticide Use by NYC in 2020

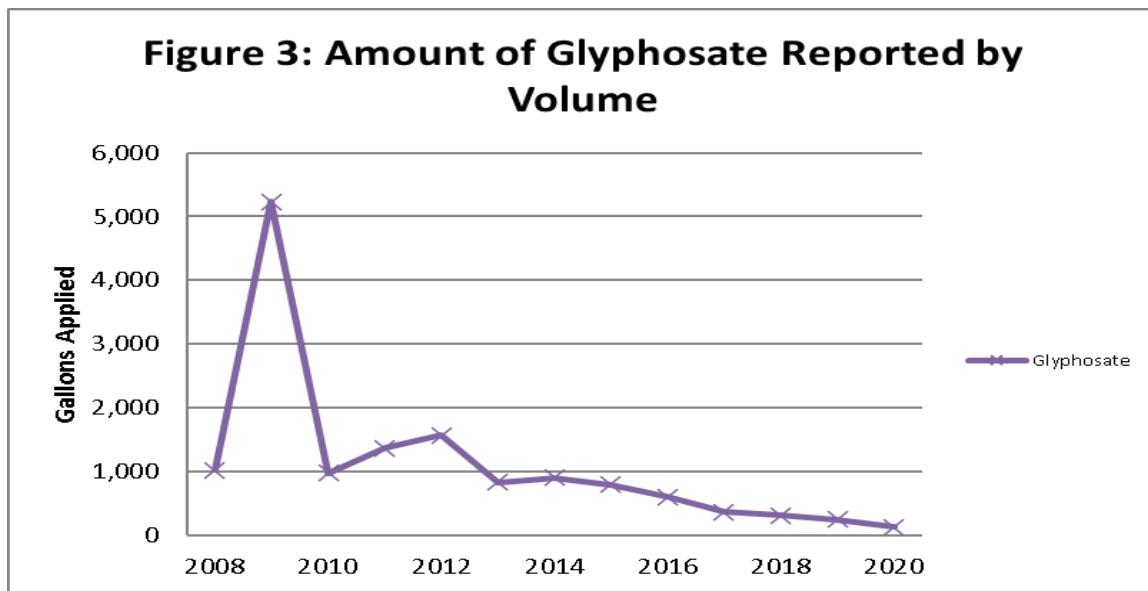
The level of completeness of city agency pesticide reporting has improved dramatically over the past ten years, making analysis of trends in pesticide use possible since 2008. Figures 1 and 2 show trends from 2008 through 2020 in use of pesticides by city agencies by type of pesticide, with solid and 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 decrease (46% by weight) from 2019 to 2020, and there was an overall 21% decrease in amount of all pesticides reported by weight. Solid herbicide by weight increased first in 2016 and continued to go up in 2020 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 2020, liquid herbicide use decreased 5% by volume (Figure 2) from 2019 including a 48% decrease in gallons of glyphosate applied

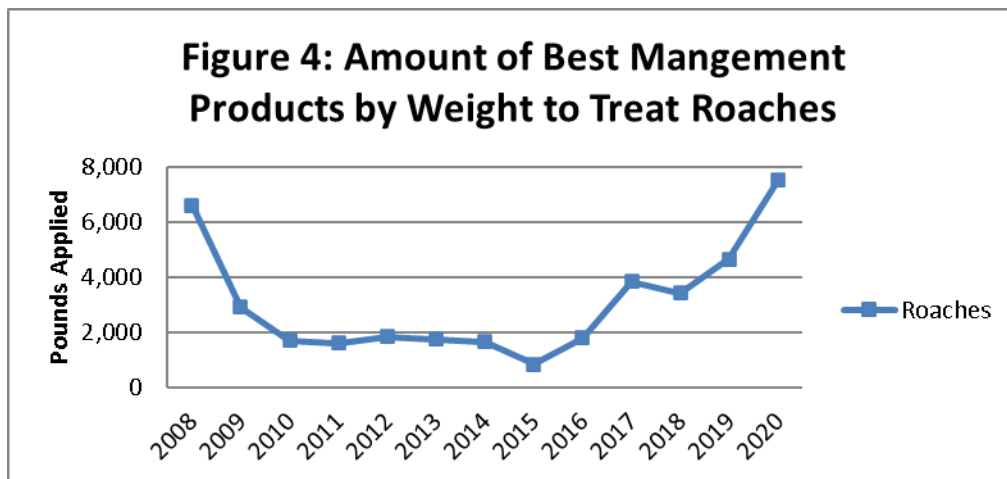
(Figure 3). Overall, there has been a 92% decline in liquid herbicide levels applied since 2012. The high volume of herbicide (mostly glyphosate) used in 2009 was due in part to large discreet projects by the Parks Department to control invasive species in remote, often wooded, parkland.



There was also a 69% increase in liquid insecticide use, reported by volume, due to a large increase in the use of a liquid insect growth regulator (IGR) product, considered a BMP product, at NYCHA to treat a variety of pests. The increase was also due to a 14% increase in pyrethroid use. This increase was mostly in treatments for insects other than roaches and bedbugs. (Appendix 1 & 3). From 2008 to 2020, there was only a 4% decrease in the volume of liquid insecticides due to this large increase in use of IGR product. (Figure 2).

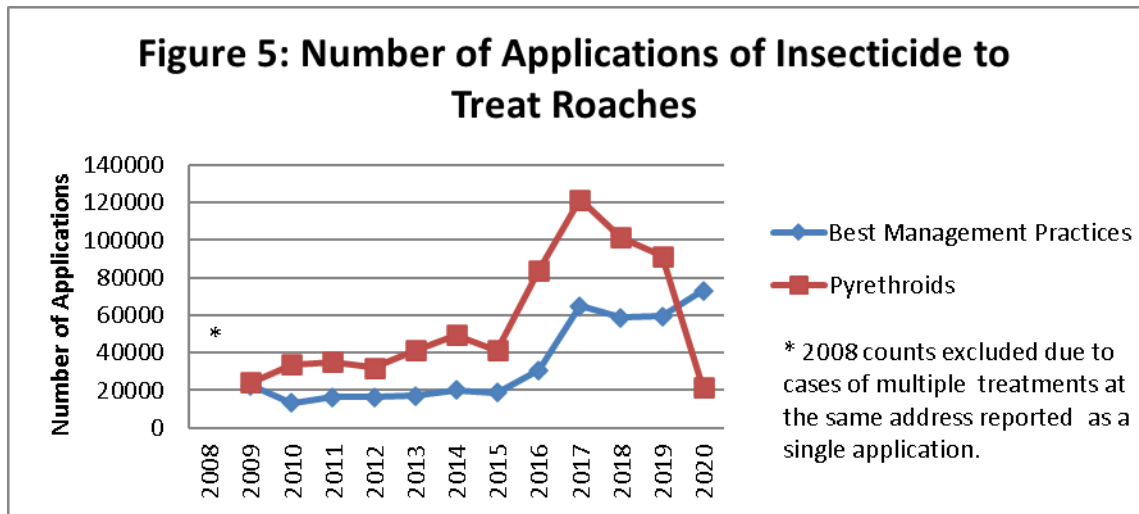
Use of spray formulations vs. Best Management Practices

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 2020 there was a 62% increase in BMP products targeting roaches (Figure 4).



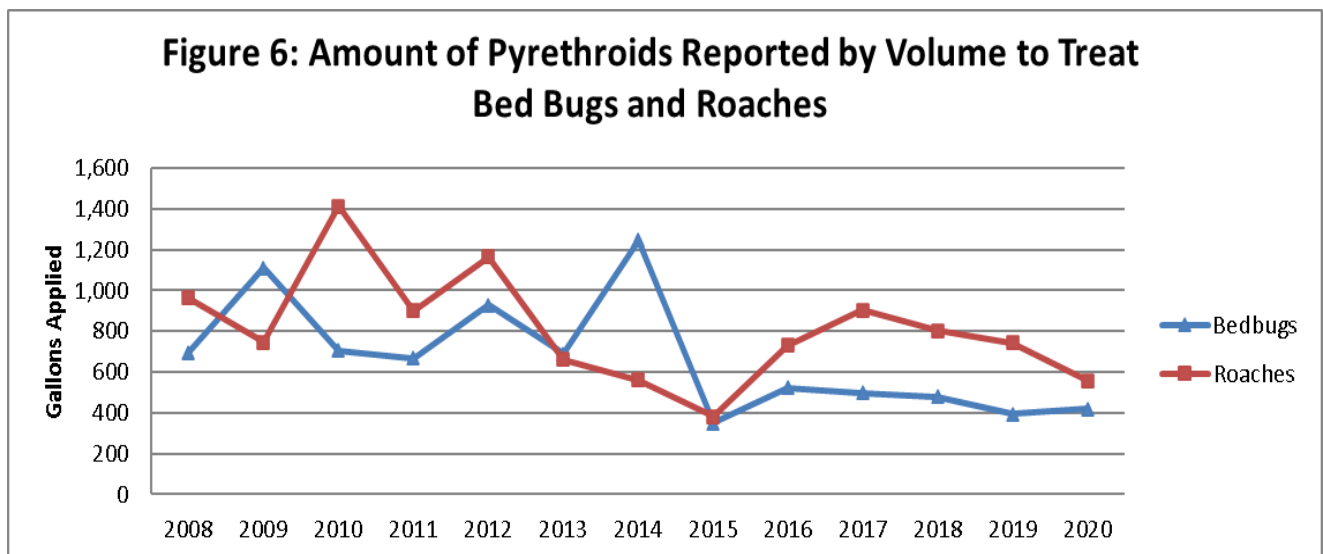
There was a 76% decrease in the number of pyrethroid applications to treat roaches from 2019 to 2020, while the number of applications of BMP products increased by 23% (Figure 5). This

decrease in pyrethroid applications corresponded to a 25% lower volume of applied pyrethroids. Meanwhile the BMP amount by weight increased by 62%, continuing an upward trend. (Figure 6 and Figure 4).



Bed Bugs vs. Roaches

Use of pyrethroid spray products targeting roaches decreased 25% by volume, and number of applications decreased 76% from 2019 to 2020 (Figure 6 and Figure 5). There was also a 6% increase in gallons of pyrethroids used by city agencies to treat bed bugs from 2019 to 2020 (Figure 6). Citywide, the number of pyrethroid applications to treat bed bugs decreased 47% in 2020. Total volume of pyrethroid use for control of bed bugs from 2008 to 2020 has remained low since 2015 compared with previous years, while volume for cockroaches started to decline in the past three years (Figure 6).



Rodents

Rodenticide use decreased by 46% in 2020 by weight (Figure 1). There was also a decrease of 14% in the number of rodenticide applications, driven mostly by a reduced number of inspections during the height of the COVID-19 pandemic.

Mosquitoes

Mosquito control measures include larviciding (killing larvae) and adulticiding (killing flying adults). The DOHMH Vector Control program applied 49,857 pounds of mosquito larvicide and 325 gallons of adulticide in 2020. Larvicide reported by weight decreased by 14% in 2020 (Figure 1). There were a very high number of applications of larvicide in sewer catch basins in 2020 across the city. Though this program occurred in previous years the count of applications was considerably higher than in past years. 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. The number of applications of adulticide declined by over half from 2019, which may be related to fewer spray events during the COVID-19 pandemic (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 ACS pesticide use by pesticide type. Table 5 lists all pesticide products used in 2020, primarily at facilities previously under management of the DJJ.

Table 4: Types of Pesticides Used by ACS in 2020

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	2.7	49.8%	15	25.4%
Insecticide	0.0	100.0%	2.8	50.2%	44	74.6%
Totals	0.0		5.5		59	

Table 5: Pesticide Products Used by ACS in 2020

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Rodenticides								
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	2.29	13	Difethialone	3	NO	NO
12455-69	CONTRAC RODENTICIDE	0.00	0.44	2	Bromadiolone	3	NO	NO
Insecticides								
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	2.02	34	Indoxacarb	3	NO	NO
100-1486	DUPONT ADVION COCKROACH BAIT ARENA	0.00	0.35	6	Indoxacarb	3	NO	NO
64405-2	REDZONE BAIT	0.00	0.38	3	Boric acid	3	NO	NO
432-763	SUSPEND SC INSECTICIDE	0.00	0.00	1	Deltamethrin	3	NO	NO

Aging, Department for the

The Department for the Aging (DFTA) promotes, administers and coordinates the development and provision of services for older New Yorkers to help them maintain their independence and participation in their communities. 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 2020.

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 BPL pesticide use by pesticide type. Table 7 lists all pesticide products used in 2020.

Table 6: Types of Pesticides Used by BPL in 2020

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	34.1	51.4%	98	28.9%
Insecticide	0.0	100.0%	32.3	48.6%	241	71.1%
Totals	0.0		66.4		339	

Table 7: Pesticide Products Used by BPL in 2020 by Pesticide Type

Pesticide Use by NYC in 2020

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Rodenticides								
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	26.06	81	Difethialone	3	NO	NO
7173-113	ROZOL TRACKING POWDER	0.00	8.00	14	Chlorophacinone	2	NO	NO
12455-56	DITRAC TRACKING POWDER	0.00	0.04	3	Diphacinone	2	NO	NO
Insecticides								
64405-2	REDZONE BAIT	0.00	27.63	103	Boric acid	3	NO	NO
432-1506	MAXFORCE QUANTUM ANT BAIT	0.00	1.19	88	Imidacloprid	3	NO	NO
1021-2593	VENDETTA PLUS COCKROACH GEL BAIT	0.00	0.20	16	Avermectin; Pyriproxyfen	3	NO	NO
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	0.10	10	Indoxacarb	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	0.11	8	Indoxacarb	3	NO	NO
432-763	SUSPEND SC INSECTICIDE	0.00	0.00	6	Deltamethrin	3	NO	NO
432-772	DELTA DUST	0.00	1.94	5	Deltamethrin	3	NO	NO
279-9554	CB INSECTICIDE WITH DELTAMETHRIN	0.00	0.69	2	Deltamethrin	3	NO	NO
432-1455	BES 0026 FLY SPOT BAIT	0.00	0.13	2	Imidacloprid; (Z)-9-Tricosene	3	NO	NO
499-550	TC-323	0.00	0.31	1	Prallethrin	3	NO	NO

Board of Elections

The Board of Elections is the administrative body that oversees elections through staff at its main and five borough offices. The agency contracts for pest control through the citywide contract administered by DCAS. Table 8 summarizes BOE pesticide use by pesticide type. Table 9 lists all pesticide products used in 2020.

Table 8: Types of Pesticides Used by BOE in 2020

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	1.6	95.6%	8	66.7%
Insecticide	0.0	100.0%	0.1	4.4%	4	33.3%
Totals	0.0		1.7		12	

Table 9: Pesticide Products Used by BOE in 2020 by Pesticide Type

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Rodenticides								

Pesticide Use by NYC in 2020

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	1.46	7	Difethialone	3	NO	NO
12455-139	Final Soft Bait	0.00	0.13	1	Brodifacoum	3	NO	NO
Insecticides								
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	0.07	3	Indoxacarb	3	NO	NO
432-763	SUSPEND SC INSECTICIDE	0.00	0.00	1	Deltamethrin	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 10 summarizes OCME pesticide use by pesticide type. Table 11 lists all pesticide products used in 2020.

Table 10: Types of Pesticides Used by OCME in 2020

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	1.9	58.8%	31	57.4%
Insecticide	0.0	100.0%	1.3	41.2%	23	42.6%
Totals	0.0		3.2		54	

Table 11: Pesticide Products Used by OCME in 2020

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Rodenticides								
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	1.63	29	Difethialone	3	NO	NO
7173-297	BROMADIOLONE PASTE 0901	0.00	0.24	2	Bromadiolone	3	NO	NO
Insecticides								
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	0.45	15	Indoxacarb	3	NO	NO
432-763	SUSPEND SC INSECTICIDE	0.01	0.00	3	Deltamethrin	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	0.36	3	Indoxacarb	3	NO	NO
64405-2	REDZONE BAIT	0.00	0.50	2	Boric acid	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 12 summarizes CUNY pesticide use by pesticide type. Table 13 lists all pesticide products used in 2020.

Table 12: Types of Pesticides Used by CUNY in 2020

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	48.2	72.0%	167	35.5%
Insecticide	0.9	100.0%	18.7	28.0%	303	64.5%
Totals	0.9		66.9		470	

Table 13: Pesticide Products Used by CUNY in 2020 by Pesticide Type

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Rodenticides								
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	33.91	110	Difethialone	3	NO	NO
100-1055	WEATHERBLOK BAIT WITH BITREX	0.00	12.73	47	Brodifacoum	3	NO	NO
82744-2-56	RATIMOR SOFT BAIT	0.00	0.13	5	Bromadiolone	3	NO	NO
7173-188	MAKI RAT AND MOUSE BAIT PACKS (PELLETS)	0.00	0.84	3	Bromadiolone	3	NO	NO
7173-297	BROMADIOLONE PASTE 0901	0.00	0.32	1	Bromadiolone	3	NO	NO
7173-113	ROZOL TRACKING POWDER	0.00	0.25	1	Chlorophacinone	2	NO	NO
Insecticides								
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	4.94	76	Indoxacarb	3	NO	NO
53883-276	DELTA 4.75% SC	0.51	0.00	65	Deltamethrin	3	NO	NO
432-763	SUSPEND SC INSECTICIDE	0.22	0.00	40	Deltamethrin	3	NO	NO
432-1544	TEMPRID SC-F INSECTICIDE	0.04	0.00	30	Cyfluthrin, beta; Imidacloprid	3	NO	NO
100-1066	DEMAND CS INSECTICIDE	0.00	1.06	17	Cyhalothrin, lambda	3	NO	NO
64405-2	REDZONE BAIT	0.00	4.56	14	Boric acid	3	NO	NO
432-1363	TEMPO SC INSECTICIDE	0.00	1.06	8	Cyfluthrin, beta	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
100-1498	DUPONT ADVION ANT GEL	0.00	0.10	7	Indoxacarb	3	NO	NO
53883-335	N + P Regulator	0.08	0.00	6	Pyriproxyfen; Novaluron	3	NO	NO
1021-1603	NYLAR 10EC	0.01	0.00	6	Pyriproxyfen	3	NO	NO
432-772	DELTA DUST	0.00	0.63	6	Deltamethrin	3	NO	NO
279-3206	TALSTAR TC FLOWABLE TERMITICIDE/INSECTICIDE	0.02	0.00	5	Bifenthrin	3	YES	NO
89459-59	ENVI ACU CONTACT Insecticide	0.00	2.76	4	Phenylethyl propionate	3	NO	NO
100-1501	DUPONT ARILON INSECTICIDE	0.00	0.00	4	Indoxacarb	3	NO	NO
1021-1815	EVERCIDE ESFENVALERATE 6.4% CS	0.01	0.00	3	Esfenvalerate	3	NO	NO
100-1483	ADVION INSECT GRANULE	0.00	2.63	3	Indoxacarb	3	NO	NO
8033-109-279	TRANSPORT (R) MIKRON INSECTICIDE	0.02	0.00	2	Acetamiprid; Bifenthrin	3	YES	NO
1021-2796	MGK Formula 3113	0.00	0.05	2	Clothianidin; Pyriproxyfen	0	NO	NO
149-8	TERRO ANT KILLER II	0.02	0.00	1	Borax	3	NO	NO
2724-351	ZOECON RF-259 EMULSIFIABLE CONCENTRATE	0.01	0.00	1	(7S)-Hydroprene	3	NO	NO
279-9554	CB INSECTICIDE WITH DELTAMETHRIN	0.00	0.88	1	Deltamethrin	3	NO	NO
1021-2593	VENDETTA PLUS COCKROACH GEL BAIT	0.00	0.03	1	Avermectin; Pyriproxyfen	3	NO	NO
100-1486	DUPONT ADVION COCKROACH BAIT ARENA	0.00	0.02	1	Indoxacarb	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, 2020. 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 14 summarizes pesticide DCAS use by pesticide type. Table 15 lists all pesticide products used in 2020.

Table 14: Types of Pesticides Used by DCAS in 2020

Pesticide Use by NYC in 2020

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	169.3	93.1%	750	74.4%
Insecticide	0.0	100.0%	12.6	6.9%	258	25.6%
Totals	0.0		181.9		1,008	

Table 15: Pesticide Products Used by DCAS in 2020 by Pesticide Type

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Rodenticides								
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	159.33	722	Difethialone	3	NO	NO
12455-69	CONTRAC RODENTICIDE	0.00	2.88	19	Bromadiolone	3	NO	NO
12455-139	Final Soft Bait	0.00	7.14	9	Brodifacoum	3	NO	NO
Insecticides								
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	4.95	158	Indoxacarb	3	NO	NO
64405-2	REDZONE BAIT	0.00	6.99	51	Boric acid	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	0.58	31	Indoxacarb	3	NO	NO
432-763	SUSPEND SC INSECTICIDE	0.05	0.00	16	Deltamethrin	3	NO	NO
100-1486	DUPONT ADVION COCKROACH BAIT ARENA	0.00	0.07	2	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 16 summarizes DOC pesticide use by pesticide type. Table 17 lists all pesticide products used in 2020.

Table 16: Types of Pesticides Used by DOC in 2020

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	21.1	35.1%	54	7.8%
Insecticide	12.8	100.0%	39.0	64.9%	640	92.2%
Totals	12.8		60.1		694	

Table 17: Pesticide Products Used by DOC in 2020 by Pesticide Type

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Rodenticides								

Pesticide Use by NYC in 2020

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	21.10	54	Difethialone	3	NO	NO
Insecticides								
432-763-62719	SUSPEND SC INSECTICIDE	2.13	0.00	146	Deltamethrin	3	NO	NO
432-1363	TEMPO SC INSECTICIDE	3.22	0.00	119	Cyfluthrin, beta	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	8.78	93	Indoxacarb	3	NO	NO
499-507	PRESCRIPTION TREATMENT BRAND ALPINE COCKROACH GEL BAIT RESERVOIR	0.01	5.72	71	Dinotefuran	3	NO	NO
432-1455	BES 0026 FLY SPOT BAIT	1.47	1.00	39	Imidacloprid; (Z)-9-Tricosene	3	NO	NO
1021-2593	VENDETTA PLUS COCKROACH GEL BAIT	0.00	3.18	37	Avermectin; Pyriproxyfen	3	NO	NO
73049-20	VECTOLEX CG BIOLOGICAL LARVICIDE	0.00	6.36	36	Bacillus sphaericus	3	NO	NO
397-13	STERI-FAB	4.91	0.00	33	Phenothrin; Isopropyl alcohol; Alkyl (60%C14, 25%C12, 15%C16) dimethylbenzyl ammonium chloride; Didecyl dimethyl ammonium chloride	2	NO	NO
1021-2796	MGK Formula 3113	0.00	3.52	26	Clothianidin; Pyriproxyfen	0	NO	NO
73049-429	VECTOMAX FG	0.00	8.20	11	Bacillus sphaericus; Bacillus thuringiensis, subsp. israelensis, strain AM 65-52	3	NO	NO
1021-1828	MGK ROACH BAIT 2822	0.00	0.24	10	Avermectin	3	NO	NO
9688-255-8845	SPECTRACIDE COMMERCIAL WASP & HORNET KILLER 3	1.00	0.00	6	Deltamethrin; S-Bioallethrin	3	YES	NO
73079-6	GREEN ZONE GRANULAR BAIT	0.02	0.09	3	Boric acid	3	NO	NO
2724-274-20954	GOLDEN MALRIN RF-128 FLY KILLER	0.00	1.44	3	Methomyl; (Z)-9-Tricosene	3	NO	NO
432-1259	PRODUCT: RBF5	0.00	0.26	2	Fipronil	3	YES	NO
432-1257	MAXFORCE ROACH BAIT F.05	0.00	0.08	2	Fipronil	3	YES	NO
432-1544	TEMPRID SC-F INSECTICIDE	0.00	0.00	1	Cyfluthrin, beta; Imidacloprid	3	NO	NO
64405-2	REDZONE BAIT	0.00	0.13	1	Boric acid	3	NO	NO
64405-2-74455	REDZONE BAIT	0.00	0.00	1	Boric acid	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 18 summarizes DOE pesticide use by pesticide type. Table 19 lists all pesticide products used in 2020.

Table 18: Types of Pesticides Used by DOE in 2020

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	15549.7	73.7%	28545	39.0%
Insecticide	231.6	100.0%	5537.7	26.3%	44607	61.0%
Totals	231.6		21,087.4		73,152	

Table 19: Pesticide Products Used by DOE in 2020 by Pesticide Type

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Rodenticides								
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	9523.17	25360	Difethialone	3	NO	NO
12455-146	CONTRAC SOFT BAIT	0.00	613.43	1,596	Bromadiolone	3	NO	NO
12455-69	CONTRAC RODENTICIDE	0.00	4,606.38	1,557	Bromadiolone	3	NO	NO
12455-148	Rat Ice	0.00	804.00	24	Carbon dioxide	2	NO	NO
87235-2-88689	BRIGAND WB WAX BLOCK RODENTICIDE	0.00	2.75	8	Bromadiolone	3	NO	NO
Insecticides								
73079-14	IMIDACLOPRID GRANULAR BAIT	0.00	2067.84	11661	Imidacloprid	3	NO	NO
499-510	PRESCRIPTION TREATMENT BRAND ALPINE COCKROACH GEL BAIT PISTON CAN	0.00	39.84	7948	Dinotefuran	3	NO	NO
64405-2	REDZONE BAIT	0.00	2703.84	5659	Boric acid	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
499-473	WHITMIRE MICRO-GEN TC 205 INJECTION SYSTEM	169.23	0.00	3207	Cyhalothrin, lambda	3	NO	NO
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	239.54	2403	Indoxacarb	3	NO	NO
499-294	AVERT PRESCRIPTION TREATMENT 310	0.00	19.94	2163	Avermectin	3	NO	NO
73766-1	GOURMET ANT BAIT GEL	0.00	30.47	2022	Disodium octaborate tetrahydrate	3	NO	NO
1021-2593	VENDETTA PLUS COCKROACH GEL BAIT	0.00	69.43	1993	Avermectin; Pyriproxyfen	3	NO	NO
432-1460	MAXFORCE FC ROACH KILLER BAIT GEL F.05	0.00	55.83	1677	Fipronil	3	YES	NO
89459-84	RF2228 LH AEROSOL	58.23	0.00	1454	Cyhalothrin, lambda; (7S)-Hydroprene	3	NO	NO
432-1257	MAXFORCE ROACH BAIT F.05	0.00	17.43	1,233	Fipronil	3	YES	NO
1021-2796	MGK Formula 3113	0.00	31.69	1,195	Clothianidin; Pyriproxyfen	0	NO	NO
6218-47	SUMMIT B.T.I. BRIQUETS	0.00	140.81	742	Bacillus thuringiensis subspecies israelensis strain BMP 144	3	NO	NO
73079-6	GREEN ZONE GRANULAR BAIT	0.00	80.81	432	Boric acid	3	NO	NO
432-1506	MAXFORCE QUANTUM ANT BAIT	0.00	6.62	363	Imidacloprid	3	NO	NO
499-370	PT 370 ASCEND FIRE ANT STOPPER BAIT	0.00	28.69	176	Avermectin	3	NO	NO
2724-469	ZOECON (S)-HYDROPRENE ROACH CONTROL STATION II	4.13	0.00	104	(7S)-Hydroprene	3	NO	NO
432-763	SUSPEND SC INSECTICIDE	0.00	0.03	71	Deltamethrin	3	NO	NO
499-507	PRESCRIPTION TREATMENT BRAND ALPINE COCKROACH GEL BAIT RESERVOIR	0.00	0.90	66	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
2724-484	RF 9707 AEROSOL	0.00	3.38	27	(7S)-Hydroprene	3	NO	NO
499-550	TC-323	0.00	0.19	3	Prallethrin	3	NO	NO
499-527	PRESCRIPTION TREATMENT BRAND ALPINE DUST INSECTICIDE	0.00	0.05	2	Dinotefuran; Diatomaceous earth	3	NO	NO
432-772	DELTA DUST	0.00	0.00	2	Deltamethrin	3	NO	NO
432-1544	TEMPRID SC-F INSECTICIDE	0.00	0.00	1	Cyfluthrin, beta; Imidacloprid	3	NO	NO
53883-415	CSI 16-105 Delta+Tekko Pro Aerosol	0.00	0.19	1	Deltamethrin; Novaluron; Pyriproxyfen	3	NO	NO
499-470	WHITMIRE MICRO-GEN TC 198	0.00	0.13	1	Cyfluthrin	3	NO	NO
64405-8	NIBOR BORATE INSECTICIDE AND FUNGICIDE	0.00	0.06	1	Disodium octaborate tetrahydrate	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 20 summarizes DEP pesticide use by pesticide type. Table 21 lists all pesticide products used in 2020.

Table 20: Types of Pesticides Used by DEP in 2020

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	40.8	26.0%	832	16.3%
Insecticide	6.6	19.5%	116.1	74.0%	4132	81.2%
Herbicide	27.3	80.5%	0.0	0.0%	125	2.5%
Totals	34.0		157.0		5,089	

Table 21: Pesticide Products Used by DEP in 2020 by Pesticide Type

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Rodenticides								
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	38.58	824	Difethialone	3	NO	NO
90780-11	TC RAT KILLER 140	0.00	1.38	4	Bromethalin	3	NO	NO
12455-79	CONTRAC ALL-WEATHER BLOX	0.00	0.88	4	Bromadiolone	3	NO	NO
Insecticides								
499-510	PRESCRIPTION TREATMENT BRAND ALPINE COCKROACH GEL BAIT PISTON CAN	0.00	11.69	2736	Dinotefuran	3	NO	NO
432-763	SUSPEND SC INSECTICIDE	0.00	56.82	884	Deltamethrin	3	NO	NO
64405-2	REDZONE BAIT	0.00	41.25	349	Boric acid	3	NO	NO
73766-1	GOURMET ANT BAIT GEL	0.00	0.35	74	Disodium octaborate tetrahydrate	3	NO	NO
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	0.24	19	Indoxacarb	3	NO	NO
9688-190-8845	SPECTRACIDE DESTROYER BRAND WASP & HORNET KILLER	2.09	0.00	18	Cyhalothrin, lambda; Prallethrin	3	NO	NO
499-304	WHITMIRE OPTEM ME PT 600	1.13	0.00	12	Cyfluthrin	3	NO	NO
499-507	PRESCRIPTION TREATMENT BRAND ALPINE COCKROACH GEL BAIT RESERVOIR	0.00	0.04	11	Dinotefuran	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.13	0.00	8	Indoxacarb	3	NO	NO
432-1527	TEMPRID RTU	0.25	0.00	4	Cyfluthrin, beta; Imidacloprid	0	NO	NO
149-8-64405	TERRO ANT KILLER II	0.03	0.00	4	Borax	3	NO	NO
4822-472	RAID MAX ROACH BAIT V	0.00	1.00	4	Avermectin	3	NO	NO
1021-1263	PYROCID FOGGING CONCENTRATE 7167	2.00	0.00	2	Pyrethrins; Piperonyl butoxide	3	YES	NO
73079-4	BORACTIN INSECTICIDE POWDER	0.00	4.00	2	Boric acid	3	NO	NO
499-550	TC-323	0.00	0.56	2	Pallethrin	3	NO	NO
432-1455	BES 0026 FLY SPOT BAIT	1.00	0.00	1	Imidacloprid; (Z)-9-Tricosene	3	NO	NO

Pesticide Use by NYC in 2020

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
1021-1641-57076	CONQUER RESIDUAL INSECTICIDE CONCENTRATE	0.00	0.19	1	Esfenvalerate	3	NO	NO
432-772	DELTA DUST	0.00	0.00	1	Deltamethrin	3	NO	NO
Herbicides								
62719-566	TURFLON ESTER ULTRA	6.47	0.00	74	Triclopyr, butoxyethyl ester	3	NO	NO
62719-176	PATHFINDER II	2.97	0.00	18	Triclopyr, butoxyethyl ester	3	NO	NO
62719-556	ACCORD XRT II	1.56	0.00	12	Glyphosate, dimethylammonium salt	3	NO	NO
7969-443	DERRINGER HERBICIDE	1.41	0.00	9	Glufosinate-ammonium	2	NO	NO
42750-247	DUPONT KRENITE S BRUSH CONTROL AGENT	13.00	0.00	4	Fosamine, ammonium salt	3	NO	NO
7969-444	FINALE HERBICIDE	1.75	0.00	4	Glufosinate-ammonium	2	NO	NO
1381-192	CORNERSTONE PLUS	0.19	0.00	4	Glyphosate, isopropylamine salt	3	NO	NO

Fire Department

The Fire Department of New York City (FDNY) is responsible for the protection against fires and fire hazards, and providing emergency medical services, technical rescue and response to various biological, chemical and radioactive hazards. FDNY manages some 350 facilities throughout the City and contracts for pest control services. Table 22 summarizes FDNY pesticide use by pesticide type. Table 23 lists all pesticide products used in 2020.

Table 22: Types of Pesticides Used by FDNY in 2020

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	127.1	56.0%	729	32.1%
Insecticide	1.1	100.0%	99.7	44.0%	1543	67.9%
Totals	1.1		226.8		2,272	

Table 23: Pesticide Products Used by FDNY in 2020 by Pesticide Type

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Rodenticides								
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	121.43	694	Difethialone	3	NO	NO
12455-69	CONTRAC RODENTICIDE	0.00	4.66	26	Bromadiolone	3	NO	NO
12455-139	Final Soft Bait	0.00	0.79	5	Brodifacoum	3	NO	NO
7173-297	BROMADIOLONE PASTE 0901	0.00	0.24	4	Bromadiolone	3	NO	NO

Pesticide Use by NYC in 2020

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Insecticides								
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	19.55	1,026	Indoxacarb	3	NO	NO
64405-2	REDZONE BAIT	0.00	49.22	249	Boric acid	3	NO	NO
432-763	SUSPEND SC INSECTICIDE	1.11	0.00	114	Deltamethrin	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	2.76	60	Indoxacarb	3	NO	NO
100-1486	DUPONT ADVION COCKROACH BAIT ARENA	0.00	0.29	27	Indoxacarb	3	NO	NO
100-1483	ADVION INSECT GRANULE	0.00	20.00	19	Indoxacarb	3	NO	NO
279-9554	CB INSECTICIDE WITH DELTAMETHRIN	0.00	2.44	15	Deltamethrin	3	NO	NO
1021-2796	MGK Formula 3113	0.00	0.06	12	Clothianidin; Pyriproxyfen	0	NO	NO
53883-415	CSI 16-105 Delta+Tekko Pro Aerosol	0.00	3.38	6	Deltamethrin; Novaluron; Pyriproxyfen	3	NO	NO
499-370	PT 370 ASCEND FIRE ANT STOPPER BAIT	0.00	0.44	5	Avermectin	3	NO	NO
432-1544	TEMPRID SC-F INSECTICIDE	0.00	0.00	4	Cyfluthrin, beta; Imidacloprid	3	NO	NO
279-3443	D-FOAM INSECTICIDE	0.00	1.31	3	Deltamethrin	3	NO	NO
432-1455	BES 0026 FLY SPOT BAIT	0.00	0.25	2	Imidacloprid; (Z)-9-Tricosene	3	NO	NO
432-1483	TEMPRID SC INSECTICIDE	0.03	0.00	1	Cyfluthrin, beta; Imidacloprid	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 24 summarizes H+H pesticide use by pesticide type. Table 25 lists products by pesticide types.

Table 24: Types of Pesticides Used by H+H in 2020

Pesticide Type	Volume	Weight	Times Applied
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Pesticide Use by NYC in 2020

	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	448.9	25.5%	724	12.4%
Insecticide	544.8	100.0%	1313.7	74.5%	5137	87.6%
Totals	544.8		1,762.6		5,861	

Table 25: Pesticide Products Used by H+H in 2020 by Pesticide Type

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Rodenticides								
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	401.26	662	Difethialone	3	NO	NO
7173-202	MAKI MINI BLOCKS	0.00	37.69	44	Bromadiolone	3	NO	NO
7173-113	ROZOL TRACKING POWDER	0.00	4.75	8	Chlorophacinone	2	NO	NO
12455-75	CONTRAC RAT AND MOUSE BAIT READY TO USE PLACE PAC	0.00	2.31	6	Bromadiolone	3	NO	NO
7173-113-40868	ROZOL TRACKING POWDER	0.00	0.13	2	Chlorophacinone	2	NO	NO
12455-79	CONTRAC ALL-WEATHER BLOX	0.00	2.13	1	Bromadiolone	3	NO	NO
12455-146	CONTRAC SOFT BAIT	0.00	0.66	1	Bromadiolone	3	NO	NO
Insecticides								
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	162.11	1,975	Indoxacarb	3	NO	NO
73079-4	BORACTIN INSECTICIDE POWDER	0.00	379.14	1,196	Boric acid	3	NO	NO
397-13	STERI-FAB	0.00	690.93	405	Phenothrin; Isopropyl alcohol; Alkyl (60%C14, 25%C12, 15%C16) dimethylbenzyl ammonium chloride; Didecyl dimethyl ammonium chloride	2	NO	NO
100-1501	DUPONT ARILON INSECTICIDE	145.85	0.00	385	Indoxacarb	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	13.46	333	Indoxacarb	3	NO	NO
432-1544	TEMPRID SC-F INSECTICIDE	7.41	0.00	195	Cyfluthrin, beta; Imidacloprid	3	NO	NO
1021-1603	NYLAR 10EC	52.92	0.00	104	Pyriproxyfen	3	NO	NO
100-1066	DEMAND CS INSECTICIDE	94.04	0.00	100	Cyhalothrin, lambda	3	NO	NO
64405-8	NIBOR BORATE INSECTICIDE AND FUNGICIDE	40.00	6.66	80	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	150.50	0.00	74	Alkyl (60%C14, 25%C12, 15%C16) dimethylbenzyl ammonium chloride	1	NO	NO
432-1363	TEMPO SC INSECTICIDE	11.89	0.00	56	Cyfluthrin, beta	3	NO	NO
432-772	DELTA DUST	0.00	9.63	52	Deltamethrin	3	NO	NO
64405-2	REDZONE BAIT	0.00	24.31	45	Boric acid	3	NO	NO
5481-8973	ORTHENE PCO FORMULA II	26.00	0.00	26	Acephate	3	YES	NO
100-1483	ADVION INSECT GRANULE	0.00	10.25	25	Indoxacarb	3	NO	NO
432-1375	PRE-EMPT FLY BAIT	0.00	14.00	24	Imidacloprid; (Z)-9-Tricosene	3	NO	NO
432-1304	TEMPO 10 WP INSECTICIDE	4.26	0.00	18	Cyfluthrin, beta	3	NO	NO
432-1483	TEMPRID SC INSECTICIDE	5.87	0.00	17	Cyfluthrin, beta; Imidacloprid	3	NO	NO
432-1460	MAXFORCE FC ROACH KILLER BAIT GEL F.05	0.00	0.01	6	Fipronil	3	YES	NO
499-550	TC-323	0.94	0.00	4	Prallethrin	3	NO	NO
2724-469	ZOECON (S)-HYDROPRENE ROACH CONTROL STATION II	0.00	0.71	4	(7S)-Hydroprene	3	NO	NO
1021-2804	MGK Formula 31011	0.13	0.00	3	Pyrethrins; Piperonyl butoxide; N-octyl bicycloheptene dicarboximide; Bifenthrin; Pyriproxyfen	3	YES	NO
7969-210	TERMIDOR SC TERMITICIDE/INSECTICIDE	4.00	0.00	2	Fipronil	3	YES	NO
8033-96-279	TRANSPORT (R) GHP INSECTICIDE	1.00	0.00	2	Acetamiprid; Bifenthrin	3	YES	NO
47000-73-1677	SSI-50 INSECTICIDE	0.00	2.00	2	Pyrethrins; Piperonyl butoxide; N-octyl bicycloheptene dicarboximide	3	YES	NO
432-836	DELTAGARD G INSECTICIDE GRANULE	0.00	0.26	2	Deltamethrin	3	NO	NO
6218-47	SUMMIT B.T.I. BRIQUETS	0.00	0.24	2	Bacillus thuringiensis subspecies israelensis strain BMP 144	3	NO	NO

Health and Mental Hygiene, Department of

The Department of Health and Mental Hygiene (DOHMH) protects and promotes the health 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 25 and 26. VSC is charged with mosquito management and uses licensed pest management staff and outside contractors. There was reduced pest control activity by DOHMH in 2020 due to the COVID-19 pandemic. During the New York State-mandated “Pause” in spring, 2020, exterminators did not go into the community. Community-based work resumed at reduced capacity in the summer when many exterminators were still supporting COVID-19 pandemic response activities. Staff were also working reduced hours in the community to limit risks of COVID-19 transmission. Table 26 summarizes DOHMH pesticide use by pesticide type. Table 27 lists all pesticide products used in 2020.

Table 26 Types of Pesticides Used by DOHMH in 2020

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	7134.4	12.5%	9054	2.1%
Insecticide	329.1	100.0%	49862.6	87.5%	420080	97.9%
Totals	329.1		56,997.0		429,134	

Table 27 Pesticide Products Used by DOHMH in 2020 by Pesticide Type

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Rodenticides								
12455-69	CONTRAC RODENTICIDE	0.00	3071.82	3653	Bromadiolone	3	NO	NO
12455-90	FINAL RODENTICIDE	0.00	2236.71	2645	Brodifacoum	3	NO	NO
12455-133	CONTRAC WITH LUMITRACK	0.00	419.23	994	Bromadiolone	3	NO	NO
7173-297	BROMADIOLONE PASTE 0901	0.00	392.41	592	Bromadiolone	3	NO	NO
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	123.70	415	Difethialone	3	NO	NO
100-1055	WEATHERBLOK BAIT WITH BITREX	0.00	626.57	339	Brodifacoum	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
7173-304	BROMETHALIN SOFT BAIT	0.00	65.78	203	Bromethalin	3	NO	NO
12455-36	CONTRAC RAT AND MOUSE BAIT	0.00	99.83	88	Bromadiolone	3	NO	NO
12455-79	CONTRAC ALL-WEATHER BLOX	0.00	59.97	88	Bromadiolone	3	NO	NO
7173-205	GENERATION PELLETS	0.00	34.91	22	Difethialone	3	NO	NO
12455-146	CONTRAC SOFT BAIT	0.00	2.20	13	Bromadiolone	3	NO	NO
12455-75	CONTRAC RAT AND MOUSE BAIT READY TO USE PLACE PAC	0.00	1.31	2	Bromadiolone	3	NO	NO
Insecticides								
73049-429	VECTOMAX FG	0.00	31,151.61	419,627	Bacillus sphaericus; Bacillus thuringiensis, subsp. Israelensis, strain AM 65-52	3	NO	NO
73049-20	VECTOLEX CG BIOLOGICAL LARVICIDE	0.00	975.44	293	Bacillus sphaericus	3	NO	NO
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	1.37	40	Indoxacarb	3	NO	NO
432-1534	BES0668 Insecticide	173.00	0.00	29	Deltamethrin	3	NO	NO
1021-1688-8329	ANVIL 10+10 ULV	152.00	0.00	23	Phenothrin; Piperonyl butoxide	3	YES	NO
73049-10	VECTOBAC G BIOLOGICAL LARVICIDE GRANULES	0.00	17,682.00	23	Bacillus thuringiensis, subsp. Israelensis, strain AM 65-52	3	NO	NO
64405-2	REDZONE BAIT	0.00	1.74	12	Boric acid	3	NO	NO
73049-501	VBC-60394 FG BIOLOGICAL LARVICIDE FINE GRANULE	0.00	48.00	10	Bacillus thuringiensis, subsp. Israelensis, strain AM 65-52	3	NO	NO
100-1486	DUPONT ADVION COCKROACH BAIT ARENA	0.00	1.38	9	Indoxacarb	3	NO	NO
70127-10	TICK-EX EC BIOInsecticide	4.08	0.00	7	Metarhizium anisopliae strain F52 spores	3	NO	NO
432-763	SUSPEND SC INSECTICIDE	0.02	0.00	5	Deltamethrin	3	NO	NO
100-1483	ADVION INSECT GRANULE	0.00	1.00	1	Indoxacarb	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	0.04	1	Indoxacarb	3	NO	NO

Homeless Services, Department of

The Department of Homeless Services (DHS) manages homeless shelters and dormitory facilities across the City. Of these, six are Family Services operated, five provide dormitory facilities for families with children, 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 28 summarizes DHS pesticide use by pesticide type. Table 29 lists all pesticide products used in 2020.

Table 28: Types of Pesticides Used by DHS in 2020

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	275.4	94.4%	600	59.4%
Insecticide	0.0	100.0%	16.2	5.6%	410	40.6%
Totals	0.0		291.6		1,010	

Table 29: Pesticide Products Used by DHS in 2020 by Pesticide Type

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Rodenticides								
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	208.56	528	Difethialone	3	NO	NO
12455-139	Final Soft Bait	0.00	59.99	56	Brodifacoum	3	NO	NO
12455-69	CONTRAC RODENTICIDE	0.00	6.88	16	Bromadiolone	3	NO	NO
Insecticides								
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	8.73	276	Indoxacarb	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	5.06	110	Indoxacarb	3	NO	NO
64405-2	REDZONE BAIT	0.00	0.25	12	Boric acid	3	NO	NO
432-763	SUSPEND SC INSECTICIDE	0.04	0.00	8	Deltamethrin	3	NO	NO
100-1483	ADVION INSECT GRANULE	0.00	2.00	2	Indoxacarb	3	NO	NO
100-1486	DUPONT ADVION COCKROACH BAIT ARENA	0.00	0.17	2	Indoxacarb	3	NO	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

Pesticide Use by NYC in 2020

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 30 summarizes NYCHA pesticide use by pesticide type on NYCHA property. Table 31 lists the products used in 2020. Please note the data in the column marked Volume (Gals) in Tables 30 and 31 reflect the amount of liquid insecticide when diluted with one gallon of water, not the amount of insecticide used during each application.

Table 30: Types of Pesticides Used by NYCHA in 2020

Pesticide Type	Volume*		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	13044.2	86.4%	39658	37.3%
Insecticide	2802.0	99.9%	2050.3	13.6%	66642	62.7%
Herbicide	4.0	0.1%	0.0	0.0%	4	0.0%
Totals	2,806.0		15,094.5		106,304	

Table 31: Pesticide Products Used by NYCHA in 2020 by Pesticide Type

EPA Reg. #	EPA Product Name	Volume (Gals)*	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Rodenticides								
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	6,678.88	28,825	Difethialone	3	NO	NO
12455-69	CONTRAC RODENTICIDE	0.00	4,195.14	5,219	Bromadiolone	3	NO	NO
12455-56	DITRAC TRACKING POWDER	0.00	328.19	2,573	Diphacinone	2	NO	NO
12455-86	CONTRAC RODENTICIDE PLACE PAC	0.00	375.92	1,019	Bromadiolone	3	NO	NO
7173-297	BROMADIOLONE PASTE 0901	0.00	268.58	434	Bromadiolone	3	NO	NO
12455-79	CONTRAC ALL-WEATHER BLOX	0.00	605.31	431	Bromadiolone	3	NO	NO
12455-139	Final Soft Bait	0.00	51.44	274	Brodifacoum	3	NO	NO
82744-2-56	RATIMOR SOFT BAIT	0.00	162.11	232	Bromadiolone	3	NO	NO
12455-75	CONTRAC RAT AND MOUSE BAIT READY TO USE PLACE PAC	0.00	39.09	193	Bromadiolone	3	NO	NO
56-42	BAIT BLOCK RODENTICIDE WITH PEANUT BUTTER FLAVORIZ	0.00	116.75	120	Diphacinone	3	NO	NO
12455-146	CONTRAC SOFT BAIT	0.00	33.80	99	Bromadiolone	3	NO	NO
7173-304	BROMETHALIN SOFT BAIT	0.00	25.66	76	Bromethalin	3	NO	NO
12455-108	FORMUS ALL-WEATHER BLOX	0.00	3.16	63	Brodifacoum	3	NO	NO
7173-113	ROZOL TRACKING POWDER	0.00	8.31	22	Chlorophacino ne	2	NO	NO
12455-80	DITRAC ALL-WEATHER BLOX	0.00	68.63	19	Diphacinone	3	NO	NO
12455-148	Rat Ice	0.00	61.00	12	Carbon dioxide	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
12455-36	CONTRAC RAT AND MOUSE BAIT	0.00	5.25	11	Bromadiolone	3	NO	NO
87235-2-88689	BRIGAND WB WAX BLOCK RODENTICIDE	0.00	4.44	11	Bromadiolone	3	NO	NO
12455-90	FINAL RODENTICIDE	0.00	3.19	7	Brodifacoum	3	NO	NO
12455-89	FINAL ALL-WEATHER BLOX	0.00	1.88	5	Brodifacoum	3	NO	NO
7173-308	Chlorophacinone Soft Bait	0.00	4.69	4	Chlorophacinone	3	NO	NO
7173-288	DIFETHIALONE BLOCK 0707	0.00	0.70	4	Difethialone	3	NO	NO
7969-382	Selontra Rodent Bait	0.00	1.10	3	Cholecalciferol	3	NO	NO
100-1055	WEATHERBLOK BAIT WITH BITREX	0.00	0.88	1	Brodifacoum	3	NO	NO
12455-16	ZP TRACKING POWDER	0.00	0.13	1	Zinc phosphide	1	NO	NO
Insecticides								
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	642.46	23,274	Indoxacarb	3	NO	NO
432-1483	TEMPRID SC INSECTICIDE	3.75	0.00	7,002	Cyfluthrin, beta; Imidacloprid	3	NO	NO
1021-2593	VENDETTA PLUS COCKROACH GEL BAIT	0.00	197.20	6,869	Avermectin; Pyriproxyfen	3	NO	NO
432-763	SUSPEND SC INSECTICIDE	5.88	0.00	5,857	Deltamethrin	3	NO	NO
397-13	STERI-FAB	724.26	0.00	4,776	Phenothrin; Isopropyl alcohol; Alkyl (60%C14, 25%C12, 15%C16) dimethylbenzyl ammonium chloride; Didecyl dimethyl ammonium chloride	2	NO	NO
53883-276	DELTA 4.75% SC	126.88	0.00	3,620	Deltamethrin	3	NO	NO
1021-2796	MGK Formula 3113	0.00	80.58	3,386	Clothianidin; Pyriproxyfen	0	NO	NO
432-1544	TEMPRID SC-F INSECTICIDE	3.58	0.00	2,027	Cyfluthrin, beta; Imidacloprid	3	NO	NO
432-1257	MAXFORCE ROACH BAIT F.05	0.00	64.42	1,945	Fipronil	3	YES	NO
499-304	WHITMIRE OPTEM ME PT 600	0.46	0.00	1,942	Cyfluthrin	3	NO	NO
432-1460	MAXFORCE FC ROACH KILLER BAIT GEL F.05	0.00	28.64	1,788	Fipronil	3	YES	NO
432-1259	PRODUCT: RBF5	0.00	32.74	1,185	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
100-1486	DUPONT ADVION COCKROACH BAIT ARENA	0.12	713.71	889	Indoxacarb	3	NO	NO
2724-351	ZOECON RF-259 EMULSIFIABLE CONCENTRATE	1,914.98	0.00	858	(7S)-Hydroprene	3	NO	NO
64405-2-74455	REDZONE BAIT	0.00	41.19	230	Boric acid	3	NO	NO
100-1290	OPTIGARD COCKROACH GEL BAIT	0.00	10.19	222	Emamectin, benzoate	3	NO	NO
67425-14	ECOPCO ACU	16.84	0.00	116	Phenylethyl propionate	3	NO	NO
73079-4	BORACTIN INSECTICIDE POWDER	0.00	13.13	85	Boric acid	3	NO	NO
2724-421	ZOECON RF-292 BRIQUET	0.00	85.00	82	S-Methoprene	3	NO	NO
279-9554	CB INSECTICIDE WITH DELTAMETHRIN	0.11	37.29	81	Deltamethrin	3	NO	NO
432-1375	PRE-EMPT FLY BAIT	0.00	18.00	81	Imidacloprid; (Z)-9-Tricosene	3	NO	NO
432-1531	BES0600 INSECTICIDE	0.00	7.15	67	Clothianidin	0	NO	NO
73766-1	GOURMET ANT BAIT GEL	0.00	42.00	43	Disodium octaborate tetrahydrate	3	NO	NO
64405-2	REDZONE BAIT	0.00	9.31	40	Boric acid	3	NO	NO
1021-1815	EVERCIDE ESFENVALERATE 6.4% CS	0.20	0.00	27	Esfenvalerate	3	NO	NO
2724-351-50809	ZOECON RF-259 EMULSIFIABLE CONCENTRATE	0.17	0.00	22	(7S)-Hydroprene	3	NO	NO
1021-2569	MULTICIDE SPRAY 29511	3.20	0.00	21	Imidacloprid; Phenothrin; N-octyl bicycloheptene dicarboximide	0	YES	NO
432-1455	BES 0026 FLY SPOT BAIT	0.00	2.48	19	Imidacloprid; (Z)-9-Tricosene	3	NO	NO
499-370	PT 370 ASCEND FIRE ANT STOPPER BAIT	0.00	2.63	18	Avermectin	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	2.41	16	Indoxacarb	3	NO	NO
499-406	AVERT PRESCRIPTION TREATMENT TC 93A BAIT	0.00	0.42	12	Avermectin	3	NO	NO
89459-59	ENVI ACU CONTACT Insecticide	1.46	0.11	11	Phenylethyl propionate	3	NO	NO
241-313-9444	SIEGE PBS GEL INSECTICIDE	0.00	14.50	7	Hydramethylnon	3	YES	YES
499-467	WHITMIRE AVERT TC 181	0.00	0.13	7	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
1021-1603	NYLAR 10EC	0.02	0.00	6	Pyriproxyfen	3	NO	NO
2724-469	ZOECON (S)-HYDROPRENE ROACH CONTROL STATION II	0.13	0.00	3	(7S)-Hydroprene	3	NO	NO
6218-47	SUMMIT B.T.I. BRIQUETS	0.00	4.33	2	Bacillus thuringiensis subspecies israelensis strain BMP 144	3	NO	NO
100-1066	DEMAND CS INSECTICIDE	0.00	0.00	1	Cyhalothrin, lambda	3	NO	NO
1021-1828	MGK ROACH BAIT 2822	0.00	0.13	1	Avermectin	3	NO	NO
432-772	DELTA DUST	0.00	0.06	1	Deltamethrin	3	NO	NO
100-1485	DUPONT ADVION ANT BAIT ARENA	0.00	0.03	1	Indoxacarb	3	NO	NO
73049-20	VECTOLEX CG BIOLOGICAL LARVICIDE	0.00	0.02	1	Bacillus sphaericus	3	NO	NO
1001-73	ECOLOGIX COCKROACH BAIT	0.00	0.00	1	Xanthine; Oxypurinol	3	NO	NO
Herbicides								
71995-33	ROUNDUP WEED & GRASS KILLER READY-TO-USE PLUS	2.00	0.00	2	Glyphosate, isopropylamine salt; Nonanoic acid	3	NO	NO
71995-47	RD 1653 HERBICIDE	2.00	0.00	1	Glyphosate, isopropylamine salt; Imazapic, ammonium salt; Nonanoic acid	3	NO	NO
524-517	ACCORD XL HERBICIDE	0.00	0.00	1	Glyphosate, isopropylamine salt	3	NO	NO

*NOTE: In some cases, 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 32 summarizes HPD pesticide use by pesticide type. Table 33 lists all pesticide products used in 2020.

Table 32: Types of Pesticides Used by HPD in 2020

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	5.0	74.2%	247.3	78.2%	322	43.0%

Pesticide Use by NYC in 2020

Insecticide	1.7	25.8%	69.0	21.8%	426	57.0%
Totals	6.7		316.2		748	

Table 33: Pesticide Products Used by HPD in 2020

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Rodenticides								
12455-79	CONTRAC ALL-WEATHER BLOX	5.00	179.11	170	Bromadiolone	3	NO	NO
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	68.08	149	Difethialone	3	NO	NO
7173-113	ROZOL TRACKING POWDER	0.00	0.07	2	Chlorophacinone	2	NO	NO
1021-2593	CONTRAC ALL-WEATHER BLOX	0.00	0.02	1	Bromadiolone	3	NO	NO
Insecticides								
53883-92	CYPER TC INSECTICIDE	1.26	0.00	155	Cypermethrin, beta	3	YES	NO
432-763	SUSPEND SC INSECTICIDE	0.46	0.00	94	Deltamethrin	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	19.80	93	Indoxacarb	3	NO	NO
1021-2593	VENDETTA PLUS COCKROACH GEL BAIT	0.00	0.91	34	Avermectin; Pyriproxyfen	3	NO	NO
64405-2	REDZONE BAIT	0.00	46.70	28	Boric acid	3	NO	NO
499-507	PRESCRIPTION TREATMENT BRAND ALPINE COCKROACH GEL BAIT RESERVOIR	0.00	0.88	12	Dinotefuran	3	NO	NO
279-3206	TALSTAR TC FLOWABLE TERMITICIDE/INSECTICIDE	0.02	0.00	3	Bifenthrin	3	YES	NO
432-1259	PRODUCT: RBF5	0.00	0.20	3	Fipronil	3	YES	NO
432-1460	MAXFORCE FC ROACH KILLER BAIT GEL F.05	0.00	0.44	2	Fipronil	3	YES	NO
1021-1828	MGK ROACH BAIT 2821	0.00	0.02	1	Avermectin	3	NO	NO
1021-1828	MGK ROACH BAIT 2822	0.00	0.02	1	Avermectin	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 34 summarizes HRA pesticide use by pesticide type. Table 35 lists the products used in 2020.

Pesticide Use by NYC in 2020

Table 34: Types of Pesticides Used by HRA in 2020

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	20.2	65.0%	109	50.7%
Insecticide	0.0	100.0%	10.9	35.0%	106	49.3%
Totals	0.0		31.2		215	

Table 35: Pesticide Products Used by HRA in 2020 by Pesticide Type

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Rodenticides								
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	20.00	108	Difethialone	3	NO	NO
12455-69	CONTRAC RODENTICIDE	0.00	0.25	1	Bromadiolone	3	NO	NO
Insecticides								
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	2.38	62	Indoxacarb	3	NO	NO
64405-2	REDZONE BAIT	0.00	5.47	27	Boric acid	3	NO	NO
432-763	SUSPEND SC INSECTICIDE	0.05	0.00	12	Deltamethrin	3	NO	NO
100-1483	ADVION INSECT GRANULE	0.00	3.00	3	Indoxacarb	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	0.05	1	Indoxacarb	3	NO	NO
100-1486	DUPONT ADVION COCKROACH BAIT ARENA	0.00	0.01	1	Indoxacarb	3	NO	NO

New York Public Libraries

The New York Public Library (NYPL), through its 85 branches libraries services residents in the boroughs of Manhattan, the Bronx and Staten Island. Pest management is provided by private contractors. No application data was provided by NYPL for 2020.

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 36 summarizes pesticide use by pesticide type. Table 37 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 36: Types of Pesticides Used by DPR in 2020

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	7709.6	14.8%	3843	60.1%
Insecticide	350.4	8.4%	440.0	0.8%	606	9.5%
Herbicide	563.0	13.6%	34720.1	66.8%	889	13.9%
Fungicide	3047.0	73.3%	9075.8	17.5%	965	15.1%
Other	194.4	4.7%	6.3	0.0%	91	1.4%
Totals	4154.8		51951.7		6,394	

Table 37: Ten Most Frequently Applied Pesticide Products by DPR in 2020 by Pesticide Type

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Rodenticides								
12455-86	CONTRAC RODENTICIDE PLACE PAC	0.00	1,367.63	1,144	Bromadiolone	3	NO	NO
12455-69	CONTRAC RODENTICIDE	0.00	689.91	553	Bromadiolone	3	NO	NO
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	212.87	540	Difethialone	3	NO	NO
12455-148	Rat Ice	0.00	4,478.00	533	Carbon dioxide	2	NO	NO
12455-36	CONTRAC RAT AND MOUSE BAIT	0.00	416.50	436	Bromadiolone	3	NO	NO
7173-205	GENERATION PELLETS	0.00	145.23	138	Difethialone	3	NO	NO
7173-187	MAKI PARAFFINIZED PELLETS	0.00	75.66	108	Bromadiolone	3	NO	NO
7173-238	GENERATION MEAL	0.00	95.61	103	Difethialone	3	NO	NO
7173-297	BROMADIOLONE PASTE 0901	0.00	29.03	98	Bromadiolone	3	NO	NO
7173-218	GENERATION MINI BLOCKS	0.00	38.63	49	Difethialone	3	NO	NO
Insecticides								
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	3.02	67	Indoxacarb	3	NO	NO
9688-190-8845	SPECTRACIDE DESTROYER BRAND WASP & HORNET KILLER	8.96	0.00	44	Cyhalothrin, lambda; Prallethrin	3	NO	NO
86203-11-59639	SAFARI 20SG INSECTICIDE	0.00	65.16	34	Dinotefuran	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	2.66	32	Indoxacarb	3	NO	NO
64405-2	REDZONE BAIT	0.00	5.95	22	Boric acid	3	NO	NO
432-763	SUSPEND SC INSECTICIDE	0.40	0.00	21	Deltamethrin	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
70506-121	UPI-2005 EXP-06 RUP INSECTICIDE	6.64	0.00	19	Cyhalothrin, lambda	2	NO	NO
100-1489	DUPONT ACELEPRYN INSECTICIDE	18.53	0.00	18	DPX-E2Y45	0	NO	NO
48813-1-68539	SUFFOIL-X	12.56	0.00	17	Petroleum distillates	3	NO	NO
432-1312	MERIT 2F INSECTICIDE	29.56	0.00	16	Imidacloprid	3	NO	NO
Herbicides								
62719-527	GARLON 4 ULTRA	45.62	0.00	109	Triclopyr	2	NO	NO
62719-324	GLYPRO	16.94	0.00	88	Glyphosate, isopropylamine salt	3	NO	NO
524-579	ROUNDUP PROMAX	22.45	0.00	75	Glyphosate, potassium salt	3	NO	NO
100-937	PRIMO MAXX	34.26	0.00	71	Trinexapac-ethyl	3	NO	NO
62719-176	PATHFINDER II	40.07	0.00	49	Triclopyr, butoxyethyl ester	3	NO	NO
62719-556	ACCORD XRT II	8.75	0.00	48	Glyphosate, dimethylammonium salt	3	NO	NO
62719-542	DIMENSION 2EW	37.34	0.00	38	Dithiopyr	2	NO	NO
89442-7	TRIN-PAC SELECT	10.09	0.00	34	Trinexapac-ethyl	3	NO	NO
524-517	ACCORD XL HERBICIDE	2.76	0.00	28	Glyphosate, isopropylamine salt	3	NO	NO
100-1014	PACLOBUTRAZOL 2SC	8.80	0.00	27	Paclobutrazol	3	NO	NO
Fungicides								
100-1364	DACONIL ACTION	577.75	0.00	78	Acibenzolar-S-methyl; Chlorothalonil	2	YES	NO
94485-1	COMPANION LIQUID BIOLOGICAL FUNGICIDE	377.65	0.00	65	Bacillus subtilis GBO3	3	NO	NO
432-942	BANOL TURF AND ORNAMENTAL FUNGICIDE	134.54	144.52	61	Propamocarb hydrochloride	3	NO	NO
432-1541	12ESP705 FUNGICIDE	0.00	2,249.75	43	Fosetyl-Al	3	NO	NO
53883-323-86064	ARMOR TECH TMI 2020XL	121.00	200.13	37	Thiophanate-methyl; Iprodione	3	YES	YES
100-1093	HERITAGE FUNGICIDE	8.29	66.91	37	Azoxystrobin	3	NO	NO
53883-353	QUALI-PRO T-NEX	30.57	2.88	34	Trinexapac-ethyl	3	NO	NO
70299-12	ZEROTOL 2.0	8.74	0.00	26	Peroxyacetic acid; Hydrogen peroxide	1	NO	NO
432-1445	BAYLETON FLO TURF AND ORNAMENTAL FUNGICIDE	42.36	0.00	21	Triadimefon	3	YES	YES
70127-2	NOVOZYMES BIOFUNGICIDE GREEN RELEASE 710-140	95.60	0.00	20	Bacillus licheniformis SB3086; IBA	3	NO	NO
Other								
4238-29	HYPOCHLORITE SOLUTION	105.00	0.00	45	Sodium hypochlorite	1	NO	NO

Pesticide Use by NYC in 2020

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 ALGAECIDE FOR PONDS	5.94	0.00	21	Poly(oxyethylene) (dimethylimino) ethylene (dimethylimino) ethylene dichloride	3	NO	NO
60061-142	PETTIT NEPTUNE 5 HARD HYBRID ABLATIVE ANTIFOULING PAINT	11.50	0.00	12	Copper oxide (ous)	2	NO	NO
59807-4	HORMODIN 1	0.00	0.26	6	IBA	3	NO	NO
2693-193	OPTIMA-BLUE	2.00	0.00	2	Copper oxide (ous)	2	NO	NO
73049-15	PROGIBB 4% PLANT GROWTH REGULATOR SOLUTION	0.00	0.00	2	Gibberellins	2	NO	NO
67702-3-54705	NEU1165M SLUG AND SNAIL BAIT	0.00	6.00	2	Iron phosphate	3	NO	NO
63838-5	BROMMAX 7.1	70.00	0.00	1	Sodium bromide; Sodium hypochlorite	1	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 38 summarizes NYPD pesticide use by pesticide type. Table 39 lists all pesticide products used in 2020.

Table 38 Types of Pesticides Used by NYPD in 2020

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	109.1	74.2%	534	48.9%
Insecticide	0.6	100.0%	38.0	25.8%	559	51.1%
Totals	0.6		147.0		1,093	

Table 39: Pesticide Products Used by NYPD in 2020 by Pesticide Type

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Rodenticides								
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	100.91	486	Difethialone	3	NO	NO
12455-69	CONTRAC RODENTICIDE	0.00	6.78	42	Bromadiolone	3	NO	NO
7173-205	GENERATION PELLETS	0.00	1.00	4	Difethialone	3	NO	NO
12455-139	Final Soft Bait	0.00	0.36	2	Brodifacoum	3	NO	NO
Insecticides								

Pesticide Use by NYC in 2020

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	7.37	293	Indoxacarb	3	NO	NO
64405-2	REDZONE BAIT	0.00	21.83	124	Boric acid	3	NO	NO
432-763	SUSPEND SC INSECTICIDE	0.56	0.00	80	Deltamethrin	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	2.66	50	Indoxacarb	3	NO	NO
100-1483	ADVION INSECT GRANULE	0.00	6.00	6	Indoxacarb	3	NO	NO
100-1486	DUPONT ADVION COCKROACH BAIT ARENA	0.00	0.10	4	Indoxacarb	3	NO	NO
432-1544	TEMPRID SC-F INSECTICIDE	0.00	0.00	2	Cyfluthrin, beta; Imidacloprid	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 40 summarizes QPL pesticide use by pesticide type. Table 41 lists all pesticide products used in 2020.

Table 40: Types of Pesticides Used by QPL in 2020

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	24.0	100.0%	53	96.4%
Insecticide	0.0	0.0%	0.0	0.0%	2	3.6%
Totals	0.0		24.0		55	

Table 41: Pesticide Products Used by QPL in 2020

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Rodenticides								
12455-89	FINAL ALL-WEATHER BLOX	0.00	24.03	53	Brodifacoum	3	NO	NO
Insecticides								
100-1290	OPTIGARD COCKROACH GEL BAIT	0.00	0.00	1	Emamectin, benzoate	3	NO	NO
432-1259	PRODUCT: RBF5	0.00	0.00	1	Fipronil	3	YES	NO

Sanitation, Department of

The Department of Sanitation (DSNY) manages garages, office buildings, transfer stations, and various publicly owned lots throughout the city. Because of the nature of the agency's work – managing garbage – pest problems are endemic at some facilities, so DSNY employs two certified

Pesticide Use by NYC in 2020

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 42 summarizes DSNY pesticide use by pesticide type. Table 43 lists the products used in 2020.

Table 42: Types of Pesticides Used by DSNY in 2020

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	2.5%	299.4	98.6%	542	45.3%
Insecticide	1.9	97.5%	4.2	1.4%	655	54.7%
Totals	1.9		303.6		1,197	

Table 43: List of Pesticides Applied by DSNY in 2020

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Rodenticides								
12455-76	CONTRAC RODENTICIDE READY TO USE PLACE PAC	0.05	207.27	407	Bromadiolone	3	NO	NO
12455-89	FINAL ALL-WEATHER BLOX	0.00	90.76	130	Brodifacoum	3	NO	NO
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	1.39	5	Difethialone	3	NO	NO
Insecticides								
432-763-62719	SUSPEND SC INSECTICIDE	1.56	0.09	519	Deltamethrin	3	NO	NO
100-1066	DEMAND CS INSECTICIDE	0.06	0.00	89	Cyhalothrin, lambda	3	NO	NO
73766-1	GOURMET ANT BAIT GEL	0.02	2.72	32	Disodium octaborate tetrahydrate	3	NO	NO
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	0.43	9	Indoxacarb	3	NO	NO
64405-2	REDZONE BAIT	0.00	0.88	2	Boric acid	3	NO	NO
9444-168-1270	ZEP TOTAL CONTROL TOTAL RELEASE FOGGER TOTAL CONTROL SYSTEMS	0.23	0.00	1	Esfenvalerate; Prallethrin; Pyriproxyfen	3	NO	NO
2724-351	ZOECON RF-259 EMULSIFIABLE CONCENTRATE	0.01	0.00	1	(7S)-Hydroprene	3	NO	NO
432-763	SUSPEND SC INSECTICIDE	0.00	0.00	1	Deltamethrin	3	NO	NO
432-1256	MAXFORCE FC ANT BAIT STATIONS	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

Pesticide Use by NYC in 2020

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 2020.

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 44 summarizes DOT pesticide use by pesticide type. Table 45 lists all pesticide products used in 2020.

Table 44: Types of Pesticides Used by DOT in 2020

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	36.0	60.1%	151	14.0%
Insecticide	0.1	0.1%	1.4	2.3%	55	5.1%
Herbicide	178.6	99.9%	22.6	37.6%	872	80.9%
Totals	178.7		60.0		1,078	

Table 45: Pesticide Products Used by DOT in 2020

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Rodenticides								
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	35.41	145	Difethialone	3	NO	NO
12455-69	CONTRAC RODENTICIDE	0.00	0.63	6	Bromadiolone	3	NO	NO
Insecticides								
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	0.57	27	Indoxacarb	3	NO	NO
432-763	SUSPEND SC INSECTICIDE	0.12	0.00	21	Deltamethrin	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	0.13	3	Indoxacarb	3	NO	NO
64405-2	REDZONE BAIT	0.00	0.53	2	Boric acid	3	NO	NO
2724-375	ALTOSID BRIQUETS	0.00	0.15	2	S-Methoprene	3	NO	NO
Herbicides								
62719-176	PATHFINDER II	109.42	0.00	241	Triclopyr, butoxyethyl ester	3	NO	NO
228-397	RIVERDALE VANQUISH HERBICIDE	25.87	0.00	175	Dicamba, diglycolamine salt	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
62719-556	ACCORD XRT II	38.61	0.00	174	Glyphosate, dimethylammoniu m salt	3	NO	NO
432-1580	DUPONT VIEWPOINT HERBICIDE	0.87	22.58	173	Aminocyclopyrachl or; Imazapyr; Metsulfuron-methyl	3	NO	NO
432-1516	ESPLANADE 200 SC	3.83	0.00	106	Indaziflam	3	NO	NO
62719-527	GARLON 4 ULTRA	0.02	0.00	3	Triclopyr	2	NO	NO
62719-176	PATHFINDER II	109.42	0.00	241	Triclopyr, butoxyethyl ester	3	NO	NO

APPENDIX 1: Complete Listing of Pesticide Products Used by New York City Agencies by Pesticide Type in 2020

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox. Cat.	EPA Carc in	CA Dev. Toxin
Rodenticides								
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	17,780.02	59757	Difethialone	3	NO	NO
12455-69	CONTRAC RODENTICIDE	0.00	12,585.74	11094	Bromadiolone	3	NO	NO
12455-90	FINAL RODENTICIDE	0.00	2,239.90	2652	Brodifacoum	3	NO	NO
12455-56	DITRAC TRACKING POWDER	0.00	328.22	2576	Diphacinone	2	NO	NO
12455-86	CONTRAC RODENTICIDE PLACE PAC	0.00	1,743.54	2163	Bromadiolone	3	NO	NO
12455-146	CONTRAC SOFT BAIT	0.00	650.09	1709	Bromadiolone	3	NO	NO
7173-297	BROMADIOLONE PASTE 0901	0.00	690.82	1131	Bromadiolone	3	NO	NO
12455-133	CONTRAC WITH LUMITRACK	0.00	419.23	994	Bromadiolone	3	NO	NO
12455-79	CONTRAC ALL-WEATHER BLOX	5.00	865.89	732	Bromadiolone	3	NO	NO
12455-148	Rat Ice	0.00	5,343.00	569	Carbon dioxide	2	NO	NO
12455-36	CONTRAC RAT AND MOUSE BAIT	0.00	521.58	535	Bromadiolone	3	NO	NO
12455-76	CONTRAC RODENTICIDE READY TO USE PLACE PAC	0.05	207.27	407	Bromadiolone	3	NO	NO
100-1055	WEATHERBLOK BAIT WITH BITREX	0.00	640.18	387	Brodifacoum	3	NO	NO
12455-139	Final Soft Bait	0.00	121.15	351	Brodifacoum	3	NO	NO
7173-304	BROMETHALIN SOFT BAIT	0.00	91.45	279	Bromethalin	3	NO	NO
82744-2-56	RATIMOR SOFT BAIT	0.00	162.24	237	Bromadiolone	3	NO	NO
12455-75	CONTRAC RAT AND MOUSE BAIT READY TO USE PLACE PAC	0.00	43.47	202	Bromadiolone	3	NO	NO
12455-89	FINAL ALL-WEATHER BLOX	0.00	116.67	188	Brodifacoum	3	NO	NO
7173-205	GENERATION PELLETS	0.00	181.14	164	Difethialone	3	NO	NO
56-42	BAIT BLOCK RODENTICIDE WITH PEANUT BUTTER FLAVORIZ	0.00	116.75	120	Diphacinone	3	NO	NO
7173-187	MAKI PARAFFINIZED PELLETS	0.00	75.66	108	Bromadiolone	3	NO	NO
7173-238	GENERATION MEAL	0.00	95.61	103	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
7173-202	MAKI MINI BLOCKS	0.00	60.13	74	Bromadiolone	3	NO	NO
12455-108	FORMUS ALL-WEATHER BLOX	0.00	3.16	63	Brodifacoum	3	NO	NO
7173-113	ROZOL TRACKING POWDER	0.00	22.25	50	Chlorophacinone	2	NO	NO
7173-218	GENERATION MINI BLOCKS	0.00	38.63	49	Difethialone	3	NO	NO
12455-106	TERAD3 BLOX	0.00	103.25	48	Cholecalciferol	3	NO	NO
12455-80	DITRAC ALL-WEATHER BLOX	0.00	68.63	19	Diphacinone	3	NO	NO
87235-2-88689	BRIGAND WB WAX BLOCK RODENTICIDE	0.00	7.19	19	Bromadiolone	3	NO	NO
7173-215	MAKI Rodenticide MINI BLOCKS	0.00	5.38	11	Bromadiolone	3	NO	NO
7173-308	Chlorophacinone Soft Bait	0.00	4.69	4	Chlorophacinone	3	NO	NO
90780-11	TC RAT KILLER 140	0.00	1.38	4	Bromethalin	3	NO	NO
7173-288	DIFETHIALONE BLOCK 0707	0.00	0.70	4	Difethialone	3	NO	NO
87235-1	BRIGAND SB SOFT BAIT RODENTICIDE	0.00	6.38	3	Bromadiolone	3	NO	NO
7969-382	Selontra Rodent Bait	0.00	1.10	3	Cholecalciferol	3	NO	NO
7173-188	MAKI RAT AND MOUSE BAIT PACKS (PELLETS)	0.00	0.84	3	Bromadiolone	3	NO	NO
7173-113-40868	ROZOL TRACKING POWDER	0.00	0.13	2	Chlorophacinone	2	NO	NO
67517-66-56	TopGun All-Weather Rodenticide Bait Blocks	0.00	0.02	2	Bromethalin	3	NO	NO
36488-63	DIFENACOU RAT AND MOUSE BLOCK IV	0.00	1.63	1	Difenacoum	3	NO	NO
12455-16	ZP TRACKING POWDER	0.00	0.13	1	Zinc phosphide	1	NO	NO
1021-2593	CONTRAC ALL-WEATHER BLOX	0.00	0.02	1	Bromadiolone	3	NO	NO
Insecticides								
73049-429	VECTOMAX FG	0.00	31,159.96	419,640	Bacillus sphaericus; Bacillus thuringiensis, subsp. Israelensis, strain AM 65-52	3	NO	NO
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	1,100.29	29,767	Indoxacarb	3	NO	NO
73079-14	IMIDACLOPRID GRANULAR BAIT	0.00	2,070.21	11,669	Imidacloprid	3	NO	NO
499-510	PRESCRIPTION TREATMENT BRAND ALPINE COCKROACH GEL BAIT PISTON CAN	0.00	51.53	10,684	Dinotefuran	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox. Cat.	EPA Carcin	CA Dev. Toxin
1021-2593	VENDETTA PLUS COCKROACH GEL BAIT	0.00	270.95	8,950	Avermectin; Pyriproxyfen	3	NO	NO
432-763	SUSPEND SC INSECTICIDE	8.92	56.85	7,235	Deltamethrin	3	NO	NO
432-1483	TEMPRID SC INSECTICIDE	9.65	0.00	7,020	Cyfluthrin, beta; Imidacloprid	3	NO	NO
64405-2	REDZONE BAIT	0.00	2,951.48	6,745	Boric acid	3	NO	NO
397-13	STERI-FAB	729.17	690.93	5,214	Phenothrin; Isopropyl alcohol; Alkyl (60%C14, 25%C12, 15%C16) dimethylbenzyl ammonium chloride; Didecyl dimethyl ammonium chloride	2	NO	NO
1021-2796	MGK Formula 3113	0.00	115.89	4,621	Clothianidin; Pyriproxyfen	0	NO	NO
53883-276	DELTA 4.75% SC	127.38	0.00	3,685	Deltamethrin	3	NO	NO
432-1460	MAXFORCE FC ROACH KILLER BAIT GEL F.05	0.00	84.93	3,473	Fipronil	3	YES	NO
499-473	WHITMIRE MICRO-GEN TC 205 INJECTION SYSTEM	169.23	0.00	3,207	Cyhalothrin, lambda	3	NO	NO
432-1257	MAXFORCE ROACH BAIT F.05	0.00	81.92	3,180	Fipronil	3	YES	NO
432-1544	TEMPRID SC-F INSECTICIDE	11.05	0.00	2,260	Cyfluthrin, beta; Imidacloprid	3	NO	NO
73766-1	GOURMET ANT BAIT GEL	0.02	75.54	2,171	Disodium octaborate tetrahydrate	3	NO	NO
499-294	AVERT PRESCRIPTION TREATMENT 310	0.00	19.94	2,163	Avermectin	3	NO	NO
499-304	WHITMIRE OPTEM ME PT 600	1.59	0.00	1,954	Cyfluthrin	3	NO	NO
89459-84	RF2228 LH AEROSOL	58.23	0.00	1,454	Cyhalothrin, lambda; (7S)-Hydroprene	3	NO	NO
73079-4	BORACTIN INSECTICIDE POWDER	0.00	396.26	1,283	Boric acid	3	NO	NO
432-1259	PRODUCT: RBF5	0.00	33.21	1,191	Fipronil	3	YES	NO
100-1486	DUPONT ADVION COCKROACH BAIT ARENA	0.12	716.12	942	Indoxacarb	3	NO	NO
2724-351	ZOECON RF-259 EMULSIFIABLE CONCENTRATE	1,915.01	0.00	862	(7S)-Hydroprene	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.13	58.97	849	Indoxacarb	3	NO	NO
6218-47	SUMMIT B.T.I. BRIQUETS	0.00	145.39	747	Bacillus thuringiensis subspecies israelensis strain BMP 144	3	NO	NO
432-763-62719	SUSPEND SC INSECTICIDE	3.73	0.09	667	Deltamethrin	3	NO	NO
432-1506	MAXFORCE QUANTUM ANT BAIT	0.00	7.87	452	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
73079-6	GREEN ZONE GRANULAR BAIT	0.02	93.16	440	Boric acid	3	NO	NO
100-1501	DUPONT ARILON INSECTICIDE	145.85	0.00	389	Indoxacarb	3	NO	NO
73049-20	VECTOLEX CG BIOLOGICAL LARVICIDE	0.00	981.82	330	Bacillus sphaericus	3	NO	NO
64405-2-74455	REDZONE BAIT	0.00	41.19	231	Boric acid	3	NO	NO
100-1290	OPTIGARD COCKROACH GEL BAIT	0.00	10.20	223	Emamectin, benzoate	3	NO	NO
100-1066	DEMAND CS INSECTICIDE	94.10	1.06	207	Cyhalothrin, lambda	3	NO	NO
499-370	PT 370 ASCEND FIRE ANT STOPPER BAIT	0.00	31.75	199	Avermectin	3	NO	NO
432-1363	TEMPO SC INSECTICIDE	15.43	1.06	186	Cyfluthrin, beta	3	NO	NO
499-507	PRESCRIPTION TREATMENT BRAND ALPINE COCKROACH GEL BAIT RESERVOIR	0.01	7.53	160	Dinotefuran	3	NO	NO
53883-92	CYPER TC INSECTICIDE	1.26	0.00	155	Cypermethrin, beta	3	YES	NO
1021-1603	NYLAR 10EC	52.95	0.00	116	Pyriproxyfen	3	NO	NO
67425-14	ECOPCO ACU	16.84	0.00	116	Phenylethyl propionate	3	NO	NO
2724-469	ZOECON (S)-HYDROPRENE ROACH CONTROL STATION II	4.25	0.71	111	(7S)-Hydroprene	3	NO	NO
432-1375	PRE-EMPT FLY BAIT	0.00	32.00	105	Imidacloprid; (Z)-9-Tricosene	3	NO	NO
279-9554	CB INSECTICIDE WITH DELTAMETHRIN	0.11	41.29	99	Deltamethrin	3	NO	NO
2724-421	ZOECON RF-292 BRIQUET	0.00	85.00	82	S-Methoprene	3	NO	NO
64405-8	NIBOR BORATE INSECTICIDE AND FUNGICIDE	40.00	6.72	81	Disodium octaborate tetrahydrate	3	NO	NO
1677-43	STER-BAC	150.50	0.00	74	Alkyl (60%C14, 25%C12, 15%C16) dimethylbenzyl ammonium chloride	1	NO	NO
432-772	DELTA DUST	0.00	12.26	67	Deltamethrin	3	NO	NO
432-1531	BES0600 INSECTICIDE	0.00	7.15	67	Clothianidin	0	NO	NO
432-1455	BES 0026 FLY SPOT BAIT	2.47	3.86	63	Imidacloprid; (Z)-9-Tricosene	3	NO	NO
9688-190-8845	SPECTRACIDE DESTROYER BRAND WASP & HORNET KILLER	11.05	0.00	62	Cyhalothrin, lambda; Prallethrin	3	NO	NO
100-1483	ADVION INSECT GRANULE	0.00	44.88	59	Indoxacarb	3	NO	NO
86203-11-59639	SAFARI 20SG INSECTICIDE	0.00	65.16	34	Dinotefuran	3	NO	NO
1021-1815	EVERCIDE ESFENVALERATE 6.4% CS	0.21	0.00	30	Esfenvalerate	3	NO	NO
432-1534	BES0668 Insecticide	173.00	0.00	29	Deltamethrin	3	NO	NO

Pesticide Use by NYC in 2020

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox. Cat.	EPA Carc in	CA Dev. Toxin
2724-484	RF 9707 AEROSOL	0.00	3.38	27	(7S)-Hydroprene	3	NO	NO
5481-8973	ORTHENE PCO FORMULA II	26.00	0.00	26	Acephate	3	YES	NO
1021-1688-8329	ANVIL 10+10 ULV	152.00	0.00	23	Phenothrin; Piperonyl butoxide	3	YES	NO
2724-351-50809	ZOECON RF-259 EMULSIFIABLE CONCENTRATE	0.30	0.00	23	(7S)-Hydroprene	3	NO	NO
73049-10	VECTOBAC G BIOLOGICAL LARVICIDE GRANULES	0.00	17,682.00	23	Bacillus thuringiensis, subsp. Israelensis, strain AM 65-52	3	NO	NO
1021-2569	MULTICIDE SPRAY 29511	3.20	0.00	21	Imidacloprid; Phenothrin; N-octyl bicycloheptene dicarboximide	0	YES	NO
70506-121	UPI-2005 EXP-06 RUP INSECTICIDE	6.64	0.00	19	Cyhalothrin, lambda	2	NO	NO
100-1489	DUPONT ACELEPRYN INSECTICIDE	18.53	0.00	18	DPX-E2Y45	0	NO	NO
432-1304	TEMPO 10 WP INSECTICIDE	4.26	0.00	18	Cyfluthrin, beta	3	NO	NO
48813-1-68539	SUFFOIL-X	12.56	0.00	17	Petroleum distillates	3	NO	NO
432-1312	MERIT 2F INSECTICIDE	29.56	0.00	16	Imidacloprid	3	NO	NO
432-1312-67760	MERIT 2F INSECTICIDE	15.16	0.00	16	Imidacloprid	3	NO	NO
53883-244-66222	QUALI-PRO LAMBDA GC-0	7.30	0.00	15	Cyhalothrin, lambda	2	NO	NO
89459-59	ENVI ACU CONTACT Insecticide	1.46	2.87	15	Phenylethyl propionate	3	NO	NO
1021-1828	MGK ROACH BAIT 2822	0.00	0.43	15	Avermectin	3	NO	NO
69526-17	CIVITAS ONE	60.00	0.00	13	Mineral oil	3	NO	NO
70051-2-59807	TRIACT 70	1.39	0.00	13	Neem oil	3	NO	NO
100-1088	SCIMITAR GC INSECTICIDE	1.30	0.00	13	Cyhalothrin, lambda	3	NO	NO
10163-324	M-PEDE INSECTICIDE/FUNGICIDE	0.14	0.00	13	Potassium laurate	2	NO	NO
62719-291	CONSERVE SC TURF AND ORNAMENTAL	0.10	0.00	13	Spinosad	3	NO	NO
499-550	TC-323	1.21	1.06	12	Prallethrin	3	NO	NO
499-406	AVERT PRESCRIPTION TREATMENT TC 93A BAIT	0.00	0.42	12	Avermectin	3	NO	NO
8033-106-1001	TRISTAR 8.5 SL INSECTICIDE	0.26	0.00	11	Acetamiprid	3	NO	NO
66222-19-1386	CHLORPYRIFOS 4E AG	38.98	0.00	10	Chlorpyrifos	2	NO	NO
4-80	BONIDE HORTICULTURAL AND DORMANT SPRAY OIL	1.33	0.00	10	Mineral oil	3	NO	NO
279-3206	TALSTAR TC FLOWABLE TERMITICIDE/INSECTICIDE	0.30	0.00	10	Bifenthrin	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
70051-9-59807	SUPERNEEM 4.5-B	0.07	0.00	10	Azadirachtin	3	NO	NO
73049-501	VBC-60394 FG BIOLOGICAL LARVICIDE FINE GRANULE	0.00	48.00	10	Bacillus thuringiensis, subsp. Israelensis, strain AM 65-52	3	NO	NO
53883-366	QUALI-PRO BIFENTHRIN GOLF & NURSERY 7 9F	2.94	0.00	9	Bifenthrin	3	YES	NO
100-1543	MAINSRING GH & N	0.13	0.00	9	Cyantraniliprole	0	NO	NO
59639-96	DISTANCE INSECT GROWTH REGULATOR	0.12	0.0	9	Pyriproxyfen	3	NO	NO
432-1471	SPIROTETRAMAT 240 SC GREENHOUSE AND NURSERY INSECTICIDE/MITICIDE	0.10	0.00	9	Spirotetramat	3	NO	NO
2724-476	ENSTAR II INSECT GROWTH REGULATOR (ENSTAR 5E)	0.65	0.00	8	(S)-Kinoprene	2	NO	NO
432-1369-59807	MARATHON II GREENHOUSE AND NURSERY INSECTICIDE	0.04	0.00	8	Imidacloprid	3	NO	NO
70127-10	TICK-EX EC BIOInsecticide	4.08	0.00	7	Metarhizium anisopliae strain F52 spores	3	NO	NO
241-313-9444	SIEGE PBS GEL INSECTICIDE	0.00	14.50	7	Hydramethylnon	3	YES	YES
53883-415	CSI 16-105 Delta+Tekko Pro Aerosol	0.00	3.56	7	Deltamethrin; Novaluron; Pyriproxyfen	3	NO	NO
73049-38	VECTOBAC 12AS BIOLOGICAL LARVICIDE	0.00	0.14	7	Bacillus thuringiensis, subsp. Israelensis, strain AM 65-52	3	NO	NO
499-467	WHITMIRE AVERT TC 181	0.00	0.13	7	Avermectin	3	NO	NO
228-624	NUFARM CHLORPYRIFOS SPC 4 INSECTICIDE	11.00	159.00	6	Chlorpyrifos	2	NO	NO
9688-255-8845	SPECTRACIDE COMMERCIAL WASP & HORNET KILLER 3	1.00	0.00	6	Deltamethrin; S- Bioallethrin	3	YES	NO
53883-335	N + P Regulator	0.08	0.00	6	Pyriproxyfen; Novaluron	3	NO	NO
62719-523	BLACKHAWK	0.00	52.75	6	Spinosad	3	NO	NO
85306-1	SELECT TCS	0.00	0.01	6	Fipronil	3	YES	NO
83100-6-88975	LADA 2F INSECTICIDE	7.22	0.00	5	Imidacloprid	3	NO	NO
71711-4-67690	SEPRO AKARI 5SC MITICIDE/INSECTICIDE	0.10	0.00	5	Fenpyroximate	2	NO	NO
100-1487	PROVAUNT	0.00	19.13	5	Indoxacarb	3	NO	NO
55809-3	CRC WASP & HORNET KILLER PLUS	0.00	6.13	5	Tetramethrin	3	YES	NO
432-1464	DYLOX 420 SL TURF AND ORNAMENTAL INSECTICIDE	70.00	0.00	4	Trichlorfon	3	NO	NO
100-1551	Ference	5.44	0.00	4	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
89442-24	BIFEN G/N 7.9SC SELECT	2.15	0.00	4	Bifenthrin	3	YES	NO
432-1527	TEMPRID RTU	0.25	0.00	4	Cyfluthrin, beta; Imidacloprid	0	NO	NO
73049-39	DIPEL DF DRY FLOWABLE BIOLOGICAL INSECTICIDE	0.09	0.35	4	Bacillus thuringiensis, subsp. Kurstaki, strain ABTS-351, fermentation solids and solubles	3	NO	NO
400-508	FLORAMITE SC	0.06	0.00	4	Bifenazate	3	NO	NO
149-8-64405	TERRO ANT KILLER II	0.03	0.00	4	Borax	3	NO	NO
4822-472	RAID MAX ROACH BAIT V	0.00	1.00	4	Avermectin	3	NO	NO
432-1227-10404	SEVIN SL CARBARYL INSECTICIDE	17.38	0.00	3	Carbaryl	3	YES	NO
69526-5	PURESpray SPRAY OIL 10E	14.75	0.00	3	Mineral oil	3	NO	NO
66222-19-73220	CHLORPYRIFOS 4E AG	4.60	0.00	3	Chlorpyrifos	2	NO	NO
1021-2804	MGK Formula 31011	0.13	0.00	3	Pyrethrins; Piperonyl butoxide; N-octyl bicycloheptene dicarboximide; Bifenthrin; Pyriproxyfen	3	YES	NO
2724-274-20954	GOLDEN MALRIN RF-128 FLY KILLER	0.00	1.44	3	Methomyl; (Z)-9-Tricosene	3	NO	NO
279-3443	D-FOAM INSECTICIDE	0.00	1.31	3	Deltamethrin	3	NO	NO
432-1457	MERIT FXT TABLET INSECTICIDE	0.00	1.20	3	Imidacloprid	3	NO	NO
7969-210	TERMIDOR SC TERMITICIDE/INSECTICIDE	4.00	0.00	2	Fipronil	3	YES	NO
1021-1263	PYROCID FOGGING CONCENTRATE 7167	2.00	0.00	2	Pyrethrins; Piperonyl butoxide	3	YES	NO
8033-96-279	TRANSPORT (R) GHP INSECTICIDE	1.00	0.00	2	Acetamiprid; Bifenthrin	3	YES	NO
8033-109-279	TRANSPORT (R) MIKRON INSECTICIDE	0.02	0.00	2	Acetamiprid; Bifenthrin	3	YES	NO
228-708	NUFARM LAMBDA-CYHALOTHRIN 1 EC INSECTICIDE	0.00	6.00	2	Cyhalothrin, lambda	2	NO	NO
432-1318	MERIT 75 WSP	0.00	3.20	2	Imidacloprid	3	NO	NO
228-501	MALLET 0.5 G INSECTICIDE	0.00	2.55	2	Imidacloprid	3	NO	NO
47000-73-1677	SSI-50 INSECTICIDE	0.00	2.00	2	Pyrethrins; Piperonyl butoxide; N-octyl bicycloheptene dicarboximide	3	YES	NO
228-588	MALLET 75 WP	0.00	1.60	2	Imidacloprid	3	NO	NO
432-836	DELTAGARD G INSECTICIDE GRANULE	0.00	0.26	2	Deltamethrin	3	NO	NO
2724-375	ALTOSID BRIQUETS	0.00	0.15	2	S-Methoprene	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
499-527	PRESCRIPTION TREATMENT BRAND ALPINE DUST INSECTICIDE	0.00	0.05	2	Dinotefuran; Diatomaceous earth	3	NO	NO
279-3155	TALSTAR NURSERY FLOWABLE INSECTICIDE/MITICIDE	5.16	0.00	1	Bifenthrin	3	YES	NO
5481-643	DYLOX 420 SL TURF AND ORNAMENTAL INSECTICIDE	3.28	0.00	1	Trichlorfon	3	YES	NO
279-3457	TRIPLE CROWN GOLF INSECTICIDE	0.97	0.00	1	Bifenthrin; Cypermethrin, zeta; Imidacloprid	2	YES	NO
53883-365	QUALI-PRO BIFENTHRIN I/T 7.9F	0.47	0.00	1	Bifenthrin	3	YES	NO
9444-168-1270	ZEP TOTAL CONTROL TOTAL RELEASE FOGGER TOTAL CONTROL SYSTEMS	0.23	0.00	1	Esfenvalerate; Prallethrin; Pyriproxyfen	3	NO	NO
149-8	TERRO ANT KILLER II	0.02	0.00	1	Borax	3	NO	NO
66222-40-400	PEDESTAL	0.01	0.00	1	Novaluron	3	NO	NO
63191-16	MILKY SPORE GRANULAR	0.00	40.00	1	Spores of Bacillus popilliae	3	NO	NO
83529-2-86064	AMORTECH IMD 2 SC	0.00	35.00	1	Imidacloprid	3	NO	NO
92564-40	DYLOX 9.3% INSECT GRANULES	0.00	20.00	1	Trichlorfon	3	YES	NO
239-2717	ORTHO HOME DEFENSE INDOOR & OUTDOOR INSECT KILLER 3	0.00	1.25	1	Bifenthrin; Cypermethrin, zeta	3	YES	NO
1021-1641-57076	CONQUER RESIDUAL INSECTICIDE CONCENTRATE	0.00	0.19	1	Esfenvalerate	3	NO	NO
499-470	WHITMIRE MICRO-GEN TC 198	0.00	0.13	1	Cyfluthrin	3	NO	NO
432-1256	MAXFORCE FC ANT BAIT STATIONS	0.00	0.05	1	Fipronil	3	YES	NO
100-1485	DUPONT ADVION ANT BAIT ARENA	0.00	0.03	1	Indoxacarb	3	NO	NO
1021-1828	MGK ROACH BAIT 2821	0.00	0.02	1	Avermectin	3	NO	NO
1001-73	ECOLOGIX COCKROACH BAIT	0.00	0.00	1	Xanthine; Oxypurinol	3	NO	NO
Herbicides								
62719-176	PATHFINDER II	152.46	0.00	308	Triclopyr, butoxyethyl ester	3	NO	NO
62719-556	ACCORD XRT II	48.92	0.00	234	Glyphosate, dimethylammonium salt	3	NO	NO
228-397	RIVERDALE VANQUISH HERBICIDE	25.87	7.00	176	Dicamba, diglycolamine salt	3	NO	NO
432-1580	DUPONT VIEWPOINT HERBICIDE	0.87	22.58	173	Aminocyclopyrachlor; Imazapyr; Metsulfuron-methyl	3	NO	NO
62719-527	GARLON 4 ULTRA	45.64	0.00	112	Triclopyr	2	NO	NO
432-1516	ESPLANADE 200 SC	3.83	0.00	106	Indaziflam	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox. Cat.	EPA Carcin	CA Dev. Toxin
62719-324	GLYPRO	16.94	0.00	88	Glyphosate, isopropylamine salt	3	NO	NO
524-579	ROUNDUP PROMAX	22.45	0.00	75	Glyphosate, potassium salt	3	NO	NO
62719-566	TURFLON ESTER ULTRA	6.47	0.00	74	Triclopyr, butoxyethyl ester	3	NO	NO
100-937	PRIMO MAXX	34.26	0.00	71	Trinexapac-ethyl	3	NO	NO
62719-542	DIMENSION 2EW	37.34	0.00	38	Dithiopyr	2	NO	NO
89442-7	TRIN-PAC SELECT	10.09	0.00	34	Trinexapac-ethyl	3	NO	NO
524-517	ACCORD XL HERBICIDE	2.76	0.00	29	Glyphosate, isopropylamine salt	3	NO	NO
100-1014	PACLOBUTRAZOL 2SC	8.80	0.00	27	Paclobutrazol	3	NO	NO
524-529	ROUNDUP PRO CONCENTRATE	24.22	0.00	26	Glyphosate, isopropylamine salt	3	NO	NO
10163-325	SCYTHE HERBICIDE	10.09	0.00	23	Nonanoic acid	2	NO	NO
1001-91	GWN-6010 PLANT GROWTH REGULATOR	0.05	31.25	22	Prohexadione calcium	3	NO	NO
241-437-67690	CLEARCAST HERBICIDE	13.22	0.00	20	Imazamox	3	NO	NO
81880-1-10163	GWN-3069 SEDGEHAMMER	26.10	0.47	16	Halosulfuron-methyl	3	NO	NO
524-475	ROUNDUP ULTRA HERBICIDE	7.72	0.00	16	Glyphosate, isopropylamine salt	3	NO	NO
86064-3	ARMOR TECH PGR 113 MC	0.41	34.81	16	Trinexapac-ethyl	3	NO	NO
7969-327	PYLEX HERBICIDE	0.40	0.00	13	Topramezone	3	NO	NO
432-1230	PROXY GROWTH REGULATOR	64.65	109.44	12	Ethephon	1	NO	NO
9198-213	THE ANDERSONS 0.25% GRANULAR DITHIOPYR HERBICIDE	0.00	947.50	12	Dithiopyr	3	NO	NO
228-317	COOL POWER SELECTIVE HERBICIDE	6.72	0.00	11	Dicamba; MCPA, 2-ethyl hexyl ester; Triclopyr, butoxyethyl ester	3	NO	NO
7969-443	DERRINGER HERBICIDE	1.41	0.00	9	Glufosinate-ammonium	2	NO	NO
228-366	RAZOR HERBICIDE	1.28	0.00	9	Glyphosate, isopropylamine salt	3	NO	NO
7969-272	DRIVE XLR8 HERBICIDE	11.59	0.00	8	Quinclorac	3	NO	NO
67702-54-4	Fireworxx 80	0.25	0.00	8	Capric acid; Caprylic acid	3	NO	NO
228-491-54705	CLEAN SLATE	0.03	0.00	8	Clopyralid, monoethanolamine 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
62097-24-53883	PAC-LOW	14.67	0.00	7	Paclobutrazol	3	NO	NO
524-326	ACCORD HERBICIDE	0.49	0.00	7	Glyphosate, isopropylamine salt	3	NO	NO
86068-3-84009	HDX WEED & GRASS KILLER CONCENTRATE	0.04	0.00	6	Glyphosate, isopropylamine salt	2	NO	NO
352-401	DUPONT OUST HERBICIDE	0.00	0.01	6	Sulfometuron methyl	3	NO	NO
100-1267	TENACITY	0.31	0.00	5	Mesotrione	3	NO	NO
228-711	NUFARM PROSEGE SELECTIVE HERBICIDE2	0.00	1.27	5	Halosulfuron-methyl	3	NO	NO
228-409	TRIPLET LOW ODOR PREMIUM SELECTIVE HERBICIDE	23.00	0.00	4	2,4-D, triisopropanolamine salt; Dicamba; MCP-P, dimethylamine salt	1	NO	NO
42750-247	DUPONT KRENITE S BRUSH CONTROL AGENT	13.00	0.00	4	Fosamine, ammonium salt	3	NO	NO
7969-444	FINALE HERBICIDE	1.75	0.00	4	Glufosinate-ammonium	2	NO	NO
62719-687	VASTLAN	0.79	0.00	4	Triclopyr, Choline Salt	2	NO	NO
432-950	ACCLAIM EXTRA HERBICIDE	0.66	0.00	4	Fenoxaprop-P (+)	3	NO	NO
1381-192	CORNERSTONE PLUS	0.19	0.00	4	Glyphosate, isopropylamine salt	3	NO	NO
53883-209	DITHIOPYR 0.172% PLUS FERTILIZER	0.00	8800.00	4	Dithiopyr	3	NO	NO
2217-833	SPEED ZONE BROADLEAF HERBICIDE	42.69	0.00	3	2,4-D, 2-ethylhexyl ester; Carfentrazone-ethyl; Dicamba; Mecroprop-p	3	YES	NO
86064-5	ARMORTECH (R) THREESOME(TM)	8.00	0.00	3	2,4-D, dimethylamine salt; Dicamba, dimethylamine salt; MCP-P, dimethylamine salt	1	NO	NO
228-744	Q-BALL HERBICIDE	1.93	0.00	3	Quinclorac, Dimethylamine Salt	3	NO	NO
53883-373	QUALI-PRO T-NEX 1 AQ	0.37	0.00	3	Trinexapac-ethyl	3	NO	NO
62097-34-82866	SHORTSTOP 2SC	0.33	0.00	3	Paclobutrazol	3	NO	NO
87663-11-92697	FL-AN140F	0.20	0.00	3	Nonanoic acid, ammonium salt	2	NO	NO
66222-151	ETHEPHON 2SL	10.00	0.00	2	Ethephon	1	NO	NO
53883-399	Quali Pro Dithiopyr L	5.13	0.00	2	Dithiopyr	2	NO	NO
74779-3	CAMBISTAT	2.64	0.00	2	Paclobutrazol	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
71995-33	ROUNDUP WEED & GRASS KILLER READY-TO-USE PLUS	2.00	0.00	2	Glyphosate, isopropylamine salt; Nonanoic acid	3	NO	NO
53883-336	QUINCLORAC 1.5 L	0.68	0.00	2	Quinclorac, Dimethylamine Salt	3	NO	NO
279-3265	F8426 HERBICIDE	0.33	0.00	2	Carfentrazone-ethyl	3	NO	NO
62719-37	GARLON 3A	0.02	0.00	2	Triclopyr, triethylamine salt	1	NO	NO
62719-504-961	LEBANON PROSCAPE FERTILIZER WITH DIMENSION 0.15% FG TURF AND ORNAMENTA	0.00	14250.00	2	Dithiopyr	3	NO	NO
100-1139	BARRICADE 4FL	15.47	0.00	1	Prodiamine	3	YES	NO
53883-379	QUALI-PRO PRODIAMINE 4L	15.00	0.00	1	Prodiamine	3	YES	NO
87373-4-5905	HELENA T-METHYL 4.5 F-T&O	10.71	0.00	1	Thiophanate-methyl	3	YES	YES
53883-364	QUALI-PRO OXADIAZON SC	6.50	0.00	1	Oxadiazon	3	YES	YES
62719-305	LONTREL TURF AND ORNAMENTAL	2.98	0.00	1	Clopyralid	3	NO	NO
71995-47	RD 1653 HERBICIDE	2.00	0.00	1	Glyphosate, isopropylamine salt; Imazapic, ammonium salt; Nonanoic acid	3	NO	NO
53883-372	QUALI-PRO OXADIAZON 2G	1.94	0.00	1	Oxadiazon	2	YES	YES
10404-43	LESCO THREE-WAY SELECTIVE HERBICIDE	1.80	0.00	1	2,4-D, dimethylamine salt; Dicamba, dimethylamine salt; MCP-P, dimethylamine salt	1	NO	NO
42519-1-8867	TARGET 6.6	1.50	0.00	1	MSMA	3	NO	NO
62719-92	CONFRONT	0.89	0.00	1	Clopyralid, triethanolamine; Triclopyr, triethylamine salt	1	NO	NO
80697-4-86064	ARMOR TECH PAC 223	0.11	0.00	1	Paclobutrazol	3	NO	NO
59639-132	V-10137 1 EC (HERBICIDE)	0.01	0.00	1	Clethodim	3	NO	NO
62719-483-87245	CHOICE TURF PREMIUM LAWN CARE FERTILIZER WITH DIMENSION 0.125% HERBICI	0.00	6250.00	1	Dithiopyr	3	NO	NO
10404-86	LESCO DIMENSION 0.15% PLUS FERTILIZER	0.00	4000.00	1	Dithiopyr	3	NO	NO
9198-176	ANDERSON'S GOOSE/CRABGRASS CONTROL	0.00	262.00	1	Bensulide; Oxadiazon	2	YES	YES

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox. Cat.	EPA Carc in	CA Dev. Toxin
228-379	DIABLO HERBICIDE	0.00	15.00	1	Dicamba, dimethylamine salt	3	NO	NO
524-535	ROUNDUP QUIKPRO HERBICIDE	0.00	9.38	1	Glyphosate, monoammonium salt; Diquat dibromide	3	NO	NO
81927-38	ALLIGARE 2,4-D AMINE	0.00	2.00	1	2,4-D, dimethylamine salt	1	NO	NO
Fungicides								
100-1364	DACONIL ACTION	577.75	0.00	78	Acibenzolar-S-methyl; Chlorothalonil	2	YES	NO
94485-1	COMPANION LIQUID BIOLOGICAL FUNGICIDE	377.65	0.00	65	Bacillus subtilis GBO3	3	NO	NO
432-942	BANOL TURF AND ORNAMENTAL FUNGICIDE	134.54	144.52	61	Propamocarb hydrochloride	3	NO	NO
432-1541	12ESP705 FUNGICIDE	0.00	2,249.75	43	Fosetyl-Al	3	NO	NO
53883-323-86064	ARMOR TECH TMI 2020XL	121.00	200.13	37	Thiophanate-methyl; Iprodione	3	YES	YES
100-1093	HERITAGE FUNGICIDE	8.29	66.91	37	Azoxystrobin	3	NO	NO
53883-353	QUALI-PRO T-NEX	30.57	2.88	34	Trinexapac-ethyl	3	NO	NO
70299-12	ZEROTOL 2.0	8.74	0.00	26	Peroxyacetic acid; Hydrogen peroxide	1	NO	NO
432-1445	BAYLETON FLO TURF AND ORNAMENTAL FUNGICIDE	42.36	0.00	21	Triadimefon	3	YES	YES
70127-2	NOVOZYMES BIOFUNGICIDE GREEN RELAF 710-140	95.60	0.00	20	Bacillus licheniformis SB3086; IBA	3	NO	NO
66222-117-86064	ORIOUS 3.6F	35.13	200.25	20	Tebuconazole	3	YES	NO
70506-262	PEGASUS 6L	165.12	0.00	18	Chlorothalonil	2	YES	NO
432-1505	CHIPCO 26019T FUNGICIDE	64.33	232.25	17	Iprodione; Trifloxystrobin	3	YES	NO
7969-349	Xzemplar Fungicide	16.93	0.00	17	Fluxapyroxad	3	NO	NO
432-890	ALIETTE WDG BRAND FUNGICIDE	0.00	610.65	17	Fosetyl-Al	3	NO	NO
86064-1	ARMORTECH CLT 825 DF	0.00	545.00	17	Chlorothalonil	2	YES	NO
264-1155	RHAPSODY ASO	181.40	0.00	16	QST 713 strain of dried Bacillus subtilis	3	NO	NO
89442-37	Fluazinam 40SC Select	11.47	98.75	16	Fluazinam	3	YES	NO
60063-7-10404	ECHO 720	121.77	0.00	15	Chlorothalonil	2	YES	NO
432-1446	TARTAN FLO FUNGICIDE	20.84	147.38	15	Triadimefon; Trifloxystrobin	3	YES	YES

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox. Cat.	EPA Carc in	CA Dev. Toxin
50534-202-100	MANICURE ULTREX TURF & ORNAMENTAL	0.00	534.40	15	Chlorothalonil	1	YES	NO
432-888	CHIPCO 26019 FLO BRAND FUNGICIDE	174.71	87.50	14	Iprodione	3	YES	NO
53883-310	QUALI-PRO CHLOROTHALONIL 720 SFT	74.40	0.00	14	Chlorothalonil	2	YES	NO
66222-117	ORIOUS 3.6F	18.57	0.00	14	Tebuconazole	3	YES	NO
68539-3	T-22G BIOLOGICAL PLANT PROTECTANT GRANULES	0.00	36.00	14	Trichoderma harzianum rifai strain KRL-AG2	3	NO	NO
100-1633	Secure Action	17.46	0.00	12	Fluazinam; Acibenzolar-S-methyl	3	YES	NO
68173-3-1001	AFFIRM WDG	0.00	94.56	12	Polyoxin D zinc salt	3	NO	NO
100-1347	CONCERT II	90.00	0.00	11	Propiconazole	1	YES	NO
432-1529	TEBUCONAZOLE SC TURF AND ORNAMENTAL FUNGICIDE	23.14	21.88	11	Tebuconazole	3	YES	NO
53883-433	QUALI-PRO MEFENOXAM 2AQ	5.41	0.00	11	Mefenoxam	2	NO	NO
53883-343	AZOXYSTROBIN 50 WG	0.00	4.48	11	Azoxystrobin	3	NO	NO
71512-20-100	SECURE	13.98	0.00	10	Fluazinam	2	YES	NO
228-633	NUFARM PROPICONAZOLE SPC EC FUNGICIDE	11.30	0.00	10	Propiconazole	2	YES	NO
59639-144	V-10116 VPP FUNGICIDE	0.00	93.04	8	Metconazole	3	NO	NO
71512-13-2217	SEGWAY FUNGICIDE	5.06	19.63	7	Cyazofamid	3	NO	NO
100-1326	BANNER MAXX II	34.50	0.00	6	Propiconazole	3	YES	NO
89442-28	IPRODIONE 2F SELECT	26.56	0.00	6	Iprodione	3	YES	NO
7969-290	INSIGNIA SC INTRINSIC BRAND FUNGICIDE	13.80	0.00	6	Pyraclostrobin	2	NO	NO
100-1433	BRISKWAY	9.02	0.00	6	Azoxystrobin; Difenoconazole	3	YES	NO
100-892	ARBOTECT 20-S FUNGICIDE	5.14	0.00	6	Thiabendazole	3	YES	NO
70299-15	GC PRO	0.00	1,002.00	6	Sodium percarbonate	1	NO	NO
70299-1	ZEROTOL ALGAECIDE/FUNGICIDE	61.08	0.00	5	Hydrogen peroxide	1	NO	NO
50534-209-100	MANICURE 6 FLOWABLE	25.00	0.00	5	Chlorothalonil	3	YES	NO
1001-69	3336 F	9.34	0.00	5	Thiophanate-methyl	3	YES	YES

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox. Cat.	EPA Carc in	CA Dev. Toxin
53883-375-86064	QUALI-PRO IPRO 2SE	5.00	156.69	5	Iprodione	3	YES	NO
71512-13-279	SEGWAY FUNGICIDE	4.73	0.00	5	Cyazofamid	3	NO	NO
7969-350	LEXICON INTRINSIC BRAND FUNGICIDE	3.53	0.00	5	Fluxapyroxad; Pyraclostrobin	3	NO	NO
86064-4	ARMOR TECH PPZ 143 MC	2.22	65.75	5	Propiconazole	2	YES	NO
62719-402-10404	DITHANE DF RAINSHIELD	0.00	120.00	5	Mancozeb	3	YES	NO
432-888-10404	CHIPCO 26019 FLO BRAND FUNGICIDE	28.80	0.00	4	Iprodione	3	YES	NO
228-623	NUFARM PROPICONAZOLE SPC 14.3 MEC FUNGICIDE	23.17	0.00	4	Propiconazole	2	YES	NO
50534-211-100	DACONIL ZN FLOWABLE FUNGICIDE	20.00	0.00	4	Chlorothalonil	2	YES	NO
42750-99	TEBUCONAZOLE 3.6FL	17.34	0.00	4	Tebuconazole	3	YES	NO
228-630-10404	NUFARM TM+IP SPC FUNGICIDE	10.88	0.00	4	Iprodione; Thiophanate-methyl	3	YES	YES
228-623-10404	NUFARM PROPICONAZOLE SPC 14.3 MEC FUNGICIDE	9.28	0.00	4	Propiconazole	2	YES	NO
67702-2-67690	CAMELOT O FUNGICIDE/BACTERICIDE	5.99	0.00	4	Copper octanoate	3	NO	NO
264-1155-68539	RHAPSODY ASO	5.50	0.00	4	QST 713 strain of dried Bacillus subtilis	3	NO	NO
228-737	NUP-15013 Fungicide	3.41	0.00	4	Fluazinam	3	YES	NO
84059-3-87865	REGALIA PTO BIOFUNGICIDE FOR USE ON TURF AND ORNAMENTALS	2.13	0.00	4	Reynoutria sachalinensis	3	NO	NO
7969-184	Insignia Fungicide	1.48	0.00	4	Pyraclostrobin	3	NO	NO
70506-272	PEGASUS DFX	0.00	415.00	4	Chlorothalonil	1	YES	NO
67690-77	ZIO	0.00	70.00	4	Pseudomonas chlororaphis strain AFS009	3	NO	NO
100-1434	MEDALLION WDG	0.00	0.13	4	Fludioxonil	3	NO	NO
42750-211	PROPICONAZOLE 41.8% EC	1.77	0.00	3	Propiconazole	2	YES	NO
400-422-59807	TERRAZOLE L	1.63	0.00	3	Terrazole	1	YES	NO
86064-6	ArmorTech ZOXY 2F	0.00	29.25	3	Azoxystrobin	3	NO	NO
4-62	BONIDE SULPHUR PLANT FUNGICIDE MICRONIZED SPRAY OR DUST	0.00	11.25	3	Sulfur	3	NO	NO
432-1223	PROSTAR 70 WP	0.00	5.63	3	Flutolanil	3	NO	NO
228-626	NUFARM T-METHYL PRO 4.5 F FUNGICIDE	17.89	0.00	2	Thiophanate-methyl	3	YES	YES
432-1522	ES TC006A	6.88	0.00	2	Mono- and di-potassium salts of phosphorous acid	0	NO	NO
228-626-52287	NUFARM T-METHYL PRO 4.5 F FUNGICIDE	6.31	0.00	2	Thiophanate-methyl	3	YES	YES

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox. Cat.	EPA Carc in	CA Dev. Toxin
228-623-88975	NUFARM PROPICONAZOLE SPC 14.3 MEC FUNGICIDE	4.81	0.00	2	Propiconazole	2	YES	NO
70051-107-59807	TRIATHLON BA	3.00	0.00	2	Bacillus subtilis var. amyloliquefaciens strain D747	3	NO	NO
228-739	NUP-15014 Fungicide	2.71	0.00	2	Tebuconazole; Fluazinam	3	YES	NO
89442-16	METALAXYL 4L SELECT	2.41	0.00	2	Metalaxyl	3	NO	NO
66222-216	QUALI-PRO MEFENOXAM 2AQ	2.16	0.00	2	Mefenoxam	2	NO	NO
73806-1	K-PHITE 7LP Fungicide	1.50	0.00	2	Mono- and di-potassium salts of phosphorous acid	3	NO	NO
42750-292	AZOXY 11% + TEB 26% FL	1.20	0.00	2	Azoxystrobin; Tebuconazole	3	YES	NO
83416-1	RELIANT SYSTEMIC Fungicide	1.13	0.00	2	Mono- and di-potassium salts of phosphorous acid	3	NO	NO
100-1600	A19649 200SC Turf	0.43	0.00	2	Pydiflumetofen	3	NO	NO
9198-115	THE ANDERSONS TURF FUNGICIDE WITH 5.0% DACONIL	0.00	1,400.00	2	Chlorothalonil	1	YES	NO
228-652	NUFARM T-METHYL 4.5 F Fungicide	0.00	104.81	2	Thiophanate-methyl	3	YES	YES
432-890-10404	ALIETTE WDG BRAND FUNGICIDE	0.00	88.00	2	Fosetyl-Al	3	NO	NO
7969-255	HONOR FUNGICIDE	0.00	37.14	2	Nicobifen; Pyraclostrobin	3	YES	NO
7969-196	EMERALD FUNGICIDE	0.00	19.55	2	Nicobifen	2	YES	NO
464-693-63288	CHEMICAR 15	75.00	0.00	1	Glutaraldehyde	1	NO	NO
5481-619	EQUUS 720 SST	44.10	0.00	1	Chlorothalonil	2	YES	NO
66222-134	THIOPHANATE METHYL 4.5 F	34.00	0.00	1	Thiophanate-methyl	3	YES	YES
42750-252	PROPICONAZOLE 1.3 ME	20.00	0.00	1	Propiconazole	2	YES	NO
70506-114	TEBUCONAZOLE 3.6 F FUNGICIDE	10.20	0.00	1	Tebuconazole	3	YES	NO
89442-14	THIOPHANATE METHYL 4.5F SELECT	8.20	0.00	1	Thiophanate-methyl	3	YES	YES
53883-375	QUALI-PRO IPRO 2SE	7.50	0.00	1	Iprodione	3	YES	NO
53883-380	QUALI-PRO IPRO 2	5.00	0.00	1	Iprodione	3	YES	NO
53883-309	QUALI-PRO ENCLAVE 5.3F	4.10	0.00	1	Chlorothalonil; Thiophanate-methyl; Iprodione; Tebuconazole	3	YES	YES
100-796	SUBDUE MAXX	4.00	0.00	1	Mefenoxam	3	NO	NO
53883-363	BUMPER 14.3 EC (PROPICONAZOLE) FUNGICIDE	2.50	0.00	1	Propiconazole	3	YES	NO
228-737-52287	NUP-15013 Fungicide	2.00	0.00	1	Fluazinam	3	YES	NO
100-1448	MEDALLION SC	1.00	0.00	1	Fludioxonil	3	NO	NO
87290-44-86064	WILLOWOOD AZOXYSTROBIN 2.08SC	0.13	0.00	1	Azoxystrobin	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
62719-388	FORE 80WP RAINSIELD	0.00	96.00	1	Mancozeb	3	YES	NO
5481-617	EQUUS DF	0.00	45.00	1	Chlorothalonil	2	YES	NO
100-1550	HERITAGE ACTION	0.00	8.75	1	Acibenzolar-S- methyl; Azoxystrobin	3	NO	NO
53883- 343-89442	AZOXYSTROBIN 50 WG	0.00	4.38	1	Azoxystrobin	3	NO	NO
70506-185	PENNCOZEB 75 DF	0.00	4.00	1	Mancozeb	3	YES	NO
68539-13	PB133	0.00	2.50	1	Potassium bicarbonate	3	NO	NO
Other (Repellents, Biochemical Pesticides, Etc.)								
4238-29	HYPOCHLORITE SOLUTION	105.00	0.00	45	Sodium hypochlorite	1	NO	NO
14802-8- 74466	MICROBE LIFE ALGAWAY 5.4 ALGAECIDE FOR PONDS	5.94	0.00	21	Poly(oxyethylene) (dimethylimino) ethylene (dimethylimino) ethylene dichloride	3	NO	NO
60061-142	PETTIT NEPTUNE 5 HARD HYBRID ABLATIVE ANTIFOULING PAINT	11.50	0.00	12	Copper oxide (ous)	2	NO	NO
59807-4	HORMODIN 1	0.00	0.26	6	IBA	3	NO	NO
2693-193	OPTIMA-BLUE	2.00	0.00	2	Copper oxide (ous)	2	NO	NO
73049-15	PROGIBB 4% PLANT GROWTH REGULATOR SOLUTION	0.00	0.00	2	Gibberellins	2	NO	NO
67702-3- 54705	NEU1165M SLUG AND SNAIL BAIT	0.00	6.00	2	Iron phosphate	3	NO	NO
63838-5	BROMMAX 7.1	70.00	0.00	1	Sodium bromide; Sodium hypochlorite	1	NO	NO

APPENDIX 2: Complete Listing of Pesticide Products Used by the Department of Parks and Recreation in 2020

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Rodenticides								
12455-86	CONTRAC RODENTICIDE PLACE PAC	0.00	1,367.63	1,144	Bromadiolone	3	NO	NO
12455-69	CONTRAC RODENTICIDE	0.00	689.91	553	Bromadiolone	3	NO	NO
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	212.87	540	Difethialone	3	NO	NO
12455-148	Rat Ice	0.00	4,478.00	533	Carbon dioxide	2	NO	NO
12455-36	CONTRAC RAT AND MOUSE BAIT	0.00	416.50	436	Bromadiolone	3	NO	NO
7173-205	GENERATION PELLETS	0.00	145.23	138	Difethialone	3	NO	NO
7173-187	MAKI PARAFFINIZED PELLETS	0.00	75.66	108	Bromadiolone	3	NO	NO
7173-238	GENERATION MEAL	0.00	95.61	103	Difethialone	3	NO	NO
7173-297	BROMADIOLONE PASTE 0901	0.00	29.03	98	Bromadiolone	3	NO	NO
7173-218	GENERATION MINI BLOCKS	0.00	38.63	49	Difethialone	3	NO	NO
12455-106	TERAD3 BLOX	0.00	103.25	48	Cholecalciferol	3	NO	NO
12455-79	CONTRAC ALL-WEATHER BLOX	0.00	18.50	38	Bromadiolone	3	NO	NO
7173-202	MAKI MINI BLOCKS	0.00	22.44	30	Bromadiolone	3	NO	NO
7173-215	MAKI Rodenticide MINI BLOCKS	0.00	5.38	11	Bromadiolone	3	NO	NO
12455-139	Final Soft Bait	0.00	1.29	4	Brodifacoum	3	NO	NO
87235-1	BRIGAND SB SOFT BAIT RODENTICIDE	0.00	6.38	3	Bromadiolone	3	NO	NO
7173-113	ROZOL TRACKING POWDER	0.00	0.88	3	Chlorophacinone	2	NO	NO
67517-66-56	TopGun All-Weather Rodenticide Bait Blocks	0.00	0.02	2	Bromethalin	3	NO	NO
36488-63	DIFENACOU RAT AND MOUSE BLOCK IV	0.00	1.63	1	Difenacoum	3	NO	NO
12455-75	CONTRAC RAT AND MOUSE BAIT READY TO USE PLACE PAC	0.00	0.75	1	Bromadiolone	3	NO	NO
Insecticides								
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	3.02	67	Indoxacarb	3	NO	NO
9688-190-8845	SPECTRACIDE DESTROYER BRAND WASP & HORNET KILLER	8.96	0.00	44	Cyhalothrin, lambda; Prallethrin	3	NO	NO
86203-11-59639	SAFARI 20SG INSECTICIDE	0.00	65.16	34	Dinotefuran	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	2.66	32	Indoxacarb	3	NO	NO
64405-2	REDZONE BAIT	0.00	5.95	22	Boric acid	3	NO	NO
432-763	SUSPEND SC INSECTICIDE	0.40	0.00	21	Deltamethrin	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
70506-121	UPI-2005 EXP-06 RUP INSECTICIDE	6.64	0.00	19	Cyhalothrin, lambda	2	NO	NO
100-1489	DUPONT ACELEPRYN INSECTICIDE	18.53	0.00	18	DPX-E2Y45	0	NO	NO
48813-1-68539	SUFFOIL-X	12.56	0.00	17	Petroleum distillates	3	NO	NO
432-1312	MERIT 2F INSECTICIDE	29.56	0.00	16	Imidacloprid	3	NO	NO
432-1312-67760	MERIT 2F INSECTICIDE	15.16	0.00	16	Imidacloprid	3	NO	NO
53883-244-66222	QUALI-PRO LAMBDA GC-0	7.30	0.00	15	Cyhalothrin, lambda	2	NO	NO
69526-17	CIVITAS ONE	60.00	0.00	13	Mineral oil	3	NO	NO
70051-2-59807	TRIACT 70	1.39	0.00	13	Neem oil	3	NO	NO
100-1088	SCIMITAR GC INSECTICIDE	1.30	0.00	13	Cyhalothrin, lambda	3	NO	NO
10163-324	M-PEDE INSECTICIDE/FUNGICIDE	0.14	0.00	13	Potassium laurate	2	NO	NO
62719-291	CONSERVE SC TURF AND ORNAMENTAL	0.10	0.00	13	Spinosad	3	NO	NO
8033-106-1001	TRISTAR 8.5 SL INSECTICIDE	0.26	0.00	11	Acetamiprid	3	NO	NO
66222-19-1386	CHLORPYRIFOS 4E AG	38.98	0.00	10	Chlorpyrifos	2	NO	NO
4-80	BONIDE HORTICULTURAL AND DORMANT SPRAY OIL	1.33	0.00	10	Mineral oil	3	NO	NO
70051-9-59807	SUPERNEEM 4.5-B	0.07	0.00	10	Azadirachtin	3	NO	NO
53883-366	QUALI-PRO BIFENTHRIN GOLF & NURSERY 7 9F	2.94	0.00	9	Bifenthrin	3	YES	NO
100-1543	MAINSRING GH & N	0.13	0.00	9	Cyantraniliprole	0	NO	NO
59639-96	DISTANCE INSECT GROWTH REGULATOR	0.12	0.00	9	Pyriproxyfen	3	NO	NO
432-1471	SPIROTETRAMAT 240 SC GREENHOUSE AND NURSERY INSECTICIDE/MITICIDE	0.10	0.00	9	Spirotetramat	3	NO	NO
2724-476	ENSTAR II INSECT GROWTH REGULATOR (ENSTAR 5E)	0.65	0.00	8	(S)-Kinoprene	2	NO	NO
432-1369-59807	MARATHON II GREENHOUSE AND NURSERY INSECTICIDE	0.04	0.00	8	Imidacloprid	3	NO	NO
73079-14	IMIDACLOPRID GRANULAR BAIT	0.00	2.38	8	Imidacloprid	3	NO	NO
73049-38	VECTOBAC 12AS BIOLOGICAL LARVICIDE	0.00	0.14	7	Bacillus thuringiensis, subsp. Israelensis, strain AM 65-52	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
228-624	NUFARM CHLORPYRIFOS SPC 4 INSECTICIDE	11.00	159.00	6	Chlorpyrifos	2	NO	NO
62719-523	BLACKHAWK	0.00	52.75	6	Spinosad	3	NO	NO
85306-1	SELECT TCS	0.00	0.01	6	Fipronil	3	YES	NO
83100-6-88975	LADA 2F INSECTICIDE	7.22	0.00	5	Imidacloprid	3	NO	NO
71711-4-67690	SEPRO AKARI 5SC MITICIDE/INSECTICIDE	0.10	0.00	5	Fenpyroximate	2	NO	NO
100-1487	PROVAUNT	0.00	19.13	5	Indoxacarb	3	NO	NO
73079-6	GREEN ZONE GRANULAR BAIT	0.00	12.25	5	Boric acid	3	NO	NO
55809-3	CRC WASP & HORNET KILLER PLUS	0.00	6.13	5	Tetramethrin	3	YES	NO
432-1464	DYLOX 420 SL TURF AND ORNAMENTAL INSECTICIDE	70.00	0.00	4	Trichlorfon	3	NO	NO
100-1551	Ference	5.44	0.00	4	Cyantraniliprole	0	NO	NO
89442-24	BIFEN G/N 7.9SC SELECT	2.15	0.00	4	Bifenthrin	3	YES	NO
73049-39	DIPEL DF DRY FLOWABLE BIOLOGICAL INSECTICIDE	0.09	0.35	4	Bacillus thuringiensis, subsp. Kurstaki, strain ABTS-351, fermentation solids and solubles	3	NO	NO
400-508	FLORAMITE SC	0.06	0.00	4	Bifenazate	3	NO	NO
432-1227-10404	SEVIN SL CARBARYL INSECTICIDE	17.38	0.00	3	Carbaryl	3	YES	NO
69526-5	PURESpray SPRAY OIL 10E	14.75	0.00	3	Mineral oil	3	NO	NO
66222-19-73220	CHLORPYRIFOS 4E AG	4.60	0.00	3	Chlorpyrifos	2	NO	NO
432-1363	TEMPO SC INSECTICIDE	0.32	0.00	3	Cyfluthrin, beta	3	NO	NO
432-1457	MERIT FXT TABLET INSECTICIDE	0.00	1.20	3	Imidacloprid	3	NO	NO
1021-1828	MGK ROACH BAIT 2822	0.00	0.04	3	Avermectin	3	NO	NO
499-550	TC-323	0.27	0.00	2	Prallethrin	3	NO	NO
279-3206	TALSTAR TC FLOWABLE TERMITICIDE/INSECTICIDE	0.26	0.00	2	Bifenthrin	3	YES	NO
432-763-62719	SUSPEND SC INSECTICIDE	0.04	0.00	2	Deltamethrin	3	NO	NO
2724-351	ZOECON RF-259 EMULSIFIABLE CONCENTRATE	0.01	0.00	2	(7S)-Hydroprene	3	NO	NO
228-708	NUFARM LAMBDA-CYHALOTHRIN 1 EC INSECTICIDE	0.00	6.00	2	Cyhalothrin, lambda	2	NO	NO
432-1318	MERIT 75 WSP	0.00	3.20	2	Imidacloprid	3	NO	NO
228-501	MALLET 0.5 G INSECTICIDE	0.00	2.55	2	Imidacloprid	3	NO	NO
228-588	MALLET 75 WP	0.00	1.60	2	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
73049-429	VECTOMAX FG	0.00	0.15	2	Bacillus sphaericus; Bacillus thuringiensis, subsp. Israelensis, strain AM 65-52	3	NO	NO
279-3155	TALSTAR NURSERY FLOWABLE INSECTICIDE/MITICIDE	5.16	0.00	1	Bifenthrin	3	YES	NO
5481-643	DYLOX 420 SL TURF AND ORNAMENTAL INSECTICIDE	3.28	0.00	1	Trichlorfon	3	YES	NO
279-3457	TRIPLE CROWN GOLF INSECTICIDE	0.97	0.00	1	Bifenthrin; Cypermethrin, zeta; Imidacloprid	2	YES	NO
53883-365	QUALI-PRO BIFENTHRIN I/T 7.9F	0.47	0.00	1	Bifenthrin	3	YES	NO
2724-351-50809	ZOECON RF-259 EMULSIFIABLE CONCENTRATE	0.13	0.00	1	(7S)-Hydroprene	3	NO	NO
66222-40-400	PEDESTAL	0.01	0.00	1	Novaluron	3	NO	NO
63191-16	MILKY SPORE GRANULAR	0.00	40.00	1	Spores of Bacillus popilliae	3	NO	NO
83529-2-86064	AMORTECH IMD 2 SC	0.00	35.00	1	Imidacloprid	3	NO	NO
92564-40	DYLOX 9.3% INSECT GRANULES	0.00	20.00	1	Trichlorfon	3	YES	NO
239-2717	ORTHO HOME DEFENSE INDOOR & OUTDOOR INSECT KILLER 3	0.00	1.25	1	Bifenthrin; Cypermethrin, zeta	3	YES	NO
432-1506	MAXFORCE QUANTUM ANT BAIT	0.00	0.07	1	Imidacloprid	3	NO	NO
100-1486	DUPONT ADVION COCKROACH BAIT ARENA	0.00	0.02	1	Indoxacarb	3	NO	NO
6218-47	SUMMIT B.T.I. BRIQUETS	0.00	0.01	1	Bacillus thuringiensis subspecies Israelensis strain BMP 144	3	NO	NO
Herbicides								
62719-527	GARLON 4 ULTRA	45.62	0.00	109	Triclopyr	2	NO	NO
62719-324	GLYPRO	16.94	0.00	88	Glyphosate, isopropylamine salt	3	NO	NO
524-579	ROUNDUP PROMAX	22.45	0.00	75	Glyphosate, potassium salt	3	NO	NO
100-937	PRIMO MAXX	34.26	0.00	71	Trinexapac-ethyl	3	NO	NO
62719-176	PATHFINDER II	40.07	0.00	49	Triclopyr, butoxyethyl ester	3	NO	NO
62719-556	ACCORD XRT II	8.75	0.00	48	Glyphosate, dimethylammonium salt	3	NO	NO
62719-542	DIMENSION 2EW	37.34	0.00	38	Dithiopyr	2	NO	NO
89442-7	TRIN-PAC SELECT	10.09	0.00	34	Trinexapac-ethyl	3	NO	NO
524-517	ACCORD XL HERBICIDE	2.76	0.00	28	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
100-1014	PACLOBUTRAZOL 2SC	8.80	0.00	27	Paclobutrazol	3	NO	NO
524-529	ROUNDUP PRO CONCENTRATE	24.22	0.00	26	Glyphosate, isopropylamine salt	3	NO	NO
10163-325	SCYTHE HERBICIDE	10.09	0.00	23	Nonanoic acid	2	NO	NO
1001-91	GWN-6010 PLANT GROWTH REGULATOR	0.05	31.25	22	Prohexadione calcium	3	NO	NO
241-437-67690	CLEARCAST HERBICIDE	13.22	0.00	20	Imazamox	3	NO	NO
81880-1-10163	GWN-3069 SEDGEHAMMER	26.10	0.47	16	Halosulfuron-methyl	3	NO	NO
524-475	ROUNDUP ULTRA HERBICIDE	7.72	0.00	16	Glyphosate, isopropylamine salt	3	NO	NO
86064-3	ARMOR TECH PGR 113 MC	0.41	34.81	16	Trinexapac-ethyl	3	NO	NO
7969-327	PYLEX HERBICIDE	0.40	0.00	13	Topramezone	3	NO	NO
432-1230	PROXY GROWTH REGULATOR	64.65	109.44	12	Ethephon	1	NO	NO
9198-213	THE ANDERSONS 0.25% GRANULAR DITHIOPYR HERBICIDE	0.00	947.50	12	Dithiopyr	3	NO	NO
228-317	COOL POWER SELECTIVE HERBICIDE	6.72	0.00	11	Dicamba; MCPA, 2-ethyl hexyl ester; Triclopyr, butoxyethyl ester	3	NO	NO
228-366	RAZOR HERBICIDE	1.28	0.00	9	Glyphosate, isopropylamine salt	3	NO	NO
7969-272	DRIVE XLR8 HERBICIDE	11.59	0.00	8	Quinclorac	3	NO	NO
67702-54-4	Fireworxx 80	0.25	0.00	8	Capric acid; Caprylic acid	3	NO	NO
228-491-54705	CLEAN SLATE	0.03	0.00	8	Clopyralid, monoethanolamine salt	3	NO	NO
62097-24-53883	PAC-LOW	14.67	0.00	7	Paclobutrazol	3	NO	NO
524-326	ACCORD HERBICIDE	0.49	0.00	7	Glyphosate, isopropylamine salt	3	NO	NO
86068-3-84009	HDX WEED & GRASS KILLER CONCENTRATE	0.04	0.00	6	Glyphosate, isopropylamine salt	2	NO	NO
352-401	DUPONT OUST HERBICIDE	0.00	0.01	6	Sulfometuron methyl	3	NO	NO
100-1267	TENACITY	0.31	0.00	5	Mesotrione	3	NO	NO
228-711	NUFARM PROSEDGE SELECTIVE HERBICIDE2	0.00	1.27	5	Halosulfuron-methyl	3	NO	NO
228-409	TRIPLET LOW ODOR PREMIUM SELECTIVE HERBICIDE	23.00	0.00	4	2,4-D, triisopropanolamine salt; Dicamba; MCPP-P, dimethylamine salt	1	NO	NO
62719-687	VASTLAN	0.79	0.00	4	Triclopyr, Choline 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
432-950	ACCLAIM EXTRA HERBICIDE	0.66	0.00	4	Fenoxaprop-P (+)	3	NO	NO
53883-209	DITHIOPYR 0.172% PLUS FERTILIZER	0.00	8,800.00	4	Dithiopyr	3	NO	NO
2217-833	SPEED ZONE BROADLEAF HERBICIDE	42.69	0.00	3	2,4-D, 2-ethylhexyl ester; Carfentrazone-ethyl; Dicamba; Mecroprop-p	3	YES	NO
86064-5	ARMORTECH (R) THREESOME(TM)	8.00	0.00	3	2,4-D, dimethylamine salt; Dicamba, dimethylamine salt; MCP-P, dimethylamine salt	1	NO	NO
228-744	Q-BALL HERBICIDE	1.93	0.00	3	Quinclorac, Dimethylamine Salt	3	NO	NO
53883-373	QUALI-PRO T-NEX 1 AQ	0.37	0.00	3	Trinexapac-ethyl	3	NO	NO
62097-34-82866	SHORTSTOP 2SC	0.33	0.00	3	Paclobutrazol	3	NO	NO
87663-11-92697	FL-AN140F	0.20	0.00	3	Nonanoic acid, ammonium salt	2	NO	NO
66222-151	ETHEPHON 2SL	10.00	0.00	2	Ethephon	1	NO	NO
53883-399	Quali Pro Dithiopyr L	5.13	0.00	2	Dithiopyr	2	NO	NO
74779-3	CAMBISTAT	2.64	0.00	2	Paclobutrazol	3	NO	NO
53883-336	QUINCLORAC 1.5 L	0.68	0.00	2	Quinclorac, Dimethylamine Salt	3	NO	NO
279-3265	F8426 HERBICIDE	0.33	0.00	2	Carfentrazone-ethyl	3	NO	NO
62719-37	GARLON 3A	0.02	0.00	2	Triclopyr, triethylamine salt	1	NO	NO
62719-504-961	LEBANON PROSCAPE FERTILIZER WITH DIMENSION 0.15% FG TURF AND ORNAMENTA	0.00	14,250.00	2	Dithiopyr	3	NO	NO
100-1139	BARRICADE 4FL	15.47	0.00	1	Prodiamine	3	YES	NO
53883-379	QUALI-PRO PRODIAMINE 4L	15.00	0.00	1	Prodiamine	3	YES	NO
87373-4-5905	HELENA T-METHYL 4.5 F-T&O	10.71	0.00	1	Thiophanate-methyl	3	YES	YES
53883-364	QUALI-PRO OXADIAZON SC	6.50	0.00	1	Oxadiazon	3	YES	YES
62719-305	LONTREL TURF AND ORNAMENTAL	2.98	0.00	1	Clopyralid	3	NO	NO
53883-372	QUALI-PRO OXADIAZON 2G	1.94	0.00	1	Oxadiazon	2	YES	YES
10404-43	LESCO THREE-WAY SELECTIVE HERBICIDE	1.80	0.00	1	2,4-D, dimethylamine salt; Dicamba, dimethylamine salt; MCP-P, dimethylamine salt	1	NO	NO
42519-1-8867	TARGET 6.6	1.50	0.00	1	MSMA	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
62719-92	CONFRONT	0.89	0.00	1	Clopyralid, triethanolamine; Triclopyr, triethylamine salt	1	NO	NO
80697-4-86064	ARMOR TECH PAC 223	0.11	0.00	1	Paclobutrazol	3	NO	NO
59639-132	V-10137 1 EC (HERBICIDE)	0.01	0.00	1	Clethodim	3	NO	NO
62719-483-87245	CHOICE TURF PREMIUM LAWN CARE FERTILIZER WITH DIMENSION 0.125% HERBICI	0.00	6,250.00	1	Dithiopyr	3	NO	NO
10404-86	LESCO DIMENSION 0.15% PLUS FERTILIZER	0.00	4,000.00	1	Dithiopyr	3	NO	NO
9198-176	ANDERSON'S GOOSE/CRABGRASS CONTROL	0.00	262.00	1	Bensulide; Oxadiazon	2	YES	YES
228-379	DIABLO HERBICIDE	0.00	15.00	1	Dicamba, dimethylamine salt	3	NO	NO
524-535	ROUNDUP QUIKPRO HERBICIDE	0.00	9.38	1	Glyphosate, monoammonium salt; Diquat dibromide	3	NO	NO
228-397	RIVERDALE VANQUISH HERBICIDE	0.00	7.00	1	Dicamba, diglycolamine salt	3	NO	NO
81927-38	ALLIGARE 2,4-D AMINE	0.00	2.00	1	2,4-D, dimethylamine salt	1	NO	NO
Fungicides								
100-1364	DACONIL ACTION	577.75	0.00	78	Acibenzolar-S-methyl; Chlorothalonil	2	YES	NO
94485-1	COMPANION LIQUID BIOLOGICAL FUNGICIDE	377.65	0.00	65	Bacillus subtilis GBO3	3	NO	NO
432-942	BANOL TURF AND ORNAMENTAL FUNGICIDE	134.54	144.52	61	Propamocarb hydrochloride	3	NO	NO
432-1541	12ESP705 FUNGICIDE	0.00	2,249.75	43	Fosetyl-Al	3	NO	NO
53883-323-86064	ARMOR TECH TMI 2020XL	121.00	200.13	37	Thiophanate-methyl; Iprodione	3	YES	YES
100-1093	HERITAGE FUNGICIDE	8.29	66.91	37	Azoxystrobin	3	NO	NO
53883-353	QUALI-PRO T-NEX	30.57	2.88	34	Trinexapac-ethyl	3	NO	NO
70299-12	ZEROTOL 2.0	8.74	0.00	26	Peroxyacetic acid; Hydrogen peroxide	1	NO	NO
432-1445	BAYLETON FLO TURF AND ORNAMENTAL FUNGICIDE	42.36	0.00	21	Triadimefon	3	YES	YES
70127-2	NOVOZYMES BIOFUNGICIDE GREEN RELEAF 710-140	95.60	0.00	20	Bacillus licheniformis SB3086; IBA	3	NO	NO
66222-117-86064	ORIO 3.6F	35.13	200.25	20	Tebuconazole	3	YES	NO
70506-262	PEGASUS 6L	165.12	0.00	18	Chlorothalonil	2	YES	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
432-1505	CHIPCO 26019T FUNGICIDE	64.33	232.25	17	Iprodione; Trifloxystrobin	3	YES	NO
7969-349	Xzemplar Fungicide	16.93	0.00	17	Fluxapyroxad	3	NO	NO
432-890	ALIETTE WDG BRAND FUNGICIDE	0.00	610.65	17	Fosetyl-Al	3	NO	NO
86064-1	ARMORTECH CLT 825 DF	0.00	545.00	17	Chlorothalonil	2	YES	NO
264-1155	RHAPSODY ASO	181.40	0.00	16	QST 713 strain of dried Bacillus subtilis	3	NO	NO
89442-37	Fluazinam 40SC Select	11.47	98.75	16	Fluazinam	3	YES	NO
60063-7-10404	ECHO 720	121.77	0.00	15	Chlorothalonil	2	YES	NO
432-1446	TARTAN FLO FUNGICIDE	20.84	147.38	15	Triadimefon; Trifloxystrobin	3	YES	YES
50534-202-100	MANICURE ULTREX TURF & ORNAMENTAL	0.00	534.40	15	Chlorothalonil	1	YES	NO
432-888	CHIPCO 26019 FLO BRAND FUNGICIDE	174.71	87.50	14	Iprodione	3	YES	NO
53883-310	QUALI-PRO CHLOROTHALONIL 720 SFT	74.40	0.00	14	Chlorothalonil	2	YES	NO
66222-117	ORIOUS 3.6F	18.57	0.00	14	Tebuconazole	3	YES	NO
68539-3	T-22G BIOLOGICAL PLANT PROTECTANT GRANULES	0.00	36.00	14	Trichoderma harzianum rifai strain KRL-AG2	3	NO	NO
100-1633	Secure Action	17.46	0.00	12	Fluazinam; Acibenzolar-S-methyl	3	YES	NO
68173-3-1001	AFFIRM WDG	0.00	94.56	12	Polyoxin D zinc salt	3	NO	NO
100-1347	CONCERT II	90.00	0.00	11	Propiconazole	1	YES	NO
432-1529	TEBUCONAZOLE SC TURF AND ORNAMENTAL FUNGICIDE	23.14	21.88	11	Tebuconazole	3	YES	NO
53883-433	QUALI-PRO MEFENOXAM 2AQ	5.41	0.00	11	Mefenoxam	2	NO	NO
53883-343	AZOXYSTROBIN 50 WG	0.00	4.48	11	Azoxystrobin	3	NO	NO
71512-20-100	SECURE	13.98	0.00	10	Fluazinam	2	YES	NO
228-633	NUFARM PROPICONAZOLE SPC EC FUNGICIDE	11.30	0.00	10	Propiconazole	2	YES	NO
59639-144	V-10116 VPP FUNGICIDE	0.00	93.04	8	Metconazole	3	NO	NO
71512-13-2217	SEGWAY FUNGICIDE	5.06	19.63	7	Cyazofamid	3	NO	NO
100-1326	BANNER MAXX II	34.50	0.00	6	Propiconazole	3	YES	NO
89442-28	IPRODIONE 2F SELECT	26.56	0.00	6	Iprodione	3	YES	NO
7969-290	INSIGNIA SC INTRINSIC BRAND FUNGICIDE	13.80	0.00	6	Pyraclostrobin	2	NO	NO
100-1433	BRISKWAY	9.02	0.00	6	Azoxystrobin; Difenoconazole	3	YES	NO
100-892	ARBOTECT 20-S FUNGICIDE	5.14	0.00	6	Thiabendazole	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
70299-15	GC PRO	0.00	1,002.00	6	Sodium percarbonate	1	NO	NO
70299-1	ZEROTOL ALGAECIDE/FUNGICIDE	61.08	0.00	5	Hydrogen peroxide	1	NO	NO
50534-209-100	MANICURE 6 FLOWABLE	25.00	0.00	5	Chlorothalonil	3	YES	NO
1001-69	3336 F	9.34	0.00	5	Thiophanate-methyl	3	YES	YES
53883-375-86064	QUALI-PRO IPRO 2SE	5.00	156.69	5	Iprodione	3	YES	NO
71512-13-279	SEGWAY FUNGICIDE	4.73	0.00	5	Cyazofamid	3	NO	NO
7969-350	LEXICON INTRINSIC BRAND FUNGICIDE	3.53	0.00	5	Fluxapyroxad; Pyraclostrobin	3	NO	NO
86064-4	ARMOR TECH PPZ 143 MC	2.22	65.75	5	Propiconazole	2	YES	NO
62719-402-10404	DITHANE DF RAINSHIELD	0.00	120.00	5	Mancozeb	3	YES	NO
432-888-10404	CHIPCO 26019 FLO BRAND FUNGICIDE	28.80	0.00	4	Iprodione	3	YES	NO
228-623	NUFARM PROPICONAZOLE SPC 14.3 MEC FUNGICIDE	23.17	0.00	4	Propiconazole	2	YES	NO
50534-211-100	DACONIL ZN FLOWABLE FUNGICIDE	20.00	0.00	4	Chlorothalonil	2	YES	NO
42750-99	TEBUCONAZOLE 3.6FL	17.34	0.00	4	Tebuconazole	3	YES	NO
228-630-10404	NUFARM TM+IP SPC FUNGICIDE	10.88	0.00	4	Iprodione; Thiophanate-methyl	3	YES	YES
228-623-10404	NUFARM PROPICONAZOLE SPC 14.3 MEC FUNGICIDE	9.28	0.00	4	Propiconazole	2	YES	NO
67702-2-67690	CAMELOT O FUNGICIDE/BACTERICIDE	5.99	0.00	4	Copper octanoate	3	NO	NO
264-1155-68539	RHAPSODY ASO	5.50	0.00	4	QST 713 strain of dried Bacillus subtilis	3	NO	NO
228-737	NUP-15013 Fungicide	3.41	0.00	4	Fluazinam	3	YES	NO
84059-3-87865	REGALIA PTO BIOFUNGICIDE FOR USE ON TURF AND ORNAMENTALS	2.13	0.00	4	Reynoutria sachalinensis	3	NO	NO
7969-184	Insignia Fungicide	1.48	0.00	4	Pyraclostrobin	3	NO	NO
70506-272	PEGASUS DFX	0.00	415.00	4	Chlorothalonil	1	YES	NO
67690-77	ZIO	0.00	70.00	4	Pseudomonas chlororaphis strain AFS009	3	NO	NO
100-1434	MEDALLION WDG	0.00	0.13	4	Fludioxonil	3	NO	NO
42750-211	PROPICONAZOLE 41.8% EC	1.77	0.00	3	Propiconazole	2	YES	NO
400-422-59807	TERRAZOLE L	1.63	0.00	3	Terrazole	1	YES	NO
86064-6	ArmorTech ZOXY 2F	0.00	29.25	3	Azoxystrobin	3	NO	NO
4-62	BONIDE SULPHUR PLANT FUNGICIDE MICRONIZED SPRAY OR DUST	0.00	11.25	3	Sulfur	3	NO	NO

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432-1223	PROSTAR 70 WP	0.00	5.63	3	Flutolanil	3	NO	NO
228-626	NUFARM T-METHYL PRO 4.5 F FUNGICIDE	17.89	0.00	2	Thiophanate-methyl	3	YES	YES
432-1522	ES TC006A	6.88	0.00	2	Mono- and di-potassium salts of phosphorous acid	0	NO	NO
228-626-52287	NUFARM T-METHYL PRO 4.5 F FUNGICIDE	6.31	0.00	2	Thiophanate-methyl	3	YES	YES
228-623-88975	NUFARM PROPICONAZOLE SPC 14.3 MEC FUNGICIDE	4.81	0.00	2	Propiconazole	2	YES	NO
70051-107-59807	TRIATHLON BA	3.00	0.00	2	Bacillus subtilis var. amyloliquefaciens strain D747	3	NO	NO
228-739	NUP-15014 Fungicide	2.71	0.00	2	Tebuconazole; Fluazinam	3	YES	NO
89442-16	METALAXYL 4L SELECT	2.41	0.00	2	Metalaxyl	3	NO	NO
66222-216	QUALI-PRO MEFENOXAM 2AQ	2.16	0.00	2	Mefenoxam	2	NO	NO
73806-1	K-PHITE 7LP Fungicide	1.50	0.00	2	Mono- and di-potassium salts of phosphorous acid	3	NO	NO
42750-292	AZOXY 11% + TEB 26% FL	1.20	0.00	2	Azoxystrobin; Tebuconazole	3	YES	NO
83416-1	RELIANT SYSTEMIC Fungicide	1.13	0.00	2	Mono- and di-potassium salts of phosphorous acid	3	NO	NO
100-1600	A19649 200SC Turf	0.43	0.00	2	Pydiflumetofen	3	NO	NO
9198-115	THE ANDERSONS TURF FUNGICIDE WITH 5.0% DACONIL	0.00	1,400.00	2	Chlorothalonil	1	YES	NO
228-652	NUFARM T-METHYL 4.5 F Fungicide	0.00	104.81	2	Thiophanate-methyl	3	YES	YES
432-890-10404	ALIETTE WDG BRAND FUNGICIDE	0.00	88.00	2	Fosetyl-Al	3	NO	NO
7969-255	HONOR FUNGICIDE	0.00	37.14	2	Nicobifen; Pyraclostrobin	3	YES	NO
7969-196	EMERALD FUNGICIDE	0.00	19.55	2	Nicobifen	2	YES	NO
464-693-63288	CHEMICAR 15	75.00	0.00	1	Glutaraldehyde	1	NO	NO
5481-619	EQUUS 720 SST	44.10	0.00	1	Chlorothalonil	2	YES	NO
66222-134	THIOPHANATE METHYL 4.5 F	34.00	0.00	1	Thiophanate-methyl	3	YES	YES
42750-252	PROPICONAZOLE 1.3 ME	20.00	0.00	1	Propiconazole	2	YES	NO
70506-114	TEBUCONAZOLE 3.6 F FUNGICIDE	10.20	0.00	1	Tebuconazole	3	YES	NO
89442-14	THIOPHANATE METHYL 4.5F SELECT	8.20	0.00	1	Thiophanate-methyl	3	YES	YES
53883-375	QUALI-PRO IPRO 2SE	7.50	0.00	1	Iprodione	3	YES	NO
53883-380	QUALI-PRO IPRO 2	5.00	0.00	1	Iprodione	3	YES	NO
53883-309	QUALI-PRO ENCLAVE 5.3F	4.10	0.00	1	Chlorothalonil; Thiophanate-methyl; Iprodione; Tebuconazole	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
100-796	SUBDUE MAXX	4.00	0.00	1	Mefenoxam	3	NO	NO
53883-363	BUMPER 14.3 EC (PROPICONAZOLE) FUNGICIDE	2.50	0.00	1	Propiconazole	3	YES	NO
228-737-52287	NUP-15013 Fungicide	2.00	0.00	1	Fluazinam	3	YES	NO
100-1448	MEDALLION SC	1.00	0.00	1	Fludioxonil	3	NO	NO
87290-44-86064	WILLOWOOD AZOXYSTROBIN 2.08SC	0.13	0.00	1	Azoxystrobin	3	NO	NO
62719-388	FORE 80WP RAINSHIELD	0.00	96.00	1	Mancozeb	3	YES	NO
5481-617	EQUUS DF	0.00	45.00	1	Chlorothalonil	2	YES	NO
100-1550	HERITAGE ACTION	0.00	8.75	1	Acibenzolar-S-methyl; Azoxystrobin	3	NO	NO
53883-343-89442	AZOXYSTROBIN 50 WG	0.00	4.38	1	Azoxystrobin	3	NO	NO
70506-185	PENNCOZEB 75 DF	0.00	4.00	1	Mancozeb	3	YES	NO
68539-13	PB133	0.00	2.50	1	Potassium bicarbonate	3	NO	NO
Other (Repellents, Biochemical Pesticides, Etc.)								
4238-29	HYPOCHLORITE SOLUTION	105.00	0.00	45	Sodium hypochlorite	1	NO	NO
14802-8-74466	MICROBE LIFE ALGAWAY 5.4 ALGAECIDE FOR PONDS	5.94	0.00	21	Poly(oxyethylene) (dimethylimino) ethylene (dimethylimino) ethylene dichloride	3	NO	NO
60061-142	PETTIT NEPTUNE 5 HARD HYBRID ABLATIVE ANTIFOULING PAINT	11.50	0.00	12	Copper oxide (ous)	2	NO	NO
59807-4	HORMODIN 1	0.00	0.26	6	IBA	3	NO	NO
2693-193	OPTIMA-BLUE	2.00	0.00	2	Copper oxide (ous)	2	NO	NO
73049-15	PROGIBB 4% PLANT GROWTH REGULATOR SOLUTION	0.00	0.00	2	Gibberellins	2	NO	NO
67702-3-54705	NEU1165M SLUG AND SNAIL BAIT	0.00	6.00	2	Iron phosphate	3	NO	NO
63838-5	BROMMAX 7.1	70.00	0.00	1	Sodium bromide; Sodium hypochlorite	1	NO	NO

APPENDIX 3: Complete Listing of “Best Management Practices” Insecticides Used Citywide in 2020

EPA Reg. #	EPA Prod Name	Volume in Gallons	Weight in Pounds	Total Applications	Active Ingredient Data
73049-429	VECTOMAX FG	0.00	31159.96	419,640	Bacillus sphaericus; Bacillus thuringiensis, subsp. Israelensis, strain AM 65-52
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	1100.29	29,767	Indoxacarb
73079-14	IMIDACLOPRID GRANULAR BAIT	0.00	2070.21	11,669	Imidacloprid
1021-2593	VENDETTA PLUS COCKROACH GEL BAIT	0.00	270.95	8,950	Avermectin; Pyriproxyfen
64405-2	REDZONE BAIT	0.00	2992.67	6,976	Boric acid
1021-2796	MGK Formula 3113	0.00	115.89	4,621	Clothianidin; Pyriproxyfen
432-1460	MAXFORCE FC ROACH KILLER BAIT GEL F.05	0.00	84.93	3,473	Fipronil
432-1257	MAXFORCE ROACH BAIT F.05	0.00	81.92	3,180	Fipronil
73766-1	GOURMET ANT BAIT GEL	0.02	75.54	2,171	Disodium octaborate tetrahydrate
73079-4	BORACTIN INSECTICIDE POWDER	0.00	396.26	1,283	Boric acid
432-1259	PRODUCT: RBF5	0.00	33.21	1,191	Fipronil
100-1486	DUPONT ADVION COCKROACH BAIT ARENA	0.12	716.12	942	Indoxacarb
100-1498	DUPONT ADVION ANT GEL	0.13	58.97	849	Indoxacarb
6218-47	SUMMIT B.T.I. BRIQUETS	0.00	145.39	747	Bacillus thuringiensis subspecies Israelensis strain BMP 144
432-1506	MAXFORCE QUANTUM ANT BAIT	0.00	7.87	452	Imidacloprid
73079-6	GREEN ZONE GRANULAR BAIT	0.02	93.16	440	Boric acid
100-1501	DUPONT ARILON INSECTICIDE	145.85	0.00	389	Indoxacarb
73049-20	VECTOLEX CG BIOLOGICAL LARVICIDE	0.00	981.82	330	Bacillus sphaericus
100-1290	OPTIGARD COCKROACH GEL BAIT	0.00	10.20	223	Emamectin, benzoate
499-370	PT 370 ASCEND FIRE ANT STOPPER BAIT	0.00	31.75	199	Avermectin
1021-1603	NYLAR 10EC	52.95	0.00	116	Pyriproxyfen
432-1375	PRE-EMPT FLY BAIT	0.00	32.00	105	Imidacloprid; (Z)-9-Tricosene
64405-8	NIBOR BORATE INSECTICIDE AND FUNGICIDE	40.00	6.72	81	Disodium octaborate tetrahydrate
432-1455	BES 0026 FLY SPOT BAIT	2.47	3.86	63	Imidacloprid; (Z)-9-Tricosene
100-1483	ADVION INSECT GRANULE	0.00	44.88	59	Indoxacarb
73049-10	VECTOBAC G BIOLOGICAL LARVICIDE GRANULES	0.00	17682.00	23	Bacillus thuringiensis, subsp. Israelensis, strain AM 65-52
48813-1	SUFFOIL-X	12.56	0.00	17	Petroleum distillates
89459-59	ENVI ACU CONTACT Insecticide	1.46	2.87	15	Phenylethyl propionate
1021-1828	MGK ROACH BAIT 2822	0.00	0.43	15	Avermectin
70051-2	TRIACT 70	1.39	0.00	13	Neem oil
10163-324	M-PEDE INSECTICIDE/FUNGICIDE	0.14	0.00	13	Potassium laurate
62719-291	CONSERVE SC TURF AND ORNAMENTAL	0.10	0.00	13	Spinosad
499-406	AVERT PRESCRIPTION TREATMENT TC 93A BAIT	0.00	0.42	12	Avermectin
73049-501	VBC-60394 FG BIOLOGICAL LARVICIDE FINE GRANULE	0.00	48.00	10	Bacillus thuringiensis, subsp. Israelensis, strain AM 65-52

59639-96	DISTANCE INSECT GROWTH REGULATOR	0.12	0.00	9	Pyriproxyfen
241-313	SIEGE PBS GEL INSECTICIDE	0.00	14.50	7	Hydramethylnon
73049-38	VECTOBAC 12AS BIOLOGICAL LARVICIDE	0.00	0.14	7	Bacillus thuringiensis, subsp. Israelensis, strain AM 65-52
53883-335	N + P Regulator	0.08	0.00	6	Pyriproxyfen; Novaluron
62719-523	BLACKHAWK	0.00	52.75	6	Spinosad
85306-1	SELECT TCS	0.00	0.01	6	Fipronil
100-1487	PROVAUNT	0.00	19.13	5	Indoxacarb
73049-39	DIPEL DF DRY FLOWABLE BIOLOGICAL INSECTICIDE	0.09	0.35	4	Bacillus thuringiensis, subsp. Kurstaki, strain ABTS-351, fermentation solids and solubles
4822-472	RAID MAX ROACH BAIT V	0.00	1.00	4	Avermectin
7969-210	TERMIDOR SC TERMITICIDE/INSECTICIDE	4.00	0.00	2	Fipronil
2724-375	ALTOSID BRIQUETS	0.00	0.15	2	S-Methoprene
499-527	PRESCRIPTION TREATMENT BRAND ALPINE DUST INSECTICIDE	0.00	0.05	2	Dinotefuran; Diatomaceous earth
63191-16	MILKY SPORE GRANULAR	0.00	40.00	1	Spores of Bacillus popilliae
432-1256	MAXFORCE FC ANT BAIT STATIONS	0.00	0.05	1	Fipronil
100-1485	DUPONT ADVION ANT BAIT ARENA	0.00	0.03	1	Indoxacarb
1021-1828	MGK ROACH BAIT 2821	0.00	0.02	1	Avermectin