



Pesticide Use by New York City Agencies in 2021

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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 all 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 10% of the total pounds of solid pesticides applied within the five boroughs of New York City when excluding the large quantity of mosquito larvicides applied.

In 2021, 29 municipal agencies reported their pesticide use to DOHMH. This report summarizes pesticides applied by or on behalf of agencies on city-owned or -leased property.

Key findings include:

- Pesticides were applied 709,855 times by New York City agencies in 2021. Agencies used 7,327 gallons of liquid and 178,838 pounds of solid pesticide products (Table 1). There was an increase in number of applications due to a broad, citywide mosquito larvae catch basin treatment program, but total product use by weight remained stable, i.e., there were more applications of less pesticide.
- Due to the citywide catch basin larviciding program, mosquitos were the most targeted pests in 2021, with cockroaches, rats, mice, and ants making up the top 5 targets (by total number of applications in descending order) (Table 3).
- Most liquid pesticide products (49% by volume) used by City Agencies were fungicide, and most solid products (45% by weight) were insecticides (Table 1). Excluding DOHMH mosquito larviciding conducted to prevent spread of West Nile Virus and other mosquito-borne diseases (41% of all solid products), rodenticides made up the largest percentage of solid pesticide products used (59% by weight).
- Insecticides
 - Insecticides were the most frequently applied type of pesticide, accounting for 87% of all applications (Table 1).
 - The volume of liquid insecticides decreased 42% in 2021, compared with 2020 (Figure 2). This decrease was due to a much smaller volume of insect growth regulator applications targeting a broad range of pests at NYCHA (Figure 6).
 - Liquid pyrethroid products targeting cockroaches and bedbugs decreased 38% and 15% respectively from 2020 to 2021, continuing a downward trend (Figure 6).

- A moderate increase (23%) in the number of mosquito larvicide applications was associated with a 46% increase in use of these products by weight, compared with 2020.
- “Best Management Practices” (BMP) insecticide products (Appendix 3) include gel and bait insecticides with little potential for human exposure. They accounted for 94% of insecticide applications in 2021 versus 91% in 2020. This slight increase was mainly due to multiple citywide applications of mosquito larvicide in sewer catch basins. BMP application amounts by weight to treat cockroaches decreased by 55% from 2020 to 2021, likely due to reduced pest activity as pyrethroid use also declined (Figure 4).
- Herbicides
 - Relative to other liquid pesticides, liquid herbicide product use remained low in 2021 (Figure 2). However, volume increased by 40%, with a 46% rise in the use of glyphosate products (773 to 1079 gallons), though amounts remained 88% lower than in 2012 (Figure 3). The Parks Department has phased out the use of glyphosate products in areas of parks accessible to the public according to 2021 revisions to Local Law 37.
 - The use of solid herbicide products in 2021 decreased 22% compared with 2020, but the use of outdoor granular turf formulations, mainly on golf courses and large institutional lawns, continued increasing over earlier years.
 - The Parks Department no longer applies pre-emergent herbicides near roadways or along walkways and perimeters of city parks.
- Rodenticides
 - Use of solid rodenticide products increased 38% by weight compared with 2020 (Figure 1). The DOHMH calibrates rodenticide use based on findings from neighborhood rat ‘indexing’, and the increase reflects a rise in the number of inspections in 2021, compared with the lower number of inspections DOHMH conducted in 2020, due to the COVID-19 pandemic.

Pesticide Use by New York City Agencies in 2021

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 of 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. In May 2021 the law was further amended to include prohibition of any additional chemicals on the EPA and California lists since the original law. The legislation further amended the law to prohibit any chemicals listed as a carcinogen by the World Health Organization’s International Association for Research on Cancer (IARC) – including glyphosate, a commonly used herbicide listed as “probably carcinogen to humans” – as of the date of the law’s passage. Additional prohibitions on use of synthetic pesticide chemicals in city parks will go into effect in late 2022, eighteen months after the adoption of the amended law.

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 issues annual waivers from prohibition the use of all insecticide gels containing the ingredients fipronil, hydramethylnon, and avermectin due to their effectiveness and low potential for human exposure. 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, as well as the original waiver applications.

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 fourteenth annual summary report demonstrates that 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 2021, all agencies reported data electronically.

II. SOURCES OF PESTICIDE USE DATA

New York City agencies are required to report their pesticide use for the preceding calendar year to DOHMH by February 1. This report summarizes data received by the DOHMH for pesticides applied during calendar year 2021.

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, 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, the State of California's List of Chemicals Known to the State to Cause Cancer or Reproductive Toxicity, and the IARC carcinogen list, all 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.

Summary statistics are reported by agency, based on records DOHMH has evaluated for completeness. It is still not possible to fully determine whether each agency was able to report every 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. Additional limitations in the data include:

- 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.

- Decisions on whether a single application is reported by an entire building or by individual apartment or office suite, as well as reporting of diluted versus undiluted amounts of applied pesticides, can significantly affect the reported amounts per applications and total number of applications in a year. Because of variations in practice among agencies and contractors, uniformity in reporting cannot be assured.

Despite the above-mentioned limitations, the data continue to improve over previous years with increased agency and contractor use of NYCPURS. Reporting errors, especially in reporting incorrect units, were further reduced in 2021 due to input standardization and consistent formatting in the NYCPURS system.

In 2021, 99% of records were either imported or directly entered into the NYCPURS system, with the 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. 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 2021, Parks, NYCHA, and DOE also continued using dry ice (frozen carbon dioxide) as an alternative rodenticide in sensitive outdoor locations, such as near city parks and 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 2021 were: Contrac All-Weather Blox®, Contrac Rodenticide®, Final Rodenticide® and Difethialone Paste Place Packs®.

In 2021, a total of 62,511 pounds of rodenticides were applied by City agencies, accounting for 35% by weight of solid pesticides applied – 59% by weight when excluding mosquito larvicides (Table 1).

Insecticides

A total of 2,464 gallons and 80,189 pounds of insecticides were applied by New York City (NYC) agencies in 2021, accounting for 34% by volume, and 45% by weight of the total

applications. Biological insecticides applied to target mosquito larvae account for 91% of insecticides by weight (Table 1). When those products are excluded, 7,012 pounds of insecticides by weight were applied, making up 7% of solid pesticides applied. Insecticides used by NYC agencies in 2021 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 2021 include Whitmire Optem ME PT 600®, Delta 4.75% SC®, Demand CS Insecticide®, Temprid SC Insecticide®, Suspend SC Insecticide® and Tempo SC Insecticide®.

Together, pyrethrins and pyrethroids accounted in 2021 for 67% of total liquid insecticides applied by volume and 1% of solid insecticides by weight – 7% by weight when excluding mosquito larvicides. These products made up 4% of the total number of insecticide applications. There was a 3% increase in pyrethroids applied by volume in 2021.

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 2021 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 2021 were carbaryl and methomyl. Organophosphate and carbamate products applied by agencies in 2021 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 2021, the use of organophosphates and carbamates accounted for only 1%

of total liquid insecticides applied by agencies by volume – a decrease from 2020 levels – and <1% of total solids by weight after 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 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 2021, 21% of the total insecticides applied by volume, and 97% by weight, were insecticidal dusts, gels and baits, insect growth regulators, or biological larvicides. These BMP products made up 94% of the total number of insecticide applications, a 16% increase in the number of applications compared with 2020, mostly due to citywide larvaciding in sewer catch basins. Excluding mosquito larvicides, the total drops to 39% of solid insecticide products by weight.

Herbicides

New York City agencies used herbicides in 2021 primarily for vegetation control in parks and for the maintenance of highways and street medians. The active ingredients most used were glyphosate, dinitroanilines, chlorophenoxyacetic acids and ureas. A total of 1,079 gallons and 27,067 pounds of herbicides were applied in 2021, accounting for 16% of total pesticide volume and 15% of total pesticide weight overall (26% after excluding mosquito larvaciding). (Table 1)

Glyphosate

Though recent use by NYC agencies has been declining, glyphosates remain a commonly used liquid herbicide in the US, 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

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.

high in certain toxic metals could present significant risk for developing kidney damage in agricultural workers. The amendments passed in 2021 now prohibit the use of glyphosate products due to IARC classifying the chemical as a probable carcinogen. 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 2021, 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 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 dinitroaniline products containing pendimethalin and prodiamine in 2021, including Barricade 4FL® and Pendulum CS Herbicide® 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 a – mecoprop-p – as a suspected carcinogen. 2,4-D is also now prohibited due to classification by IARC as possibly carcinogenic to humans. Common chlorophenoxyacetic acid active ingredients are 2,4-D, MCPP, mecoprop-p, dicamba and MCPA. Common chlorophenoxyacetic acid products used by agencies in 2021 were Riverdale Vanquish Herbicide®, Diablo Herbicide® and Speed Zone Broadleaf Herbicide®. In 2021, 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, botanic gardens, and NYCHA property.

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. Rimsulfuron, a urea herbicide among the twenty most heavily used herbicides reported by commercial applicators in the private market in the City in 2017 (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 2021 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 2021 were Sedgehammer®, Oust XP Herbicide®, Dupont Viewpoint Herbicide® and Nufarm Prosedge Selective Herbicide 2 ®. In 2021, 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 2021 were azoxystrobin, chlorothalonil, tebuconazole, fosetyl-Al, thiophanate-methyl, propiconazole, azoxystrobin, iprodione and triadimefon. Common fungicide products applied in 2021 include Daconil Action®, Banol Turf and Ornamental Fungicide®, Bayleton Flo Turf and Ornamental Fungicide®, Armor Tech TMI 2020XL®, 12ESP705 Fungicide®, and Lesco Manicrue 6FL®.

Fungicides represented less than 1% of the total number of pesticide applications in 2021, but they made up 49% of total volume of liquid pesticides applied and 5% of total weight of solid products – 9% 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 types of pesticide reported by volume. Much of this increase is due to a shift to liquid formulations from solid products (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 709,855 times by New York City agencies in 2021, 12% more than in 2020 due to an increase in larvicide applications, with a 21% 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 (45% by weight), and fungicides were the most heavily used liquid (49% by volume). In 2021, 91% of the insecticides reported by weight were bacterial products designed to kill mosquito larvae in stagnant waters away from human contact. Excluding these products used as part of DOHMH mosquito-borne disease control programs, 7% of total solid pesticides by weight were insecticides and 59% were rodenticides. 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 2021, by Pesticide Type

Pesticide Type	Volume		Weight			Times Applied	
	Gallons	% of Total	Pounds	% of Total	% without larvicide	Number	% of Total
Rodenticide	17	0.2%	62,511	35.0%	59.2%	87,784	12.4%
Insecticide	2,464	33.6%	80,189	44.8%	6.6%	618,507	87.1%
Herbicide	1,079	14.7%	27,067	15.1%	25.6%	2,469	0.3%
Fungicide	3,567	48.7%	9,067	5.1%	8.6%	1,000	0.1%
Other	201	2.7%	4	0.002%	0.003%	95	0.01%
Totals	7,327		178,838			709,855	

Table 2 lists the ten most frequently used products for each pesticide type on New York City owned or leased property in 2021. 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 2021 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	12,128.45	48,756	Difethialone	3	NO	NO
12455-69	CONTRAC RODENTICIDE	0.00	26,791.33	16,205	Bromadiolone	3	NO	NO
12455-56	DITRAC TRACKING POWDER	0.00	109.79	6,675	Diphacinone	2	NO	NO
12455-133	CONTRAC WITH LUMITRACK	0.00	756.65	2,154	Bromadiolone	3	NO	NO
12455-146	CONTRAC SOFT BAIT	0.00	846.99	2,142	Bromadiolone	3	NO	NO
7173-297	BROMADIOLONE PASTE 0901	0.00	632.05	1,970	Bromadiolone	3	NO	NO
12455-90	FINAL RODENTICIDE	0.00	1,547.13	1,776	Brodifacoum	3	NO	NO
12455-79	CONTRAC ALL-WEATHER BLOX	0.59	1,425.36	1,499	Bromadiolone	3	NO	NO
12455-86	CONTRAC RODENTICIDE PLACE PAC	3.30	2,281.44	1,403	Bromadiolone	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
12455-139	Final Soft Bait	0.00	259.46	1,098	Brodifacoum	3	NO	NO
Insecticides								
73049-429	VECTOMAX FG	0.00	18,809.51	515,780	Bacillus sphaericus; Bacillus thuringiensis, subsp. Israelensis, strain AM 65-52	3	NO	NO
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	780.10	29,255	Indoxacarb	3	NO	NO
499-510	PRESCRIPTION TREATMENT BRAND ALPINE COCKROACH GEL BAIT PISTON CAN	0.00	97.14	11,944	Dinotefuran	3	NO	NO
64405-2	REDZONE BAIT	0.00	1,061.54	7,351	Boric acid	3	NO	NO
1021-2593	VENDETTA PLUS COCKROACH GEL BAIT	0.02	154.62	6,906	Avermectin; Pyriproxyfen	3	NO	YES
432-763	SUSPEND SC INSECTICIDE	5.07	71.01	6,801	Deltamethrin	3	NO	NO
432-1483	TEMPRID SC INSECTICIDE	2.00	0.00	6,096	Cyfluthrin, beta; Imidacloprid	3	NO	NO
1021-2796	MGK Formula 3113	0.00	92.80	5,470	Clothianidin; Pyriproxyfen	0	NO	NO
397-13	STERI-FAB	611.31	621.04	4,928	Phenothrin; Isopropyl alcohol; Alkyl (60%C14, 25%C12, 15%C16) dimethylbenzyl ammonium chloride; Didecyl dimethyl ammonium chloride	2	NO	NO
432-1460	MAXFORCE FC ROACH KILLER BAIT GEL F.05	0.01	54.18	3,526	Fipronil	3	YES	NO
Herbicides								
62719-176	PATHFINDER II	215.54	0.00	383	Triclopyr, butoxyethyl ester	3	NO	NO
432-1580	DUPONT VIEWPOINT HERBICIDE	2.20	63.02	293	Aminocyclopyrachlor; Imazapyr; Metsulfuron-methyl	3	NO	NO
62719-556	ACCORD XRT II	62.34	0.00	291	Glyphosate, dimethylammonium salt	3	NO	NO
228-397	RIVERDALE VANQUISH HERBICIDE	42.48	0.00	279	Dicamba, diglycolamine salt	3	NO	NO
62719-527	GARLON 4 ULTRA	45.41	5.56	220	Triclopyr	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
432-1516	ESPLANADE 200 SC	7.65	0.00	105	Indaziflam	3	NO	NO
100-937	PRIMO MAXX	38.12	0.00	93	Trinexapac-ethyl	3	NO	NO
62719-324	GLYPRO	23.22	0.00	85	Glyphosate, isopropylamine salt	3	NO	NO
524-579	ROUNDUP PROMAX	50.39	3.64	62	Glyphosate, potassium salt	3	NO	NO
241-437-67690	CLEARCAST HERBICIDE	18.84	0.00	56	Imazamox	3	NO	NO
Fungicides								
100-1364	DACONIL ACTION	703.27	0.00	81	Acibenzolar-S-methyl; Chlorothalonil	2	YES	NO
432-942	BANOL TURF AND ORNAMENTAL FUNGICIDE	152.58	43.75	54	Propamocarb hydrochloride	3	NO	NO
53883-323-86064	ARMOR TECH TMI 2020XL	115.25	370.00	45	Thiophanate-methyl; Iprodione	3	YES	YES
432-1541	12ESP705 FUNGICIDE	0.00	2243.02	44	Fosetyl-Al	3	NO	NO
53883-353	QUALI-PRO T-NEX	42.65	0.00	42	Trinexapac-ethyl	3	NO	NO
68539-3	T-22G BIOLOGICAL PLANT PROTECTANT GRANULES	0.00	111.00	36	Trichoderma harzianum rifai strain KRL-AG2	3	NO	NO
66222-117-86064	ARMOR TECH TEB360 XL	56.91	177.84	30	Tebuconazole	3	YES	NO
50534-202-100	MANICURE ULTREX TURF & ORNAMENTAL	0.00	979.40	28	Chlorothalonil	1	NO	NO
432-1446	TARTAN FLO FUNGICIDE	57.00	166.88	26	Triadimefon; Trifloxystrobin	3	YES	YES
264-1155	RHAPSODY AS0	211.60	0.00	24	QST 713 strain of dried Bacillus subtilis	3	NO	NO
Other								
4238-29	HYPOCHLORITE SOLUTION	96.25	0.00	42	Sodium hypochlorite	1	NO	NO
60061-142	PETTIT NEPTUNE 5 HARD HYBRID ABLATIVE ANTIFOULING PAINT	28.00	0.00	28	Copper oxide (ous)	2	NO	NO
59807-4	HORMODIN 1	0.00	0.57	13	IBA	3	NO	NO
14802-8-74466	MICROBE LIFE ALGAWAY 5.4 ALGAECIDE FOR PONDS	1.25	0.00	5	Poly(oxyethylene) (dimethylimino) ethylene (dimethylimino) ethylene dichloride	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
73049-15	PROGIBB 4% PLANT GROWTH REGULATOR SOLUTION	0.00	0.00	5	Gibberellins	2	NO	NO
63838-5	BROMMAX 7.1	75.00	0.00	1	Sodium bromide; Sodium hypochlorite	1	NO	NO
55943-1	HOT FOOT BIRD REPELLENT	0.00	3.00	1	Polybutenes	3	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, 2021

Target Pest	Volume in Gallons	Weight in Pounds	Total Applications	% of Total Applications
Mosquitoes	526	73,296	516,190	72.72%
Roaches	626	5,092	89,500	12.61%
Rats	18	41,354	59,643	8.40%
Mice	10	20,951	27,690	3.90%
Ants	119	200	3,719	<1%
Bedbugs	55	2,713	3,572	<1%
Weeds, vines, or grasses	1,079	27,067	2,469	<1%
Other Crawling Insects	220	2,013	2,240	<1%
Flying insects	186	617	2,095	<1%
Other Pests	380	797	1,734	<1%
Fungal Disease or Infestation	3,567	9,067	1,000	<1%
Other Rodents	1	0	3	<1%
Totals	6,786	183,165	709,855	

The level of completeness of city agency pesticide reporting has improved dramatically over the years, making analysis of trends in pesticide use possible since 2008. Figures 1 and 2 show trends from 2008 through 2021 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 had returned to a level similar to previous years (Figure 1) after 2016, but in 2021 the use increased 46% due to an active West Nile Virus season and continued treatment of city catch basins. Use of solid rodenticide products showed an increase (38% by weight) from 2020 to 2021, and there was an overall 20% increase in amount of all pesticides reported by weight. Solid herbicide by weight declined slightly in 2021 after increasing from 2016 through 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).

Figure 1: Pesticides Applied by City Agencies Reported by Weight

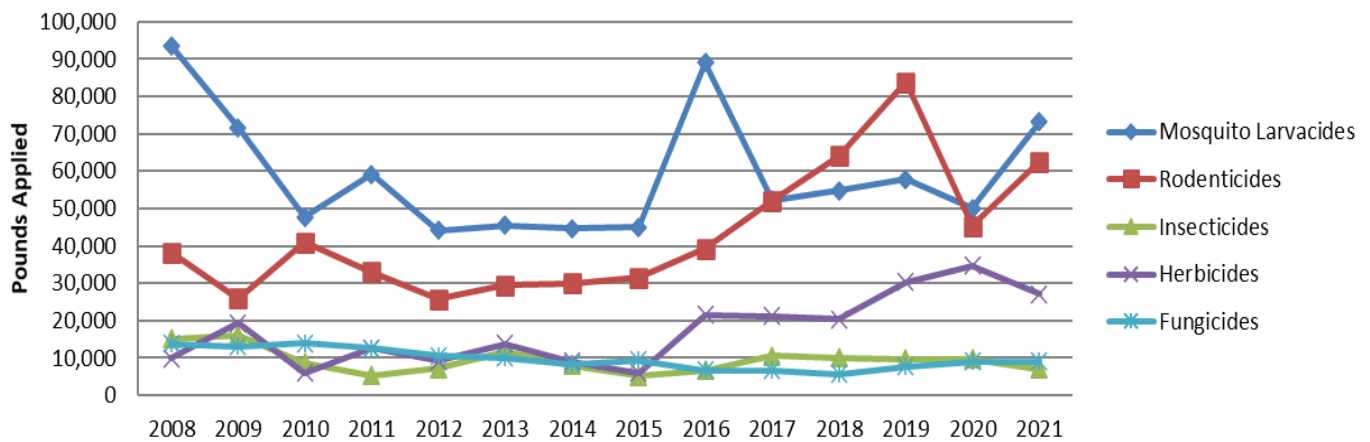
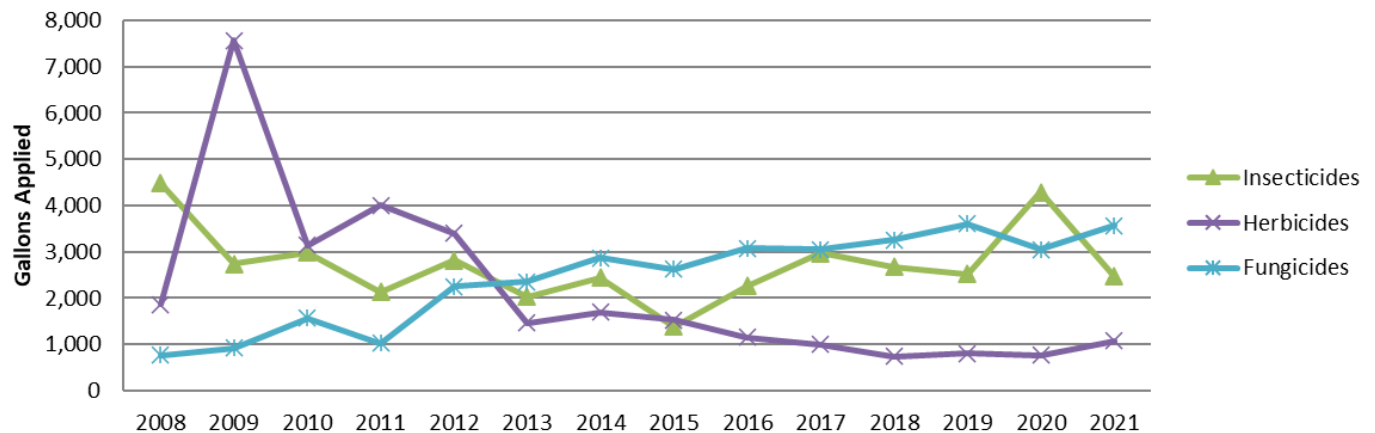
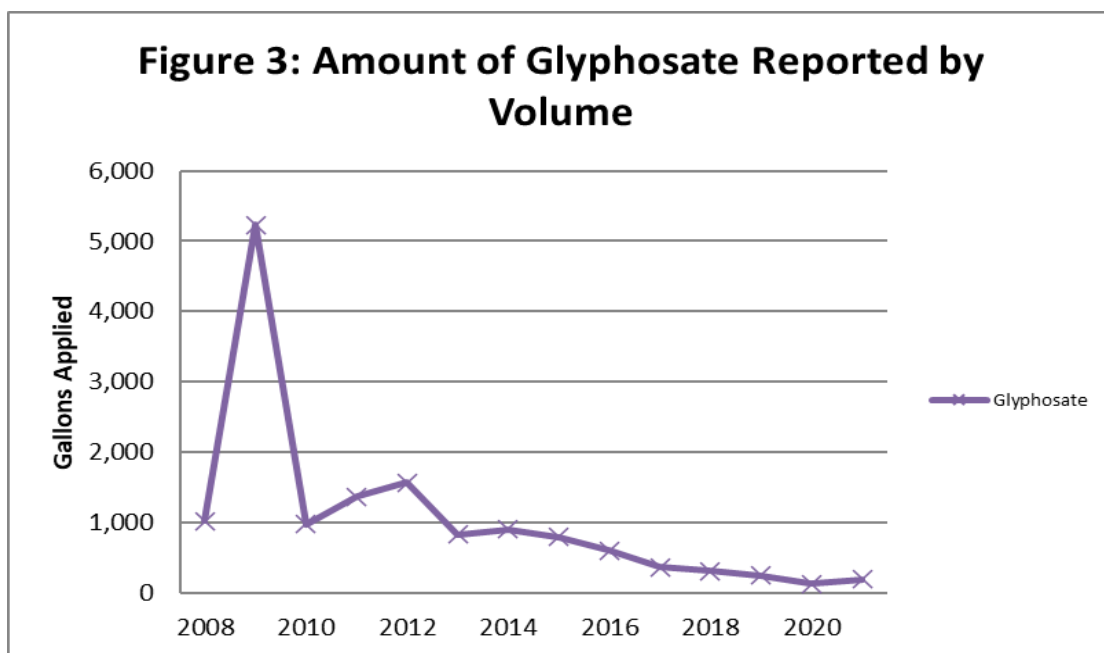


Figure 2: Pesticides Applied by City Agencies Reported by Volume

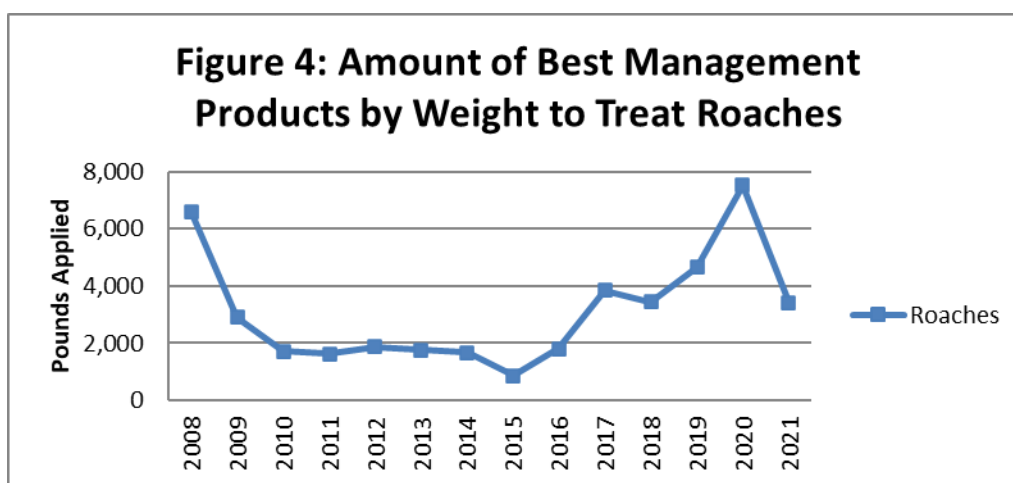


Rodenticides and mosquito larvicides are not included in Figure 2 as those products are almost exclusively solid formulations reported by weight. There was a 42% decrease in liquid insecticide use reported by volume in 2021 compared to 2020, due to a decrease in use of pyrethroids and liquid BMP insecticides (Appendix 1 & 3). From 2008 to 2021, there was a 45% decrease in the volume of liquid insecticides used (Figure 2). In contrast, liquid herbicide use increased 40% by volume (Figure 2) from 2020 to 2021, including a 46% increase in gallons of glyphosate applied (Figure 3). Overall, there has been an 88% decline in glyphosate 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.



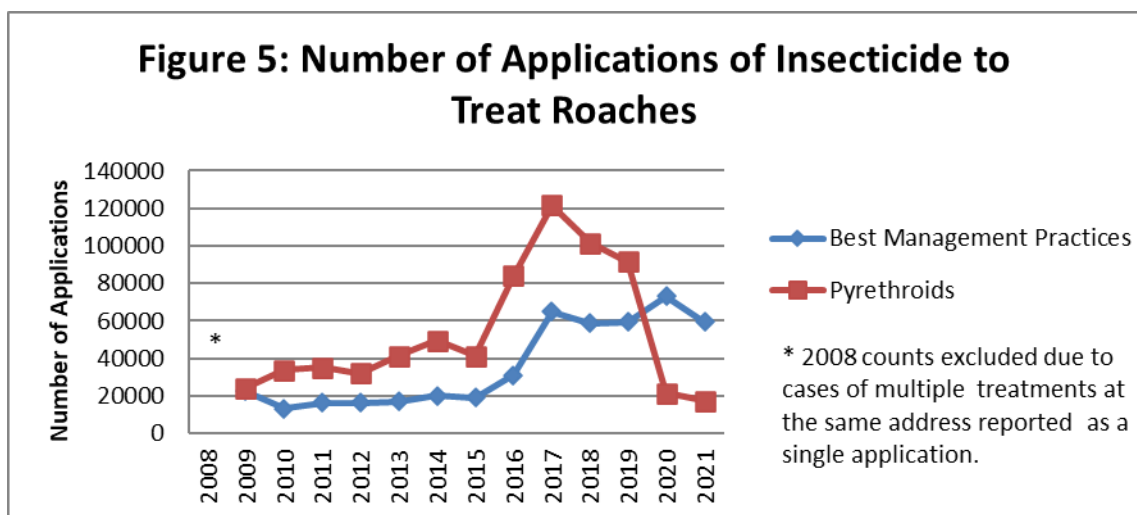
Use of spray formulations vs. Best Management Practices

After a large reduction in BMP products to combat roaches from 2008 to 2010, the reported use of these products leveled off through 2015, increased through 2020, and declined sharply in 2021. There was a 55% decrease in BMP products targeting roaches in 2021 compared with 2020 (Figure 4).



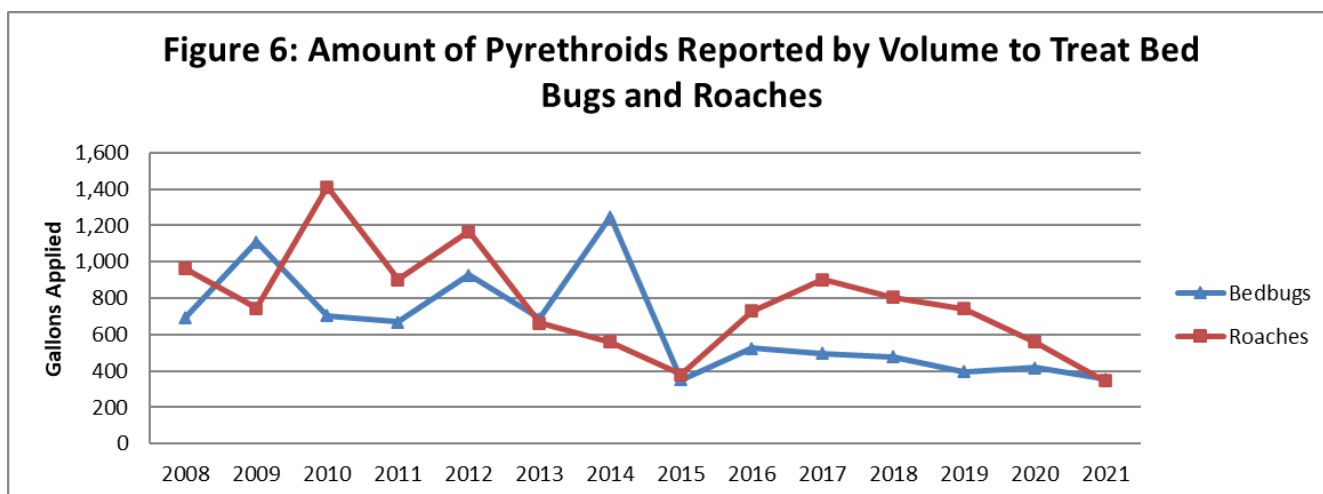
There was a 20% decrease in the number of pyrethroid applications and a 19% decrease in the number of BMP applications to treat roaches from 2020 to 2021 (Figure 5). The decrease in pyrethroid applications corresponded to a 38% lower volume of applied pyrethroids (Figure 6). Meanwhile the BMP amount by weight decreased by 55%, shifting the previous upward trend

downward and likely reflecting lower pest burden, given the corresponding decline in pyrethroid use (Figure 4).



Bed Bugs vs. Roaches

Use of pyrethroid spray products targeting roaches decreased 38% by volume, and number of applications decreased 20% from 2020 to 2021 (Figure 6 and Figure 5). There was also a 15% decrease in gallons of pyrethroids used by city agencies to treat bed bugs from 2020 to 2021 (Figure 6). Citywide, the number of pyrethroid applications to treat bed bugs decreased 23% in 2021. Total volume of pyrethroid use for control of bed bugs from 2008 to 2021 has remained low since 2015 compared with previous years, while volume for cockroaches has declined from a high in 2017 (Figure 6).



Rodents

Rodenticide use increased by 38% in 2021 by weight (Figure 1). The number of applications was unchanged. Variability year to year is due to a neighborhood rat surveillance initiative. In addition, more inspections were conducted in 2021 than during the shutdown at the beginning of the COVID-19 pandemic.

Mosquitoes

Mosquito control measures include larviciding (killing larvae) and adulticiding (killing flying adults). The DOHMH Vector Control program applied 73,154 pounds of mosquito larvicide and 518 gallons of adulticide in 2021. Larvicide reported by weight increased by 46% in 2021 (Figure 1). There continued to be a very high number of applications of larvicide in sewer catch basins in 2021 across the city. Though this program occurred in previous years, the counts of applications in recent years have increased considerably. The agency will continue to monitor mosquito populations across the five boroughs, especially the populations that commonly carry mosquito-borne pathogens such as the West Nile and Zika viruses. The amount of adulticide applied by DOHMH varies year to year, depending on weather and severity of mosquito infestations. The number of applications of adulticide doubled from 2020, due to more spray events than during the peak of 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 2021, primarily at facilities previously under management of the DJJ.

Table 4: Types of Pesticides Used by ACS in 2021

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	14.7	61.1%	90	28.9%
Insecticide	0.0	100.0%	9.4	38.9%	221	71.1%
Totals	0.0		24.1		311	

Table 5: Pesticide Products Used by ACS in 2021

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	9.13	57	Difethialone	3	NO	NO
7173-297	BROMADIOLONE PASTE 0901	0.00	5.50	32	Bromadiolone	3	NO	NO
12455-69	CONTRAC RODENTICIDE	0.00	0.06	1	Bromadiolone	3	NO	NO
Insecticides								
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	5.48	178	Indoxacarb	3	NO	NO
64405-2	REDZONE BAIT	0.00	1.70	16	Boric acid	3	NO	NO
92028-3-47000	SureKill Roach Gel Bait	0.00	1.85	15	Imidacloprid	3	NO	NO
100-1486	DUPONT ADVION COCKROACH BAIT ARENA	0.00	0.14	4	Indoxacarb	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	0.07	4	Indoxacarb	3	NO	NO
432-763	SUSPEND SC INSECTICIDE	0.01	0.00	3	Deltamethrin	3	NO	NO
432-1455	BES 0026 FLY SPOT BAIT	0.00	0.13	1	Imidacloprid; (Z)-9-Tricosene	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 2021.

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 2021.

Table 6: Types of Pesticides Used by BPL in 2021

Volume	Weight	Times Applied
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Pesticide Type	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	66.9	81.1%	235	35.6%
Insecticide	0.1	100.0%	15.6	18.9%	425	64.4%
Totals	0.1		82.4		660	

Table 7: Pesticide Products Used by BPL in 2021 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	45.97	188	Difethialone	3	NO	NO
7173-113	ROZOL TRACKING POWDER	0.00	13.38	27	Chlorophacinone	2	NO	NO
87235-1-88689	EZ SOFT - SOFT BAIT RODENTICIDE	0.00	7.52	19	Bromadiolone	3	NO	NO
12455-56	DITRAC TRACKING POWDER	0.00	0.00	1	Diphacinone	2	NO	NO
Insecticides								
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	1.80	165	Indoxacarb	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	1.52	69	Indoxacarb	3	NO	NO
432-763	SUSPEND SC INSECTICIDE	0.04	0.00	58	Deltamethrin	3	NO	NO
1021-1641-57076	CONQUER RESIDUAL INSECTICIDE CONCENTRATE	0.04	0.00	50	Esfenvalerate	3	NO	NO
64405-2	REDZONE BAIT	0.00	9.06	38	Boric acid	3	NO	NO
432-1506	MAXFORCE QUANTUM ANT BAIT	0.00	0.61	28	Imidacloprid	3	NO	NO
1021-2593	VENDETTA PLUS COCKROACH GEL BAIT	0.00	0.20	9	Avermectin; Pyriproxyfen	3	NO	YES
499-550	TC-323	0.00	1.25	3	Prallethrin	3	NO	NO
432-772	DELTA DUST	0.00	1.00	3	Deltamethrin	3	NO	NO
279-9554	CB INSECTICIDE WITH DELTAMETHRIN	0.00	0.13	1	Deltamethrin	3	NO	NO
432-1264	MAXFORCE FC ANT KILLER BAIT GEL	0.00	0.02	1	Fipronil	3	YES	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 2021.

Table 8: Types of Pesticides Used by BOE in 2021

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	4.3	95.7%	17	73.9%
Insecticide	0.0	100.0%	0.2	4.3%	6	26.1%
Totals	0.0		4.5		23	

Table 9: Pesticide Products Used by BOE in 2021 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	3.86	16	Difethialone	3	NO	NO
7173-297	BROMADIOLONE PASTE 0901	0.00	0.48	1	Bromadiolone	3	NO	NO
Insecticides								
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	0.15	5	Indoxacarb	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	0.04	1	Indoxacarb	3	NO	NO

Chief Medical Examiner

The Office of Chief Medical Examiner (OCME) is responsible for investigating deaths in unusual circumstances, approving requests for cremations, 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 2021.

Table 10: Types of Pesticides Used by OCME in 2021

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	1.2	31.8%	19	39.6%
Insecticide	0.0	100.0%	2.5	68.2%	29	60.4%
Totals	0.0		3.6		48	

Table 11: Pesticide Products Used by OCME in 2021

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Rodenticides								
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	0.84	13	Difethialone	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
7173-297	BROMADIOLONE PASTE 0901	0.00	0.32	6	Bromadiolone	3	NO	NO
Insecticides								
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	0.46	16	Indoxacarb	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	0.46	5	Indoxacarb	3	NO	NO
432-763	SUSPEND SC INSECTICIDE	0.02	0.00	4	Deltamethrin	3	NO	NO
64405-2	REDZONE BAIT	0.00	1.56	4	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 a subset of the following 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 2021.

Table 12: Types of Pesticides Used by CUNY in 2021

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	28.6	70.2%	119	32.9%
Insecticide	73.1	100.0%	12.2	29.8%	243	67.1%
Totals	73.1		40.7		362	

Table 13: Pesticide Products Used by CUNY in 2021 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	9.45	78	Difethialone	3	NO	NO
100-1055	WEATHERBLOK BAIT WITH BITREX	0.00	11.33	29	Brodifacoum	3	NO	NO
56-42	BAIT BLOCK RODENTICIDE WITH PEANUT BUTTER FLAVORIZ	0.00	4.88	6	Diphacinone	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
12455-79	CONTRAC ALL-WEATHER BLOX	0.00	2.75	4	Bromadiolone	3	NO	NO
12455-146	CONTRAC SOFT BAIT	0.00	0.18	2	Bromadiolone	3	NO	NO
Insecticides								
53883-276	DELTA 4.75% SC	73.00	0.00	73	Deltamethrin	3	NO	NO
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	2.46	64	Indoxacarb	3	NO	NO
432-1544	TEMPRID SC-F INSECTICIDE	0.07	0.00	42	Cyfluthrin, beta; Imidacloprid	3	NO	NO
64405-2	REDZONE BAIT	0.00	4.56	32	Boric acid	3	NO	NO
499-507	PRESCRIPTION TREATMENT BRAND ALPINE COCKROACH GEL BAIT RESERVOIR	0.00	0.15	10	Dinotefuran	3	NO	NO
1021-1828	MGK ROACH BAIT 2822	0.00	0.00	5	Avermectin	3	NO	YES
432-763	SUSPEND SC INSECTICIDE	0.01	0.00	4	Deltamethrin	3	NO	NO
432-772	DELTA DUST	0.00	0.11	4	Deltamethrin	3	NO	NO
499-550	TC-323	0.00	4.38	3	Prallethrin	3	NO	NO
432-1363	TEMPO SC INSECTICIDE	0.00	0.00	2	Cyfluthrin, beta	3	NO	NO
499-470	WHITMIRE MICRO-GEN TC 198	0.00	0.44	1	Cyfluthrin	3	NO	NO
432-1506	MAXFORCE QUANTUM ANT BAIT	0.00	0.02	1	Imidacloprid	3	NO	NO
73766-1	GOURMET ANT BAIT GEL	0.00	0.02	1	Disodium octaborate tetrahydrate	3	NO	NO
100-1290	OPTIGARD COCKROACH GEL BAIT	0.00	0.02	1	Emamectin, benzoate	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 55 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 DCAS pesticide use by pesticide type. Table 15 lists all pesticide products used in 2021.

Table 14: Types of Pesticides Used by DCAS in 2021

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	0.2	38.6%	1	6.3%
Insecticide	0.0	100.0%	0.4	61.4%	15	93.8%
Totals	0.0		0.6		16	

Table 15: Pesticide Products Used by DCAS in 2021 by Pesticide Type

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Rodenticides								
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	0.22	1	Difethialone	3	NO	NO
Insecticides								
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	0.24	12	Indoxacarb	3	NO	NO
432-763	SUSPEND SC INSECTICIDE	0.00	0.00	2	Deltamethrin	3	NO	NO
92028-3-47000	SureKill Roach Gel Bait	0.00	0.11	1	Imidacloprid	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 2021.

Table 16: Types of Pesticides Used by DOC in 2021

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.6	6.8%	200.7	85.1%	188	20.3%
Insecticide	8.8	93.2%	35.2	14.9%	738	79.7%
Totals	9.4		235.9		926	

Table 17: Pesticide Products Used by DOC in 2021 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								

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	170.44	112	Difethialone	3	NO	NO
12455-79	CONTRAC ALL-WEATHER BLOX	0.59	28.70	62	Bromadiolone	3	NO	NO
12455-56	DITRAC TRACKING POWDER	0.00	0.79	8	Diphacinone	2	NO	NO
12455-61	LIQUA-TOX II	0.05	0.00	4	Diphacinone, sodium salt	3	NO	NO
12455-86	CONTRAC RODENTICIDE PLACE PAC	0.00	0.38	1	Bromadiolone	3	NO	NO
7173-172	ROZOL BLUE TRACKING POWDER	0.00	0.38	1	Chlorophacinone	2	NO	NO
Insecticides								
1021-2593	VENDETTA PLUS COCKROACH GEL BAIT	0.00	3.53	100	Avermectin; Pyriproxyfen	3	NO	YES
73079-4	BORACTIN INSECTICIDE POWDER	1.80	0.00	98	Boric acid	3	NO	NO
432-1455	BES 0026 FLY SPOT BAIT	1.24	2.01	85	Imidacloprid; (Z)-9-Tricosene	3	NO	NO
499-507	PRESCRIPTION TREATMENT BRAND ALPINE COCKROACH GEL BAIT RESERVOIR	0.00	2.77	73	Dinotefuran	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	2.19	70	Indoxacarb	3	NO	NO
432-763-62719	SUSPEND SC	0.63	0.00	67	Deltamethrin	3	NO	NO
432-1363	TEMPO SC INSECTICIDE	0.17	0.00	65	Cyfluthrin, beta	3	NO	NO
1021-2796	MGK Formula 3113	0.00	0.76	46	Clothianidin; Pyriproxyfen	0	NO	NO
73079-6	GREEN ZONE GRANULAR BAIT	0.00	6.52	43	Boric acid	3	NO	NO
397-13	STERI-FAB	4.12	0.00	31	Phenothrin; Isopropyl alcohol; Alkyl (60%C14, 25%C12, 15%C16) dimethylbenzyl ammonium chloride; Didecyl dimethyl ammonium chloride	2	NO	NO
9688-255-8845	SPECTRACIDE COMMERCIAL WASP & HORNET KILLER 3	0.67	0.00	17	Deltamethrin; S-Bioallethrin	3	YES	NO
73079-2	INTICE GRANULAR BAIT	0.00	0.17	8	Boric acid	3	NO	NO
64405-2-74455	ECOLOGICAL ANT & INSECT BAIT	0.00	1.02	7	Boric acid	3	NO	NO
432-1259	PRODUCT: RBF5	0.00	0.32	6	Fipronil	3	YES	NO
432-1257	MAXFORCE ROACH BAIT F.05	0.00	0.08	6	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
2724-274	GOLDEN MALRIN RF-128 FLY KILLER	0.00	13.08	4	Methomyl; (Z)-9-Tricosene	3	NO	NO
2724-274-20954	GOLDEN MALRIN RF-128 FLY KILLER	0.00	2.25	4	Methomyl; (Z)-9-Tricosene	3	NO	NO
64405-2	REDZONE BAIT	0.00	0.25	3	Boric acid	3	NO	NO
9688-190	CHEMSICO WASP & HORNET KILLER LE	0.16	0.00	2	Cyhalothrin, lambda; Prallethrin	3	NO	NO
6218-47	SUMMIT B.T.I. BRIQUETS	0.00	0.20	2	Bacillus thuringiensis subspecies israelensis strain BMP 144	3	NO	NO
432-1460	MAXFORCE FC ROACH KILLER BAIT GEL F.05	0.00	0.02	1	Fipronil	3	YES	NO

Economic Development Corporation

The New York City Economic Development Corporation (NYCEDC) fosters inclusive economic development across all five boroughs by helping to lay the foundations of growth, advancing quality jobs across sectors and promoting access to opportunity. Through investments in community facilities, affordable housing, parks, open space, streetscapes, infrastructure and resiliency projects, NYCEDC works with local communities to create dynamic and accessible neighborhoods across the City. NYCEDC is responsible for contracting for pest control, including rodent control, in publicly accessible open spaces within the lots of private buildings. Table 18 summarizes NYCEDC pesticide use by pesticide type. Table 19 lists all pesticide products used in 2021.

Table 18: Types of Pesticides Used by NYCEDC in 2021

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	179.3	100.0%	275	99.3%
Insecticide	0.0	100.0%	0.0	0.0%	2	0.7%
Totals	0.0		179.3		277	

Table 19: Pesticide Products Used by NYCEDC in 2021 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								
12455-89	FINAL ALL-WEATHER BLOX	0.00	107.87	249	Brodifacoum	3	NO	NO
12455-79	CONTRAC ALL-WEATHER BLOX	0.00	71.44	26	Bromadiolone	3	NO	NO
Insecticides								

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
100-1486	DUPONT ADVION COCKROACH BAIT ARENA	0.00	0.03	2	Indoxacarb	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 20 summarizes DOE pesticide use by pesticide type. Table 21 lists all pesticide products used in 2021.

Table 20: Types of Pesticides Used by DOE in 2021

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	10,744.5	87.9%	10,612	34.0%
Insecticide	40.5	100.0%	1,475.8	12.1%	20,589	66.0%
Totals	40.5		12,220.3		31,201	

Table 21: Pesticide Products Used by DOE in 2021 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	2,352.11	8,208	Difethialone	3	NO	NO
12455-146	CONTRAC SOFT BAIT	0.00	721.15	1,716	Bromadiolone	3	NO	NO
12455-69	CONTRAC RODENTICIDE	0.00	1,851.56	643	Bromadiolone	3	NO	NO
12455-148	Rat Ice	0.00	5,819.00	43	Carbon dioxide	2	NO	NO
87235-2-88689	BRIGAND WB WAX BLOCK RODENTICIDE	0.00	0.69	2	Bromadiolone	3	NO	NO
Insecticides								

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
499-510	PRESCRIPTIO N TREATMENT BRAND ALPINE COCKROACH GEL BAIT PISTON CAN	0.00	78.07	8,966	Dinotefuran	3	NO	NO
64405-2	REDZONE BAIT	0.00	732.31	6,234	Boric acid	3	NO	NO
73079-14	IMIDACLOPRID D GRANULAR BAIT	0.00	586.38	1,891	Imidacloprid	3	NO	NO
73766-1	GOURMET ANT BAIT GEL	0.00	18.50	1,301	Disodium octaborate tetrahydrate	3	NO	NO
499-294	AVERT PRESCRIPTIO N TREATMENT 310	0.00	4.66	366	Avermectin	3	NO	YES
499-473	WHITMIRE MICRO-GEN TC 205 INJECTION SYSTEM	25.89	0.00	354	Cyhalothrin, lambda	3	NO	NO
89459-84	RF2228 LH AEROSOL	11.74	0.06	312	Cyhalothrin, lambda; (7S)- Hydroprene	3	NO	NO
1021-2593	VENDETTA PLUS COCKROACH GEL BAIT	0.00	6.31	235	Avermectin; Pyriproxyfen	3	NO	YES
432-1460	MAXFORCE FC ROACH KILLER BAIT GEL F.05	0.00	3.59	158	Fipronil	3	YES	NO
432-1506	MAXFORCE QUANTUM ANT BAIT	0.00	5.70	154	Imidacloprid	3	NO	NO
432-1257	MAXFORCE ROACH BAIT F.05	0.00	1.55	116	Fipronil	3	YES	NO
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	1.78	105	Indoxacarb	3	NO	NO
6218-47	SUMMIT B.T.I. BRIQUETS	0.00	19.89	101	Bacillus thuringiensis subspecies Israelensis strain BMP 144	3	NO	NO
1021-2796	MGK Formula 3113	0.00	2.61	93	Clothianidin; Pyriproxyfen	0	NO	NO
432-1256	MAXFORCE FC ANT BAIT STATIONS	0.00	0.92	63	Fipronil	3	YES	NO
499-370	PT 370 ASCEND FIRE ANT STOPPER BAIT	0.00	10.50	61	Avermectin	3	NO	YES

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
499-507	PRESCRIPTION TREATMENT BRAND ALPINE COCKROACH GEL BAIT RESERVOIR	0.00	0.15	23	Dinotefuran	3	NO	NO
73079-6	GREEN ZONE GRANULAR BAIT	0.00	0.88	14	Boric acid	3	NO	NO
2724-484	RF 9707 AEROSOL	0.28	0.39	13	(7S)-Hydroprene	3	NO	NO
432-763	SUSPEND SC INSECTICIDE	0.00	0.45	8	Deltamethrin	3	NO	NO
2724-469	ZOECON (S)-HYDROPRENE ROACH CONTROL STATION II	1.56	0.00	5	(7S)-Hydroprene	3	NO	NO
53883-335	N + P Regulator	0.01	0.00	2	Pyriproxyfen; Novaluron	3	NO	NO
100-1066	DEMAND CS INSECTICIDE	0.00	0.00	2	Cyhalothrin, lambda	3	NO	NO
499-527	PRESCRIPTION TREATMENT BRAND ALPINE DUST INSECTICIDE	0.00	0.38	2	Dinotefuran; Diatomaceous earth	3	NO	NO
397-13	STERI-FAB	0.00	0.31	2	Phenothrin; Isopropyl alcohol; Alkyl (60%C14, 25%C12, 15%C16) dimethylbenzyl ammonium chloride; Didecyl dimethyl ammonium chloride	2	NO	NO
8033-114-279	ENDZONE INSECTICIDE STICKER	0.00	0.00	2	Acetamiprid	3	NO	NO
432-1455	BES 0026 FLY SPOT BAIT	1.00	0.00	1	Imidacloprid; (Z)-9-Tricosene	3	NO	NO
499-557	Alpine WSG	0.00	0.28	1	Novaluron	3	NO	NO
499-550	TC-323	0.00	0.06	1	Prallethrin	3	NO	NO
279-9554	CB INSECTICIDE WITH DELTAMETHRIN	0.00	0.06	1	Deltamethrin	3	NO	NO
100-1485	DUPONT ADVION ANT BAIT ARENA	0.00	0.02	1	Indoxacarb	3	NO	NO
432-772	DELTA DUST	0.00	0.00	1	Deltamethrin	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 NYC. DEP contracts for some pest control services and employs approximately 10 licensed applicators for maintenance of roadways and other infrastructure in the watershed. Table 22 summarizes DEP pesticide use by pesticide type. Table 23 lists all pesticide products used in 2021.

Table 22: Types of Pesticides Used by DEP in 2021

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	156.2	57.5%	614	14.3%
Insecticide	2.3	21.6%	115.4	42.5%	3,622	84.4%
Herbicide	8.2	78.4%	0.0	0.0%	57	1.3%
Totals	10.4		271.7		4,293	

Table 23: Pesticide Products Used by DEP in 2021 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	154.46	609	Difethialone	3	NO	NO
12455-132-3240	TOMCAT WITH BROMETHALIN BAIT CHUNX	0.00	1.13	2	Bromethalin	3	NO	NO
7173-297	BROMADIOLONE PASTE 0901	0.00	0.37	2	Bromadiolone	3	NO	NO
12455-79	CONTRAC ALL-WEATHER BLOX	0.00	0.25	1	Bromadiolone	3	NO	NO
Insecticides								
499-510	PRESCRIPTION TREATMENT BRAND ALPINE COCKROACH GEL BAIT PISTON CAN	0.00	19.07	2,978	Dinotefuran	3	NO	NO
432-763	SUSPEND SC INSECTICIDE	0.01	70.25	354	Deltamethrin	3	NO	NO
64405-2	REDZONE BAIT	0.00	21.84	212	Boric acid	3	NO	NO
73766-1	GOURMET ANT BAIT GEL	0.00	0.36	37	Disodium octaborate tetrahydrate	3	NO	NO
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	0.41	20	Indoxacarb	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
9688-190-8845	SPECTRACIDE DESTROYER BRAND WASP & HORNET KILLER	1.92	0.00	9	Cyhalothrin, lambda; Prallethrin	3	NO	NO
499-304	WHITMIRE OPTEM ME PT 600	0.30	0.00	4	Cyfluthrin	3	NO	NO
432-1506	MAXFORCE QUANTUM ANT BAIT	0.00	0.00	2	Imidacloprid	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.02	0.00	1	Indoxacarb	3	NO	NO
149-8-64405	TERRO PCO LIQUID ANT BAIT	0.01	0.00	1	Borax	3	NO	NO
73079-4	BORACTIN INSECTICIDE POWDER	0.00	3.00	1	Boric acid	3	NO	NO
499-550	TC-323	0.00	0.31	1	Pallethrin	3	NO	NO
241-392	PHANTOM TERMITICIDE-INSECTICIDE	0.00	0.14	1	Chlorfenapyr	3	YES	NO
73079-6	GREEN ZONE GRANULAR BAIT	0.00	0.06	1	Boric acid	3	NO	NO
Herbicides								
62719-566	TURFLON ESTER ULTRA	1.47	0.00	35	Triclopyr, butoxyethyl ester	3	NO	NO
62719-556	ACCORD XRT II	0.81	0.00	9	Glyphosate, dimethylammonium salt	3	NO	NO
42750-247	DUPONT KRENITE S BRUSH CONTROL AGENT	4.50	0.00	5	Fosamine, ammonium salt	3	NO	NO
7969-444	FINALE HERBICIDE	0.75	0.00	5	Glufosinate-ammonium	2	NO	NO
1381-192	CORNERSTONE PLUS	0.66	0.00	3	Glyphosate, isopropylamine salt	3	NO	NO

Finance, Department of

The Department of Finance (DOF) collects City revenues, ensures compliance with City tax and other revenue laws, evaluates all real property in the City, provides a forum for the public to dispute tax and parking violation liability, and maintains property records. The agency contracts for pest control through the citywide contract administered by DCAS. Table 24 summarizes pesticide use by pesticide type. Table 25 lists all pesticide products used by DOF in 2021.

Table 24: Types of Pesticides Used by DOF in 2021

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	0.8	34.1%	4	17.4%
Insecticide	0.0	0.0%	1.6	65.9%	19	82.6%
Totals	0.0		2.5		23	

Table 25: Pesticide Products Used by DOF in 2021 by Pesticide Type

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Rodenticides								
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	0.84	4	Difethialone	3	NO	NO
Insecticides								
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	1.62	19	Indoxacarb	3	NO	NO

Fire Department

The Fire Department of New York City (FDNY) is responsible for 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 26 summarizes FDNY pesticide use by pesticide type. Table 27 lists all pesticide products used in 2021.

Table 26: Types of Pesticides Used by FDNY in 2021

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	162.0	68.4%	952	39.9%
Insecticide	0.6	100.0%	75.0	31.6%	1,433	60.1%
Totals	0.6		237.0		2,385	

Table 27: Pesticide Products Used by FDNY in 2021 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	121.96	751	Difethialone	3	NO	NO
7173-297	BROMADIOLONE PASTE 0901	0.00	33.04	170	Bromadiolone	3	NO	NO
12455-69	CONTRAC RODENTICIDE	0.00	6.95	30	Bromadiolone	3	NO	NO
7173-113	ROZOL TRACKING POWDER	0.00	0.06	1	Chlorophacinone	2	NO	NO
Insecticides								

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	15.16	620	Indoxacarb	3	NO	NO
432-763	SUSPEND SC INSECTICIDE	0.55	0.00	392	Deltamethrin	3	NO	NO
64405-2	REDZONE BAIT	0.00	55.82	360	Boric acid	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	2.91	49	Indoxacarb	3	NO	NO
100-1486	DUPONT ADVION COCKROACH BAIT ARENA	0.00	0.06	3	Indoxacarb	3	NO	NO
92028-3-47000	SureKill Roach Gel Bait	0.00	0.07	2	Imidacloprid	3	NO	NO
53883-335	N + P Regulator	0.02	0.00	1	Pyriproxyfen; Novaluron	3	NO	NO
432-1544	TEMPRID SC-F INSECTICIDE	0.00	0.00	1	Cyfluthrin, beta; Imidacloprid	3	NO	NO
73079-12	SILICIDE(TM)	0.00	0.75	1	Diatomaceous earth	3	NO	NO
432-836	DELTAGARD G INSECTICIDE GRANULE	0.00	0.13	1	Deltamethrin	3	NO	NO
499-550	TC-323	0.00	0.06	1	Prallethrin	3	NO	NO
1021-2796	MGK Formula 3113	0.00	0.00	1	Clothianidin; Pyriproxyfen	0	NO	NO
432-1531	BES0600 INSECTICIDE	0.00	0.00	1	Clothianidin	0	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 28 summarizes H+H pesticide use by pesticide type. Table 29 lists products by pesticide types in 2021.

Table 28: Types of Pesticides Used by H+H in 2021

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	273.7	19.8%	509	10.9%

Insecticide	717.9	100.0%	1,106.7	80.0%	4,166	89.1%
Other	0.0	0.0%	3.0	0.2%	1	0.0%
Totals	717.9		1,383.3		4,676	

Table 29: Pesticide Products Used by H+H in 2021 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	269.91	505	Difethialone	3	NO	NO
7173-113	ROZOL TRACKING POWDER	0.00	3.75	4	Chlorophacinone	2	NO	NO
Insecticides								
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	104.01	1,603	Indoxacarb	3	NO	NO
73079-4	BORACTIN INSECTICIDE POWDER	0.00	228.18	867	Boric acid	3	NO	NO
397-13	STERI-FAB	0.00	620.73	392	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	432.05	0.00	337	Indoxacarb	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	8.66	247	Indoxacarb	3	NO	NO
1677-43	STER-BAC	58.48	0.00	134	Alkyl (60%C14, 25%C12, 15%C16) dimethylbenzyl ammonium chloride	1	NO	NO
64405-2	REDZONE BAIT	0.00	68.06	92	Boric acid	3	NO	NO
100-1066	DEMAND CS INSECTICIDE	67.91	0.00	91	Cyhalothrin, lambda	3	NO	NO
1021-1603	NYLAR 10EC	52.48	0.00	81	Pyriproxyfen	3	NO	NO
432-1375	PRE-EMPTY FLY BAIT	0.00	34.88	64	Imidacloprid; (Z)-9-Tricosene	3	NO	NO
432-1363	TEMPO SC INSECTICIDE	9.99	0.00	54	Cyfluthrin, beta	3	NO	NO
432-772	DELTA DUST	0.00	9.31	48	Deltamethrin	3	NO	NO
64405-8	NIBOR BORATE INSECTICIDE AND FUNGICIDE	12.63	9.49	43	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
432-1544	TEMPRID SC-F INSECTICIDE	20.03	0.00	37	Cyfluthrin, beta; Imidacloprid	3	NO	NO
432-1304	TEMPO 10 WP INSECTICIDE	57.27	0.00	24	Cyfluthrin, beta	3	NO	NO
149-8-64405	TERRO PCO LIQUID ANT BAIT	0.00	7.53	17	Borax	3	NO	NO
5481-8973	ORTHENE PCO FORMULA II	7.10	0.00	8	Acephate	3	YES	NO
100-1483	ADVION INSECT GRANULE	0.00	5.50	8	Indoxacarb	3	NO	NO
432-1255	MAXFORCE GRANULAR INSECT BAIT	0.00	2.06	4	Hydramethylnon	3	YES	YES
149-8	TERRO ANT KILLER II	0.00	0.36	3	Borax	3	NO	NO
432-1455	BES 0026 FLY SPOT BAIT	0.00	1.50	2	Imidacloprid; (Z)-9-Tricosene	3	NO	NO
47000-73-1677	SSI-50 INSECTICIDE	0.00	1.50	2	Pyrethrins; Piperonyl butoxide; N-octyl bicycloheptene dicarboximide	3	YES	NO
6218-47	SUMMIT B.T.I. BRIQUETS	0.00	1.43	2	Bacillus thuringiensis subspecies israelensis strain BMP 144	3	NO	NO
432-1262	MAXFORCE IBH10	0.00	1.00	2	Hydramethylnon	3	YES	YES
100-1481	DUPONT ADVION FIRE ANT BAIT	0.00	0.63	2	Indoxacarb	3	NO	NO
499-550	TC-323	0.00	1.50	1	Prallethrin	3	NO	NO
5481-533-47000	PROZAP INSECT GUARD	0.00	0.35	1	DDVP	3	YES	NO
Other (Repellents, Biochemical Pesticides, Etc.)								
55943-1	HOT FOOT BIRD REPELLENT	0.00	3.00	1	Polybutenes	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 2021 due to the COVID-19 pandemic. During the New York State-mandated “Pause” in spring, 2021, 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 30 summarizes DOHMH pesticide use by pesticide type. Table 31 lists all pesticide products used in 2021.

Table 30 Types of Pesticides Used by DOHMH in 2021

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	12,846.8	14.9%	18,404	3.4%
Insecticide	518.0	100.0%	73,177.0	85.1%	516,215	96.6%
Totals	518.0		86,023.8		534,619	

Table 31 Pesticide Products Used by DOHMH in 2021 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	7,692.51	10,568	Bromadiolone	3	NO	NO
12455-133	CONTRAC WITH LUMITRACK	0.00	756.65	2,154	Bromadiolone	3	NO	NO
12455-90	FINAL RODENTICIDE	0.00	1,533.19	1,773	Brodifacoum	3	NO	NO
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	446.59	1,540	Difethialone	3	NO	NO
7173-297	BROMADIOLONE PASTE 0901	0.00	323.81	992	Bromadiolone	3	NO	NO
7173-205	GENERATION PELLETS	0.00	1,359.69	515	Difethialone	3	NO	NO
12455-139	Final Soft Bait	0.00	81.84	246	Brodifacoum	3	NO	NO
100-1055	WEATHERBLOK BAIT WITH BITREX	0.00	490.53	243	Brodifacoum	3	NO	NO
7173-304	BROMETHALIN SOFT BAIT	0.00	40.84	176	Bromethalin	3	NO	NO
12455-36	CONTRAC RAT AND MOUSE BAIT	0.00	87.19	89	Bromadiolone	3	NO	NO
12455-146	CONTRAC SOFT BAIT	0.00	13.56	64	Bromadiolone	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
12455-79	CONTRAC ALL-WEATHER BLOX	0.00	20.41	44	Bromadiolone	3	NO	NO
Insecticides								
73049-429	VECTOMAX FG	0.00	18,809.51	515,780	Bacillus sphaericus; Bacillus thuringiensis, subsp. Israelensis, strain AM 65-52	3	NO	NO
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	15.01	139	Indoxacarb	3	NO	NO
73049-10	VECTOBAC G BIOLOGICAL LARVICIDE GRANULES	0.00	38,121.31	87	Bacillus thuringiensis, subsp. Israelensis, strain AM 65-52	3	NO	NO
73049-20	VECTOLEX CG BIOLOGICAL LARVICIDE	0.00	16,218.00	63	Bacillus sphaericus	3	NO	NO
1021-1688-8329	ANVIL 10+10 ULV	175.24	0.00	38	Phenothrin; Piperonyl butoxide	3	YES	NO
1021-1795-8329	DUET DUAL-ACTION ADULTICIDE	182.26	0.00	33	Phenothrin; Piperonyl butoxide; Prallethrin	3	YES	NO
432-1534	BES0668 Insecticide	160.53	0.00	24	Deltamethrin	3	NO	NO
64405-2	REDZONE BAIT	0.00	2.75	18	Boric acid	3	NO	NO
92028-3-47000	SureKill Roach Gel Bait	0.00	1.66	11	Imidacloprid	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	0.42	10	Indoxacarb	3	NO	NO
432-763	SUSPEND SC INSECTICIDE	0.02	0.00	8	Deltamethrin	3	NO	NO
1021-2818	SUMILARV 0.5G SACHETS (WSP)	0.00	3.31	3	Pyriproxyfen	3	NO	NO
73049-501	VBC-60394 FG BIOLOGICAL LARVICIDE FINE GRANULE	0.00	5.00	1	Bacillus thuringiensis, subsp. Israelensis, strain AM 65-52	3	NO	NO

Homeless Services, Department of

The Department of Homeless Services (DHS) manages homeless shelters and dormitory facilities across NYC. 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 32 summarizes DHS pesticide use by pesticide type. Table 33 lists all pesticide products used in 2021.

Table 32: Types of Pesticides Used by DHS in 2021

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	94.5	92.1%	375	60.3%
Insecticide	0.0	100.0%	8.1	7.9%	247	39.7%
Totals	0.0		102.6		622	

Table 33: Pesticide Products Used by DHS in 2021 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	84.81	285	Difethialone	3	NO	NO
7173-297	BROMADIOLONE PASTE 0901	0.00	8.47	89	Bromadiolone	3	NO	NO
7173-205	GENERATION PELLETS	0.00	1.25	1	Difethialone	3	NO	NO
Insecticides								
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	6.08	219	Indoxacarb	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	0.52	20	Indoxacarb	3	NO	NO
432-763	SUSPEND SC INSECTICIDE	0.02	0.00	5	Deltamethrin	3	NO	NO
64405-2	REDZONE BAIT	0.00	1.50	3	Boric acid	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 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 34 summarizes NYCHA pesticide use by pesticide type on NYCHA property. Table 35 lists the products used in 2021.

Table 34: Types of Pesticides Used by NYCHA in 2021

Pesticide Type	Volume*		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	28,174.7	93.3%	49,669	42.3%
Insecticide	748.0	100.0%	2,009.5	6.7%	67,758	57.7%
Herbicide	0.1	0.0%	0.0	0.0%	1	0.0%
Totals	748.2		30,184.1		117,428	

Table 35: Pesticide Products Used by NYCHA in 2021 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	8,043.06	34,743	Difethialone	3	NO	NO
12455-56	DITRAC TRACKING POWDER	0.00	107.12	6,646	Diphacinone	2	NO	NO
12455-69	CONTRAC RODENTICIDE	0.00	16,380.00	4,289	Bromadiolone	3	NO	NO
12455-79	CONTRAC ALL-WEATHER BLOX	0.00	1,007.83	1,073	Bromadiolone	3	NO	NO
12455-139	Final Soft Bait	0.00	166.71	836	Brodifacoum	3	NO	NO
12455-86	CONTRAC RODENTICIDE PLACE PAC	0.00	1,251.90	431	Bromadiolone	3	NO	NO
82744-2-56	JT EATON NECTUS SOFT BAIT 2G SECOND GENERATION RODENTICIDE	0.00	141.92	392	Bromadiolone	3	NO	NO
12455-146	CONTRAC SOFT BAIT	0.00	112.11	360	Bromadiolone	3	NO	NO
12455-75	CONTRAC RAT AND MOUSE BAIT READY TO USE PLACE PAC	0.00	61.03	264	Bromadiolone	3	NO	NO
7173-297	BROMADIOLONE PASTE 0901	0.00	170.56	258	Bromadiolone	3	NO	NO
87235-2-88689	BRIGAND WB WAX BLOCK RODENTICIDE	0.00	147.06	90	Bromadiolone	3	NO	NO
12455-108	FORMUS ALL-WEATHER BLOX	0.00	3.22	71	Brodifacoum	3	NO	NO
7173-113	ROZOL TRACKING POWDER	0.00	10.61	51	Chlorophacino ne	2	NO	NO
12455-148	Rat Ice	0.00	333.00	42	Carbon dioxide	2	NO	NO
7173-308	Chlorophacinone Soft Bait	0.00	59.81	33	Chlorophacino ne	3	NO	NO
7173-304	BROMETHALIN SOFT BAIT	0.00	135.43	26	Bromethalin	3	NO	NO
12455-80	DITRAC ALL-WEATHER BLOX	0.00	9.91	18	Diphacinone	3	NO	NO
56-42	BAIT BLOCK RODENTIICDE WITH PEANUT BUTTER FLAVORIZ	0.00	8.06	15	Diphacinone	3	NO	NO
12455-89	FINAL ALL-WEATHER BLOX	0.00	4.24	13	Brodifacoum	3	NO	NO
12455-36	CONTRAC RAT AND MOUSE BAIT	0.00	4.69	8	Bromadiolone	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)*	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
12455-90	FINAL RODENTICIDE	0.00	13.94	3	Brodifacoum	3	NO	NO
7969-382	Selontra Rodent Bait	0.00	2.03	3	Cholecalciferol	3	NO	NO
7173-288	DIFETHIALONE BLOCK 0707	0.00	0.29	3	Difethialone	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	614.02	25,716	Indoxacarb	3	NO	NO
1021-2593	VENDETTA PLUS COCKROACH GEL BAIT	0.00	143.51	6,508	Avermectin; Pyriproxyfen	3	NO	YES
432-1483	TEMPRID SC INSECTICIDE	1.99	0.00	6,094	Cyfluthrin, beta; Imidacloprid	3	NO	NO
432-763	SUSPEND SC INSECTICIDE	3.40	0.00	5,603	Deltamethrin	3	NO	NO
1021-2796	MGK Formula 3113	0.00	89.37	5,329	Clothianidin; Pyriproxyfen	0	NO	NO
397-13	STERI-FAB	605.07	0.00	4,499	Phenothrin; Isopropyl alcohol; Alkyl (60%C14, 25%C12, 15%C16) dimethylbenzyl ammonium chloride; Didecyl dimethyl ammonium chloride	2	NO	NO
432-1460	MAXFORCE FC ROACH KILLER BAIT GEL F.05	0.01	49.54	3,366	Fipronil	3	YES	NO
53883-276	DELTA 4.75% SC	112.69	0.00	2,514	Deltamethrin	3	NO	NO
432-1544	TEMPRID SC-F INSECTICIDE	3.58	0.00	1,916	Cyfluthrin, beta; Imidacloprid	3	NO	NO
432-1257	MAXFORCE ROACH BAIT F.05	0.00	31.41	1,367	Fipronil	3	YES	NO
432-1259	PRODUCT: RBF5	0.00	23.91	1,003	Fipronil	3	YES	NO
100-1486	DUPONT ADVION COCKROACH BAIT ARENA	0.00	692.41	876	Indoxacarb	3	NO	NO
499-304	WHITMIRE OPTEM ME PT 600	0.21	0.00	720	Cyfluthrin	3	NO	NO
2724-351	ZOECON RF-259 EMULSIFIABLE CONCENTRATE	1.35	0.00	598	(7S)-Hydroprene	3	NO	NO
64405-2-74455	ECOLOGICAL ANT & INSECT BAIT	0.00	44.88	188	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
100-1290	OPTIGARD COCKROACH GEL BAIT	0.00	16.93	148	Emamectin, benzoate	3	NO	NO
1021-1828	MGK ROACH BAIT 2822	0.00	16.83	141	Avermectin	3	NO	YES
279-3206	TALSTAR TC FLOWABLE TERMITICIDE/INSECT ICIDE	4.69	0.00	132	Bifenthrin	3	YES	NO
1021-1815	EVERCIDE ESFENVALERATE 6.4% CS	0.78	0.00	118	Esfenvalerate	3	NO	NO
432-1375	PRE-EMPTY FLY BAIT	0.00	15.93	113	Imidacloprid; (Z)-9- Tricosene	3	NO	NO
64405-2	REDZONE BAIT	0.00	72.94	103	Boric acid	3	NO	NO
73079-4	BORACTIN INSECTICIDE POWDER	0.00	20.68	98	Boric acid	3	NO	NO
2724-352	ZOECON RF-291 EMULSIFIABLE CONCENTRATE WITH PRECOR	0.60	0.00	80	S-Methoprene	3	NO	NO
279-9554	CB INSECTICIDE WITH DELTAMETHRIN	0.00	38.33	74	Deltamethrin	3	NO	NO
499-370	PT 370 ASCEND FIRE ANT STOPPER BAIT	0.00	12.88	72	Avermectin	3	NO	YES
62577-12	ECOPCO ACU	8.57	0.00	70	Phenylethyl propionate	3	NO	NO
1021-1603	NYLAR 10EC	0.21	0.00	55	Pyriproxyfen	3	NO	NO
2724-421	ZOECON RF-292 BRIQUET	0.00	95.60	45	S-Methoprene	3	NO	NO
432-1531	BES0600 INSECTICIDE	0.00	3.90	37	Clothianidin	0	NO	NO
73766-1	GOURMET ANT BAIT GEL	0.00	2.31	36	Disodium octaborate tetrahydrate	3	NO	NO
2724-351- 50809	ZOECON GENCOR 9% EMULSIFIABLE CONCENTRATE	0.22	0.00	32	(7S)- Hydroprene	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	0.91	19	Indoxacarb	3	NO	NO
1021-2569	MULTICIDE SPRAY 29511	3.59	0.00	17	Imidacloprid; Phenothrin; N- octyl bicycloheptene dicarboximide	0	YES	NO
432-1455	BES 0026 FLY SPOT BAIT	0.00	10.82	17	Imidacloprid; (Z)-9- Tricosene	3	NO	NO
499-467	WHITMIRE AVERT TC 181	0.00	0.41	16	Avermectin	3	NO	YES

EPA Reg. #	EPA Product Name	Volume (Gals)*	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
100-1066	DEMAND CS INSECTICIDE	0.01	0.00	8	Cyhalothrin, lambda	3	NO	NO
8033-114-279	ENDZONE INSECTICIDE STICKER	0.00	0.63	5	Acetamiprid	3	NO	NO
499-406	AVERT PRESCRIPTION TREATMENT TC 93A BAIT	0.00	0.02	5	Avermectin	3	NO	YES
499-470	WHITMIRE MICRO-GEN TC 198	0.07	2.19	3	Cyfluthrin	3	NO	NO
241-313-9444	SIEGE PBS GEL INSECTICIDE	0.00	4.00	3	Hydramethylno n	3	YES	YES
2724-469	ZOECON (S)-HYDROPRENE ROACH CONTROL STATION II	0.00	2.00	3	(7S)-Hydroprene	3	NO	NO
100-1485	DUPONT ADVION ANT BAIT ARENA	0.00	0.06	3	Indoxacarb	3	NO	NO
64405-8	NIBOR BORATE INSECTICIDE AND FUNGICIDE	1.00	0.00	1	Disodium octaborate tetrahydrate	3	NO	NO
73729-1-4	DIATOMACEOUS EARTH CRAWLING INSECT KILLER	0.00	1.00	1	Diatomaceous earth	3	NO	NO
499-550	TC-323	0.00	0.55	1	Prallethrin	3	NO	NO
89459-59	ENVI ACU CONTACT Insecticide	0.00	0.53	1	Phenylethyl propionate	3	NO	NO
100-1483	ADVION INSECT GRANULE	0.00	0.50	1	Indoxacarb	3	NO	NO
73079-12	SILICIDE(TM)	0.00	0.31	1	Diatomaceous earth	3	NO	NO
73049-20	VECTOLEX CG BIOLOGICAL LARVICIDE	0.00	0.11	1	Bacillus sphaericus	3	NO	NO
6218-47	SUMMIT B.T.I. BRIQUETS	0.00	0.07	1	Bacillus thuringiensis subspecies israelensis strain BMP 144	3	NO	NO
Herbicides								
9688-293-8845	SPECTRACIDE WEED & GRASS KILLER 2	0.13	0.00	1	Dicamba, dimethylamine salt; Diquat dibromide; Fluazifop-P-butyl	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 36 summarizes HPD pesticide use by pesticide type. Table 37 lists all pesticide products used in 2021.

Table 36: Types of Pesticides Used by HPD in 2021

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	375.5	83.9%	442	42.8%
Insecticide	1.3	100.0%	71.8	16.1%	590	57.2%
Totals	1.3		447.3		1,032	

Table 37: Pesticide Products Used by HPD in 2021

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	133.56	256	Difethialone	3	NO	NO
12455-79	CONTRAC ALL-WEATHER BLOX	0.00	236.72	164	Bromadiolone	3	NO	NO
12455-56	DITRAC TRACKING POWDER	0.00	1.88	20	Diphacinone	2	NO	NO
12455-75	CONTRAC RAT AND MOUSE BAIT READY TO USE PLACE PAC	0.00	3.32	1	Bromadiolone	3	NO	NO
7173-113	ROZOL TRACKING POWDER	0.00	0.00	1	Chlorophacinone	2	NO	NO
Insecticides								
279-3206	TALSTAR TC FLOWABLE TERMITICIDE/INSECTICIDE	0.68	0.00	151	Bifenthrin	3	YES	NO
100-1498	DUPONT ADVION ANT GEL	0.00	7.16	105	Indoxacarb	3	NO	NO
432-1259	PRODUCT: RBF5	0.00	0.73	105	Fipronil	3	YES	NO
64405-2	REDZONE BAIT	0.00	55.86	69	Boric acid	3	NO	NO
432-763	SUSPEND SC INSECTICIDE	0.28	0.00	55	Deltamethrin	3	NO	NO
1021-2593	VENDETTA PLUS COCKROACH GEL BAIT	0.00	1.07	52	Avermectin; Pyriproxyfen	3	NO	YES
53883-92	CYPER TC INSECTICIDE	0.23	0.01	44	Cypermethrin, beta	3	YES	NO
1021-2838	ULD BP-100 Contact Insecticide II	0.04	0.00	2	Pyrethrins; Piperonyl butoxide	3	YES	NO
432-1483	TEMPRID SC INSECTICIDE	0.01	0.00	2	Cyfluthrin, beta; Imidacloprid	3	NO	NO
432-1455	BES 0026 FLY SPOT BAIT	0.00	5.00	2	Imidacloprid; (Z)-9-Tricosene	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
2724-351	ZOECON RF-259 EMULSIFIABLE CONCENTRATE	0.02	0.00	1	(7S)- Hydroprene	3	NO	NO
432-1254	MAXFORCE PROFESSIONAL INSECT CONTROL ROACH KILLER	0.00	1.98	1	Hydramethylnon	3	YES	YES
100-1486	DUPONT ADVION COCKROACH BAIT ARENA	0.00	0.00	1	Indoxacarb	3	NO	NO

Human Resources Administration

The New York City Human Resources Administration/Department of Social Services (HRA/DSS) provides temporary help to individuals and families with social service and economic needs to assist them in reaching self-sufficiency. HRA serves more than 3 million New Yorkers through essential and diverse programs and services. HRA/DSS has numerous offices and public service centers throughout the 5 boroughs. Table 38 summarizes HRA pesticide use by pesticide type. Table 39 lists the products used in 2021.

Table 38: Types of Pesticides Used by HRA in 2021

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	18.1	79.0%	143	51.6%
Insecticide	0.1	100.0%	4.8	21.0%	134	48.4%
Totals	0.1		22.9		277	

Table 39: Pesticide Products Used by HRA in 2021 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	13.14	111	Difethialone	3	NO	NO
7173-297	BROMADIOLONE PASTE 0901	0.00	4.92	32	Bromadiolone	3	NO	NO
Insecticides								
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	2.98	104	Indoxacarb	3	NO	NO
432-763	SUSPEND SC INSECTICIDE	0.06	0.00	14	Deltamethrin	3	NO	NO
64405-2	REDZONE BAIT	0.00	0.62	14	Boric acid	3	NO	NO
432-1460	MAXFORCE FC ROACH KILLER BAIT GEL F.05	0.00	1.03	1	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
64405-2-74455	ECOLOGICAL ANT & INSECT BAIT	0.00	0.19	1	Boric acid	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 2021.

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 40 summarizes pesticide use by pesticide type. Table 41 below lists for each pesticide type, all products used, unless there were more than 10, in which case the 10 most frequently applied products are listed. Appendix 2 includes a complete product listing for DPR.

Table 40: Types of Pesticides Used by DPR in 2021

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	16.6	0.3%	8,646.4	18.5%	3,563	53.9%
Insecticide	349.5	7.0%	2,032.6	4.3%	732	11.1%
Herbicide	845.0	17.0%	27,004.2	57.8%	1,220	18.5%
Fungicide	3,566.7	71.6%	9,066.7	19.4%	1,000	15.1%
Other	200.5	4.0%	0.6	0.0%	94	1.4%
Totals	4,978.2		46,750.5		6,609	

Table 41: Ten Most Frequently Applied Pesticide Products by DPR in 2021 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								

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
12455-86	CONTRAC RODENTICIDE PLACE PAC	3.30	1,029.16	971	Bromadiolone	3	NO	NO
12455-69	CONTRAC RODENTICIDE	0.00	845.74	639	Bromadiolone	3	NO	NO
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	137.58	618	Difethialone	3	NO	NO
12455-148	Rat Ice	0.55	5,897.66	442	Carbon dioxide	2	NO	NO
12455-36	CONTRAC RAT AND MOUSE BAIT	0.00	255.31	265	Bromadiolone	3	NO	NO
7173-297	BROMADIOLONE PASTE 0901	0.00	38.10	143	Bromadiolone	3	NO	NO
12455-79	CONTRAC ALL-WEATHER BLOX	0.00	52.06	114	Bromadiolone	3	NO	NO
7173-238	GENERATION MEAL	0.00	175.50	79	Difethialone	3	NO	NO
12455-137	Rampage Pelleted Bait	0.00	7.31	55	Bromethalin	3	NO	NO
7173-205	GENERATION PELLETS	0.00	80.06	49	Difethialone	3	NO	NO
Insecticides								
9688-190-8845	SPECTRACIDE DESTROYER BRAND WASP & HORNET KILLER	14.02	15.23	79	Cyhalothrin, lambda; Prallethrin	3	NO	NO
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	3.11	54	Indoxacarb	3	NO	NO
74779-17	RTSA 4% EMAMECTIN BENZOATE	56.24	0.00	41	Emamectin, benzoate	3	NO	NO
53883-244-66222	QUALI-PRO LAMBDA GC-0	12.87	21.81	33	Cyhalothrin, lambda	2	NO	NO
432-763	SUSPEND SC INSECTICIDE	0.19	0.31	31	Deltamethrin	3	NO	NO
86203-11-59639	SAFARI 20SG INSECTICIDE	0.00	10.03	30	Dinotefuran	3	NO	NO
1021-1815	EVERCIDE ESFENVALERATE 6.4% CS	5.60	3.66	26	Esfenvalerate	3	NO	NO
432-1312-67760	GARANT T&O 2F	24.19	0.00	24	Imidacloprid	3	NO	NO
70506-121	UPI-2005 EXP-06 RUP INSECTICIDE	6.39	0.00	24	Cyhalothrin, lambda	2	NO	NO
64405-2	REDZONE BAIT	0.00	8.41	23	Boric acid	3	NO	NO
Herbicides								
62719-527	GARLON 4 ULTRA	45.33	5.56	219	Triclopyr	2	NO	NO
62719-176	PATHFINDER II	100.96	0.00	144	Triclopyr, butoxyethyl ester	3	NO	NO
100-937	PRIMO MAXX	38.12	0.00	93	Trinexapac-ethyl	3	NO	NO
62719-324	GLYPRO	23.22	0.00	85	Glyphosate, isopropylamine salt	3	NO	NO
524-579	ROUNDUP PROMAX	50.39	3.64	62	Glyphosate, potassium salt	3	NO	NO
241-437-67690	CLEARCAST HERBICIDE	18.84	0.00	56	Imazamox	3	NO	NO
86064-3	ARMOR TECH PGR 113 MC	5.57	93.41	55	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
89442-7	TRIN-PAC SELECT	29.86	0.00	48	Trinexapac-ethyl	3	NO	NO
62719-542	DIMENSION 2EW	56.84	0.00	40	Dithiopyr	2	NO	NO
100-1014	PACLOBUTRAZOL 2SC	14.28	0.00	38	Paclobutrazol	3	NO	NO
Fungicides								
100-1364	DACONIL ACTION	703.27	0.00	81	Acibenzolar-S-methyl; Chlorothalonil	2	YES	NO
432-942	BANOL TURF AND ORNAMENTAL FUNGICIDE	152.58	43.75	54	Propamocarb hydrochloride	3	NO	NO
53883-323-86064	ARMOR TECH TMI 2020XL	115.25	370.00	45	Thiophanate-methyl; Iprodione	3	YES	YES
432-1541	12ESP705 FUNGICIDE	0.00	2,243.02	44	Fosetyl-Al	3	NO	NO
53883-353	QUALI-PRO T-NEX	42.65	0.00	42	Trinexapac-ethyl	3	NO	NO
68539-3	T-22G BIOLOGICAL PLANT PROTECTANT GRANULES	0.00	111.00	36	Trichoderma harzianum rifai strain KRL-AG2	3	NO	NO
66222-117-86064	ARMOR TECH TEB360 XL	56.91	177.84	30	Tebuconazole	3	YES	NO
50534-202-100	MANICURE ULTREX TURF & ORNAMENTAL	0.00	979.40	28	Chlorothalonil	NULL	NO	NO
432-1446	TARTAN FLO FUNGICIDE	57.00	166.88	26	Triadimefon; Trifloxystrobin	3	YES	YES
264-1155	RHAPSODY AS0	211.60	0.00	24	QST 713 strain of dried Bacillus subtilis	3	NO	NO
Other								
4238-29	HYPOCHLORITE SOLUTION	96.25	0.00	42	Sodium hypochlorite	1	NO	NO
60061-142	PETTIT NEPTUNE 5 HARD HYBRID ABLATIVE ANTIFOULING PAINT	28.00	0.00	28	Copper oxide (ous)	2	NO	NO
59807-4	HORMODIN 1	0.00	0.57	13	IBA	3	NO	NO
14802-8-74466	MICROBE LIFE ALGAWAY 5.4 ALGAECIDE FOR PONDS	1.25	0.00	5	Poly(oxyethylene) (dimethylimino) ethylene (dimethylimino) ethylene dichloride	3	NO	NO
73049-15	PROGIBB 4% PLANT GROWTH REGULATOR SOLUTION	0.00	0.00	5	Gibberellins	2	NO	NO
63838-5	BROMMAX 7.1	75.00	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 42 summarizes NYPD pesticide use by pesticide type. Table 43 lists all pesticide products used in 2021.

Table 42 Types of Pesticides Used by NYPD in 2021

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	136.3	82.7%	702	57.7%
Insecticide	0.3	100.0%	28.5	17.3%	514	42.3%
Totals	0.3		164.8		1,216	

Table 43: Pesticide Products Used by NYPD in 2021 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	87.94	484	Difethialone	3	NO	NO
7173-297	BROMADIOLONE PASTE 0901	0.00	34.58	186	Bromadiolone	3	NO	NO
12455-69	CONTRAC RODENTICIDE	0.00	13.75	32	Bromadiolone	3	NO	NO
Insecticides								
432-763	SUSPEND SC INSECTICIDE	0.25	0.00	189	Deltamethrin	3	NO	NO
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	4.39	173	Indoxacarb	3	NO	NO
64405-2	REDZONE BAIT	0.00	21.84	121	Boric acid	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	1.69	30	Indoxacarb	3	NO	NO
432-836	DELTA GARD G INSECTICIDE GRANULE	0.00	0.63	1	Deltamethrin	3	NO	NO

Queens Public Libraries

The Queens Public Library (QPL) manages 64 libraries, as well as indoor, outdoor and office facilities. Contractors are hired for pest management as needed and the major pest infestations are roaches and mice. Table 44 summarizes QPL pesticide use by pesticide type. Table 45 lists all pesticide products used in 2021.

Table 44: Types of Pesticides Used by QPL in 2021

Volume	Weight	Times Applied
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Pesticide Type	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	40.2	99.8%	101	96.2%
Insecticide	0.0	100.0%	0.1	0.2%	4	3.8%
Totals	0.0		40.3		105	

Table 45: Pesticide Products Used by QPL in 2021

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	34.66	89	Brodifacoum	3	NO	NO
12455-79	CONTRAC ALL-WEATHER BLOX	0.00	5.20	11	Bromadiolone	3	NO	NO
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	0.40	1	Difethialone	3	NO	NO
Insecticides								
1021-2796	MGK Formula 3113	0.00	0.06	1	Clothianidin; Pyriproxyfen	0	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	0.02	1	Indoxacarb	3	NO	NO
64405-2	REDZONE BAIT	0.00	0.00	1	Boric acid	3	NO	NO
100-1486	DUPONT ADVION COCKROACH BAIT ARENA	0.00	0.00	1	Indoxacarb	3	NO	NO

Sanitation, Department of

The Department of Sanitation (DSNY) manages garages, office buildings, transfer stations, and various publicly owned lots throughout the city. Because of the nature of the agency's work – managing garbage – pest problems are endemic at some facilities, so DSNY employs two certified pesticide applicators who make routine visits to facilities and respond to emergency calls. DSNY also contracts for weed control on some of the City's rights-of-way. Table 46 summarizes DSNY pesticide use by pesticide type. Table 47 lists the products used in 2021.

Table 46: Types of Pesticides Used by DSNY in 2021

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.2%	291.3	99.7%	516	43.5%
Insecticide	3.2	99.8%	0.9	0.3%	669	56.5%
Totals	3.2		292.2		1,185	

Table 47: List of Pesticides Applied by DSNY in 2021

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	0.01	220.31	404	Bromadiolone	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
	READY TO USE PLACE PAC							
12455-89	FINAL ALL-WEATHER BLOX	0.00	52.56	92	Brodifacoum	3	NO	NO
56-42-8254	EATON'S ALL-WEATHER BAIT BLOCKS RODENTICIDE WITH MOLASSES/PEA NUT BUTTE	0.00	18.13	16	Diphacinone	3	NO	NO
7173-297	BROMADIOLONE PASTE 0901	0.00	0.19	2	Bromadiolone	3	NO	NO
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	0.11	2	Difethialone	3	NO	NO
Insecticides								
100-1066	DEMAND CS INSECTICIDE	0.51	0.00	409	Cyhalothrin, lambda	3	NO	NO
432-763-62719	SUSPEND SC	0.92	0.00	215	Deltamethrin	3	NO	NO
73766-1	GOURMET ANT BAIT GEL	0.27	0.23	35	Disodium octaborate tetrahydrate	3	NO	NO
9444-168-1270	ZEP TOTAL CONTROL TOTAL RELEASE FOGGER TOTAL CONTROL SYSTEMS	1.48	0.00	5	Esfenvalerate; Prallethrin; Pyriproxyfen	3	NO	NO
1021-2593	VENDETTA PLUS COCKROACH GEL BAIT	0.02	0.00	2	Avermectin; Pyriproxyfen	3	NO	YES
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	0.09	2	Indoxacarb	3	NO	NO
499-557	Alpine WSG	0.00	0.55	1	Novaluron	3	NO	NO

Taxi and Limousine Commission

The Taxi and Limousine Commission (TLC) licenses and regulates more than 50,000 vehicles and approximately 100,000 drivers, performs safety and emissions inspections of the more than 13,000 medallion taxicabs three times each year, and holds numerous hearings for violations of City and TLC rules and regulations, making it the most active taxi and limousine licensing regulatory agency in the United States. The agency contracts for pest control through the citywide contract administered by DCAS. Table 48 summarizes pesticide use by pesticide type. Table 49 lists all pesticide products used by TLC in 2021.

Table 48: Types of Pesticides Used by TLC in 2018

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

Rodenticide	0.0	0.0%	0.7	95.5%	2	66.7%
Insecticide	0.0	100.0%	0.0	4.5%	1	33.3%
Totals	0.0		0.7		3	

Table 49: Pesticide Products Used by TLC in 2018

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
Rodenticides								
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	0.66	2	Difethialone	3	NO	NO
Insecticides								
100-1498	DUPONT ADVION ANT GEL	0.00	0.03	1	Indoxacarb	3	NO	NO

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 50 summarizes DOT pesticide use by pesticide type. Table 51 lists all pesticide products used in 2021.

Table 50: Types of Pesticides Used by DOT in 2021

Pesticide Type	Volume		Weight		Times Applied	
	Gallons	% of Total	Pounds	% of Total	Number	% of Total
Rodenticide	0.0	0.0%	53.9	43.8%	232	14.9%
Insecticide	0.2	0.1%	6.2	5.0%	135	8.7%
Herbicide	225.9	99.9%	63.0	51.2%	1,191	76.4%
Totals	226.1		123.1		1,558	

Table 51: Pesticide Products Used by DOT in 2021

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	41.42	172	Difethialone	3	NO	NO
7173-297	BROMADIOLONE PASTE 0901	0.00	11.72	57	Bromadiolone	3	NO	NO
12455-69	CONTRAC RODENTICIDE	0.00	0.75	3	Bromadiolone	3	NO	NO
Insecticides								

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
432-763	SUSPEND SC INSECTICIDE	0.22	0.00	71	Deltamethrin	3	NO	NO
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	0.86	41	Indoxacarb	3	NO	NO
2724-375	ALTOSID BRIQUETS	0.00	2.58	11	S-Methoprene	3	NO	NO
64405-2	REDZONE BAIT	0.00	2.44	8	Boric acid	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	0.29	4	Indoxacarb	3	NO	NO
Herbicides								
432-1580	DUPONT VIEWPOINT HERBICIDE	2.20	63.02	293	Aminocyclopyrachl or; Imazapyr; Metsulfuron-methyl	3	NO	NO
228-397	RIVERDALE VANQUISH HERBICIDE	42.48	0.00	279	Dicamba, diglycolamine salt	3	NO	NO
62719-556	ACCORD XRT II	58.86	0.00	274	Glyphosate, dimethylammoniu m salt	3	NO	NO
62719-176	PATHFINDER II	114.58	0.00	239	Triclopyr, butoxyethyl ester	3	NO	NO
432-1516	ESPLANADE 200 SC	7.65	0.00	105	Indaziflam	3	NO	NO
62719-527	GARLON 4 ULTRA	0.08	0.00	1	Triclopyr	2	NO	NO

APPENDIX 1: Complete Listing of Pesticide Products Used by New York City Agencies by Pesticide Type in 2021

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	12,128.45	48,756	Difethialone	3	NO	NO
12455-69	CONTRAC RODENTICIDE	0.00	26,791.33	16,205	Bromadiolone	3	NO	NO
12455-56	DITRAC TRACKING POWDER	0.00	109.79	6,675	Diphacinone	2	NO	NO
12455-133	CONTRAC WITH LUMITRACK	0.00	756.65	2,154	Bromadiolone	3	NO	NO
12455-146	CONTRAC SOFT BAIT	0.00	846.99	2,142	Bromadiolone	3	NO	NO
7173-297	BROMADIOLONE PASTE 0901	0.00	632.05	1,970	Bromadiolone	3	NO	NO
12455-90	FINAL RODENTICIDE	0.00	1,547.13	1,776	Brodifacoum	3	NO	NO
12455-79	CONTRAC ALL-WEATHER BLOX	0.59	1,425.36	1,499	Bromadiolone	3	NO	NO
12455-86	CONTRAC RODENTICIDE PLACE PAC	3.30	2,281.44	1,403	Bromadiolone	3	NO	NO
12455-139	Final Soft Bait	0.00	259.46	1,098	Brodifacoum	3	NO	NO
7173-205	GENERATION PELLETS	0.00	1,441.00	565	Difethialone	3	NO	NO
12455-148	Rat Ice	0.55	12,049.66	527	Carbon dioxide	2	NO	NO
12455-89	FINAL ALL-WEATHER BLOX	0.00	201.83	449	Brodifacoum	3	NO	NO
12455-76	CONTRAC RODENTICIDE READY TO USE PLACE PAC	0.01	220.31	404	Bromadiolone	3	NO	NO
82744-2-56	JT EATON NECTUS SOFT BAIT 2G SECOND GENERATION RODENTICIDE	0.00	141.92	392	Bromadiolone	3	NO	NO
12455-36	CONTRAC RAT AND MOUSE BAIT	0.00	347.19	362	Bromadiolone	3	NO	NO
100-1055	WEATHERBLOK BAIT WITH BITREX	0.00	501.86	272	Brodifacoum	3	NO	NO
12455-75	CONTRAC RAT AND MOUSE BAIT READY TO USE PLACE PAC	0.00	64.35	265	Bromadiolone	3	NO	NO
7173-304	BROMETHALIN SOFT BAIT	0.00	176.27	202	Bromethalin	3	NO	NO
87235-2-88689	BRIGAND WB WAX BLOCK RODENTICIDE	0.00	147.75	92	Bromadiolone	3	NO	NO
7173-113	ROZOL TRACKING POWDER	0.00	28.43	86	Chlorophacinone	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
7173-238	GENERATION MEAL	0.00	175.50	79	Difethialone	3	NO	NO
12455-108	FORMUS ALL-WEATHER BLOX	0.00	3.22	71	Brodifacoum	3	NO	NO
12455-137	Rampage Pelleted Bait	0.00	7.31	55	Bromethalin	3	NO	NO
56-42	BAIT BLOCK RODENTICIDE WITH PEANUT BUTTER FLAVORIZ	0.00	27.38	46	Diphacinone	3	NO	NO
7173-202	MAKI MINI BLOCKS	0.00	16.57	38	Bromadiolone	3	NO	NO
7173-308	Chlorophacinone Soft Bait	0.00	59.81	33	Chlorophacinone	3	NO	NO
7173-187	MAKI PARAFFINIZED PELLETS	0.00	37.73	32	Bromadiolone	3	NO	NO
7173-188	MAKI RAT AND MOUSE BAIT PACKS (PELLETS)	11.16	4.57	25	Bromadiolone	3	NO	NO
87235-1-88689	EZ SOFT - SOFT BAIT RODENTICIDE	0.00	8.14	21	Bromadiolone	3	NO	NO
12455-80	DITRAC ALL-WEATHER BLOX	0.00	9.91	18	Diphacinone	3	NO	NO
56-42-8254	EATON'S ALL-WEATHER BAIT BLOCKS RODENTICIDE WITH MOLASSES/PEANUT BUTTE	0.00	18.13	16	Diphacinone	3	NO	NO
7173-218	GENERATION MINI BLOCKS	1.56	27.26	13	Difethialone	3	NO	NO
12455-95	FASTRAC ALL-WEATHER BLOX	0.00	3.50	10	Bromethalin	3	NO	NO
82744-1-56	JT EATON BAIT BLOCK 2G SECOND GENERATION RODENTICIDE	0.00	4.50	7	Bromadiolone	3	NO	NO
12455-61	LIQUA-TOX II	0.05	0.00	4	Diphacinone, sodium salt	3	NO	NO
12455-91	FINAL RODENTICIDE READY-TO-USE PLACE PAC	0.00	1.75	4	Brodifacoum	3	NO	NO
61282-97-56	JT Eaton TM Answer [®] Kills Mice with Reusable Bait Station A	0.00	1.63	4	Bromethalin	3	NO	NO
7969-382	Selontra Rodent Bait	0.00	2.03	3	Cholecalciferol	3	NO	NO
3240-42-12455	QUINTOX RAT AND MOUSE BAIT READY-TO-USE PLACE PAC	0.00	0.78	3	Cholecalciferol	3	NO	NO
7173-288	DIFETHIALONE BLOCK 0707	0.00	0.29	3	Difethialone	3	NO	NO
12455-132-3240	TOMCAT WITH BROMETHALIN BAIT CHUNX	0.00	1.13	2	Bromethalin	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
100-1050	TALON-G RODENTICIDE BAIT PACK MINI-PELLETS WITH BI	0.00	0.55	1	Brodifacoum	3	NO	NO
7173-172	ROZOL BLUE TRACKING POWDER	0.00	0.38	1	Chlorophacinone	2	NO	NO
12455-16	ZP TRACKING POWDER	0.00	0.13	1	Zinc phosphide	1	NO	NO
Insecticides								
73049-429	VECTOMAX FG	0.00	18,809.5 1	515,780	Bacillus sphaericus; Bacillus thuringiensis, subsp. Israelensis, strain AM 65-52	3	NO	NO
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	780.10	29,255	Indoxacarb	3	NO	NO
499-510	PRESCRIPTION TREATMENT BRAND ALPINE COCKROACH GEL BAIT PISTON CAN	0.00	97.14	11,944	Dinotefuran	3	NO	NO
64405-2	REDZONE BAIT	0.00	1,061.54	7,351	Boric acid	3	NO	NO
1021-2593	VENDETTA PLUS COCKROACH GEL BAIT	0.02	154.62	6,906	Avermectin; Pyriproxyfen	3	NO	YES
432-763	SUSPEND SC INSECTICIDE	5.07	71.01	6,801	Deltamethrin	3	NO	NO
432-1483	TEMPRID SC INSECTICIDE	2.00	0.00	6,096	Cyfluthrin, beta; Imidacloprid	3	NO	NO
1021-2796	MGK Formula 3113	0.00	92.80	5,470	Clothianidin; Pyriproxyfen	0	NO	NO
397-13	STERI-FAB	611.31	621.04	4,928	Phenothrin; Isopropyl alcohol; Alkyl (60%C14, 25%C12, 15%C16) dimethylbenzyl ammonium chloride; Didecyl dimethyl ammonium chloride	2	NO	NO
432-1460	MAXFORCE FC ROACH KILLER BAIT GEL F.05	0.01	54.18	3,526	Fipronil	3	YES	NO
53883-276	DELTA 4.75% SC	185.69	0.00	2,587	Deltamethrin	3	NO	NO
432-1544	TEMPRID SC-F INSECTICIDE	23.68	0.00	1,996	Cyfluthrin, beta; Imidacloprid	3	NO	NO
73079-14	IMIDACLOPRID GRANULAR BAIT	0.00	586.38	1,891	Imidacloprid	3	NO	NO
432-1257	MAXFORCE ROACH BAIT F.05	0.00	33.05	1,489	Fipronil	3	YES	NO
73766-1	GOURMET ANT BAIT GEL	0.27	21.42	1,410	Disodium octaborate tetrahydrate	3	NO	NO
432-1259	PRODUCT: RBF5	0.00	24.96	1,114	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
73079-4	BORACTIN INSECTICIDE POWDER	1.80	251.86	1,064	Boric acid	3	NO	NO
100-1486	DUPONT ADVION COCKROACH BAIT ARENA	0.00	692.65	887	Indoxacarb	3	NO	NO
499-304	WHITMIRE OPTEM ME PT 600	0.50	0.00	724	Cyfluthrin	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.02	28.41	657	Indoxacarb	3	NO	NO
2724-351	ZOECON RF-259 EMULSIFIABLE CONCENTRATE	1.38	1.49	613	(7S)-Hydroprene	3	NO	NO
100-1066	DEMAND CS INSECTICIDE	68.55	0.00	511	Cyhalothrin, lambda	3	NO	NO
499-294	AVERT PRESCRIPTION TREATMENT 310	0.00	4.66	366	Avermectin	3	NO	YES
499-473	WHITMIRE MICRO-GEN TC 205 INJECTION SYSTEM	25.89	0.00	354	Cyhalothrin, lambda	3	NO	NO
100-1501	DUPONT ARILON INSECTICIDE	432.05	0.00	337	Indoxacarb	3	NO	NO
89459-84	RF2228 LH AEROSOL	11.74	0.06	312	Cyhalothrin, lambda; (7S)-Hydroprene	3	NO	NO
279-3206	TALSTAR TC FLOWABLE TERMITICIDE/INSECTICIDE	5.37	0.00	283	Bifenthrin	3	YES	NO
432-763-62719	SUSPEND SC	1.56	0.00	283	Deltamethrin	3	NO	NO
64405-2-74455	ECOLOGICAL ANT & INSECT BAIT	0.00	46.08	196	Boric acid	3	NO	NO
432-1506	MAXFORCE QUANTUM ANT BAIT	0.00	6.33	185	Imidacloprid	3	NO	NO
432-1375	PRE-EMPT FLY BAIT	0.00	50.81	177	Imidacloprid; (Z)-9-Tricosene	3	NO	NO
100-1290	OPTIGARD COCKROACH GEL BAIT	0.00	16.94	149	Emamectin, benzoate	3	NO	NO
1021-1828	MGK ROACH BAIT 2822	0.00	16.83	146	Avermectin	3	NO	YES
1021-1815	EVERCIDE ESFENVALERATE 6.4% CS	6.38	3.66	144	Esfenvalerate	3	NO	NO
1021-1603	NYLAR 10EC	52.69	0.00	136	Pyriproxyfen	3	NO	NO
1677-43	STER-BAC	58.48	0.00	134	Alkyl (60%C14, 25%C12, 15%C16) dimethylbenzyl ammonium chloride	1	NO	NO
499-370	PT 370 ASCEND FIRE ANT STOPPER BAIT	0.00	24.37	134	Avermectin	3	NO	YES
432-1363	TEMPO SC INSECTICIDE	11.42	0.00	125	Cyfluthrin, beta	3	NO	NO
6218-47	SUMMIT B.T.I. BRIQUETS	0.00	23.16	111	Bacillus thuringiensis subspecies israelensis strain BMP 144	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox. Cat.	EPA Carc in	CA Dev. Toxin
432-1455	BES 0026 FLY SPOT BAIT	2.24	19.45	108	Imidacloprid; (Z)-9-Tricosene	3	NO	NO
499-507	PRESCRIPTION TREATMENT BRAND ALPINE COCKROACH GEL BAIT RESERVOIR	0.00	3.07	106	Dinotefuran	3	NO	NO
9688-190-8845	SPECTRACIDE DESTROYER BRAND WASP & HORNET KILLER	15.95	15.23	88	Cyhalothrin, lambda; Prallethrin	3	NO	NO
73049-10	VECTOBAC G BIOLOGICAL LARVICIDE GRANULES	0.00	38,121.31	87	Bacillus thuringiensis, subsp. Israelensis, strain AM 65-52	3	NO	NO
2724-352	ZOECON RF-291 EMULSIFIABLE CONCENTRATE WITH PRECOR	0.60	0.00	80	S-Methoprene	3	NO	NO
279-9554	CB INSECTICIDE WITH DELTAMETHRIN	0.00	38.51	76	Deltamethrin	3	NO	NO
62577-12	ECOPCO ACU	8.57	0.00	70	Phenylethyl propionate	3	NO	NO
73049-20	VECTOLEX CG BIOLOGICAL LARVICIDE	0.00	16,218.11	64	Bacillus sphaericus	3	NO	NO
432-1256	MAXFORCE FC ANT BAIT STATIONS	0.00	0.92	63	Fipronil	3	YES	NO
73079-6	GREEN ZONE GRANULAR BAIT	0.00	7.46	58	Boric acid	3	NO	NO
432-772	DELTA DUST	0.00	10.42	56	Deltamethrin	3	NO	NO
1021-1641-57076	CONQUER RESIDUAL INSECTICIDE CONCENTRATE	0.04	0.00	50	Esfenvalerate	3	NO	NO
2724-421	ZOECON RF-292 BRIQUET	0.00	95.60	45	S-Methoprene	3	NO	NO
64405-8	NIBOR BORATE INSECTICIDE AND FUNGICIDE	13.63	9.49	44	Disodium octaborate tetrahydrate	3	NO	NO
53883-92	CYPER TC INSECTICIDE	0.23	0.01	44	Cypermethrin, beta	3	YES	NO
74779-17	RTSA 4% EMAMECTIN BENZOATE	56.24	0.00	41	Emamectin, benzoate	3	NO	NO
1021-1688-8329	ANVIL 10+10 ULV	175.24	0.00	38	Phenothrin; Piperonyl butoxide	3	YES	NO
432-1531	BES0600 INSECTICIDE	0.00	3.90	38	Clothianidin	0	NO	NO
1021-1795-8329	DUET DUAL-ACTION ADULTICIDE	182.26	0.00	33	Phenothrin; Piperonyl butoxide; Prallethrin	3	YES	NO
53883-244-66222	QUALI-PRO LAMBDA GC-0	12.87	21.81	33	Cyhalothrin, lambda	2	NO	NO
2724-351-50809	ZOECON GENCOR 9% EMULSIFIABLE CONCENTRATE	0.22	0.00	32	(7S)-Hydroprene	3	NO	NO
86203-11-59639	SAFARI 20SG INSECTICIDE	0.00	10.03	30	Dinotefuran	3	NO	NO
92028-3-47000	SureKill Roach Gel Bait	0.00	3.68	29	Imidacloprid	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox. Cat.	EPA Carcin	CA Dev. Toxin
432-1534	BES0668 Insecticide	160.53	0.00	24	Deltamethrin	3	NO	NO
432-1304	TEMPO 10 WP INSECTICIDE	57.27	0.00	24	Cyfluthrin, beta	3	NO	NO
432-1312-67760	GARANT T&O 2F	24.19	0.00	24	Imidacloprid	3	NO	NO
70506-121	UPI-2005 EXP-06 RUP INSECTICIDE	6.39	0.00	24	Cyhalothrin, lambda	2	NO	NO
53883-366	QUALI-PRO BIFENTHRIN GOLF & NURSERY 7 9F	14.79	0.00	22	Bifenthrin	3	YES	NO
100-1088	SCIMITAR GC INSECTICIDE	7.35	0.00	22	Cyhalothrin, lambda	3	NO	NO
499-550	TC-323	44.77	8.11	18	Prallethrin	3	NO	NO
100-1543	MAINSRING GH & N	0.27	0.00	18	Cyantraniliprole	0	NO	NO
149-8-64405	TERRO PCO LIQUID ANT BAIT	0.01	7.53	18	Borax	3	NO	NO
432-1312	MERIT 2F INSECTICIDE	28.46	2.34	17	Imidacloprid	3	NO	NO
1021-2569 29511	MULTICIDE SPRAY	3.59	0.00	17	Imidacloprid; Phenothrin; N-octyl bicycloheptene dicarboximide	0	YES	NO
9688-255-8845	SPECTRACIDE COMMERCIAL WASP & HORNET KILLER 3	0.67	0.00	17	Deltamethrin; S-Bioallethrin	3	YES	NO
499-467	WHITMIRE AVERT TC 181	0.00	0.41	16	Avermectin	3	NO	YES
62719-523	BLACKHAWK	0.94	69.84	15	Spinosad	3	NO	NO
48813-1-68539	SUFFOIL-X	2.24	0.00	14	Petroleum distillates	3	NO	NO
66222-203	QUALI-PRO IMIDACLOPRID 2F TURF & ORNAMENTAL INSECTICIDE	6.96	0.00	13	Imidacloprid	3	NO	NO
2724-484	RF 9707 AEROSOL	0.28	0.39	13	(7S)-Hydroprene	3	NO	NO
62719-291	CONSERVE SC TURF AND ORNAMENTAL	0.10	0.00	13	Spinosad	3	NO	NO
100-1483	ADVION INSECT GRANULE	0.00	16.19	13	Indoxacarb	3	NO	NO
432-1369-59807	MARATHON II GREENHOUSE AND NURSERY INSECTICIDE	0.03	0.00	11	Imidacloprid	3	NO	NO
2724-375	ALTOSID BRIQUETS	0.00	2.58	11	S-Methoprene	3	NO	NO
10163-324	M-PEDE INSECTICIDE/FUNGICIDE	0.33	0.00	10	Potassium laurate	2	NO	NO
100-1489	DUPONT ACELEPRYN INSECTICIDE	15.79	0.00	9	DPX-E2Y45	0	NO	NO
83100-6-88975	PRIMERAONE IMIDACLOPRID 2F INSECTICIDE	7.06	0.00	9	Imidacloprid	3	NO	NO
432-1471	SPIROTETRAMAT 240 SC GREENHOUSE AND NURSERY INSECTICIDE/MITICIDE	0.06	0.00	9	Spirotetramat	3	NO	NO
100-1551	Ference	7.20	0.00	8	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
5481-8973	ORTHENE PCO FORMULA II	7.10	0.00	8	Acephate	3	YES	NO
74578-10	TREE-AGE G4	2.54	0.00	8	Emamectin, benzoate	3	NO	NO
2724-469	ZOECON (S)-HYDROPRENE ROACH CONTROL STATION II	1.56	2.00	8	(7S)-Hydroprene	3	NO	NO
73079-2	INTICE GRANULAR BAIT	0.00	0.17	8	Boric acid	3	NO	NO
8033-114-279	ENDZONE INSECTICIDE STICKER	0.00	0.63	7	Acetamiprid	3	NO	NO
70051-2-59807	TRIACT 70	1.97	0.00	6	Neem oil	3	NO	NO
71711-4-67690	SEPRO AKARI 5SC MITICIDE/INSECTICIDE	0.42	0.00	6	Fenpyroximate	2	NO	NO
2724-793	RF2067-EW	0.22	0.00	6	(S)-Kinoprene	3	NO	NO
9444-168-1270	ZEP TOTAL CONTROL TOTAL RELEASE FOGGER TOTAL CONTROL SYSTEMS	1.48	0.00	5	Esfenvalerate; Prallethrin; Pyriproxyfen	3	NO	NO
100-1487	PROVAUNT	0.56	39.15	5	Indoxacarb	3	NO	NO
59639-170-74779	TRANSTECT 70WSP INSECTICIDE	0.22	0.00	5	Dinotefuran	3	NO	NO
53883-371	QUALI-PRO ABAMECTIN 0.15 EC	0.05	0.00	5	Avermectin	2	NO	YES
400-508-59807	FLORAMITE SC	0.04	0.00	5	Bifenazate	3	NO	NO
100-1636	Provaunt WDG	0.00	22.43	5	Indoxacarb	3	NO	NO
499-406	AVERT PRESCRIPTION TREATMENT TC 93A BAIT	0.00	0.02	5	Avermectin	3	NO	YES
85306-1	SELECT TCS	0.00	0.01	5	Fipronil	3	YES	NO
499-470	WHITMIRE MICRO-GEN TC 198	0.07	2.63	4	Cyfluthrin	3	NO	NO
499-557	Alpine WSG	0.00	21.88	4	Novaluron	3	NO	NO
2724-274	GOLDEN MALRIN RF-128 FLY KILLER	0.00	13.08	4	Methomyl; (Z)-9-Tricosene	3	NO	NO
2724-274-20954	GOLDEN MALRIN RF-128 FLY KILLER	0.00	2.25	4	Methomyl; (Z)-9-Tricosene	3	NO	NO
432-1255	MAXFORCE GRANULAR INSECT BAIT	0.00	2.06	4	Hydramethylnon	3	YES	YES
100-1485	DUPONT ADVION ANT BAIT ARENA	0.00	0.08	4	Indoxacarb	3	NO	NO
73049-38	VECTOBAC 12AS BIOLOGICAL LARVICIDE	0.00	0.08	4	Bacillus thuringiensis, subsp. israelensis, strain AM 65-52	3	NO	NO
432-1264	MAXFORCE FC ANT KILLER BAIT GEL	0.00	0.02	4	Fipronil	3	YES	NO
5481-643	DYLOX 420 SL TURF AND ORNAMENTAL INSECTICIDE	35.00	0.00	3	Trichlorfon	3	YES	NO
69526-5	PURESpray SPRAY OIL 10E	20.00	0.00	3	Mineral oil	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox. Cat.	EPA Carcin	CA Dev. Toxin
241-392	PHANTOM TERMITICIDE- INSECTICIDE	0.84	0.14	3	Chlorfenapyr	3	YES	NO
86869-5	LAMBDA SELECT	0.59	0.00	3	Cyhalothrin, lambda	2	NO	NO
4-80	BONIDE HORTICULTURAL AND DORMANT SPRAY OIL	0.23	0.00	3	Mineral oil	3	NO	NO
59639-96	DISTANCE INSECT GROWTH REGULATOR	0.14	0.00	3	Pyriproxyfen	3	NO	NO
2724-476	ENSTAR II INSECT GROWTH REGULATOR (ENSTAR 5E)	0.10	0.00	3	(S)-Kinoprene	2	NO	NO
81880-29- 10163	Sanmite SC Miticide Insecticide	0.03	0.00	3	Pyridaben	3	NO	NO
53883-335	N + P Regulator	0.02	0.00	3	Pyriproxyfen; Novaluron	3	NO	NO
5481-641	DYLOX 6.2 GRANULAR INSECTICIDE	0.00	1,380.00	3	Trichlorfon	3	YES	NO
241-313- 9444	SIEGE PBS GEL INSECTICIDE	0.00	4.00	3	Hydramethylnon	3	YES	YES
1021-2818	SUMILARV 0.5G SACHETS (WSP)	0.00	3.31	3	Pyriproxyfen	3	NO	NO
149-8	TERRO ANT KILLER II	0.00	0.36	3	Borax	3	NO	NO
279-3457	TRIPLE CROWN GOLF INSECTICIDE	7.27	0.00	2	Bifenthrin; Cypermethrin, zeta; Imidacloprid	2	YES	NO
89442-24	BIFEN G/N 7.9SC SELECT	1.37	0.00	2	Bifenthrin	3	YES	NO
70506-24	UP-STAR GOLD INSECTICIDE	1.21	0.00	2	Bifenthrin	3	YES	NO
9688-190	CHEMSICO WASP & HORNET KILLER LE	0.16	0.00	2	Cyhalothrin, lambda; Prallethrin	3	NO	NO
70051-9- 59807	AZATIN O BIOLOGICAL INSECTICIDE	0.06	0.00	2	Azadirachtin	3	NO	NO
1021-2838	ULD BP-100 Contact Insecticide II	0.04	0.00	2	Pyrethrins; Piperonyl butoxide	3	YES	NO
432-1318	MERIT 75 WSP	0.00	6.00	2	Imidacloprid	3	NO	NO
47000-73- 1677	SSI-50 INSECTICIDE	0.00	1.50	2	Pyrethrins; Piperonyl butoxide; N-octyl bicycloheptene dicarboximide	3	YES	NO
73079-12	SILICIDE(TM)	0.00	1.06	2	Diatomaceous earth	3	NO	NO
432-1262	MAXFORCE IBH10	0.00	1.00	2	Hydramethylnon	3	YES	YES
432-836	DELTA GARD G INSECTICIDE GRANULE	0.00	0.75	2	Deltamethrin	3	NO	NO
100-1481	DUPONT ADVION FIRE ANT BAIT	0.00	0.63	2	Indoxacarb	3	NO	NO
499-527	PRESCRIPTION TREATMENT BRAND ALPINE DUST INSECTICIDE	0.00	0.38	2	Dinotefuran; Diatomaceous earth	3	NO	NO
48813-1	BRANDT STS HORTICULTURAL OIL	0.00	0.04	2	Petroleum distillates	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox. Cat.	EPA Carcin	CA Dev. Toxin
432-1227-10404	LESCO SEVIN SL	6.19	0.00	1	Carbaryl	3	YES	YES
279-3155	TALSTAR NURSERY FLOWABLE INSECTICIDE/MITICIDE	4.69	0.00	1	Bifenthrin	3	YES	NO
228-695	MALLET 2F T&O INSECTICIDE	3.13	0.00	1	Imidacloprid	3	NO	NO
66222-19	CHLORPYRIFOS 4E AG	2.50	0.00	1	Chlorpyrifos	2	NO	YES
2217-937	SAGACITY 10SL	0.75	0.00	1	Dinotefuran	3	NO	NO
2724-351-432	TURBOCIDE GOLD WITH GENTROL	0.01	0.00	1	(7S)-Hydroprene	3	NO	NO
228-501	MALLET 0.5 G INSECTICIDE	0.00	300.00	1	Imidacloprid	3	NO	NO
69526-17	CIVITAS ONE	0.00	82.03	1	Mineral oil	3	NO	NO
92564-40	DYLOX 9.3% INSECT GRANULES	0.00	30.00	1	Trichlorfon	3	YES	NO
73049-501	VBC-60394 FG BIOLOGICAL LARVICIDE FINE GRANULE	0.00	5.00	1	Bacillus thuringiensis, subsp. Israelensis, strain AM 65-52	3	NO	NO
432-1254	MAXFORCE PROFESSIONAL INSECT CONTROL ROACH KILLER	0.00	1.98	1	Hydramethylnon	3	YES	YES
73729-1-4	DIATOMACEOUS EARTH CRAWLING INSECT KILLER	0.00	1.00	1	Diatomaceous earth	3	NO	NO
1021-815	PYROCIDE INTERMEDIATE 6605	0.00	1.00	1	Carbaryl; Pyrethrins; Piperonyl butoxide; N-octyl bicycloheptene dicarboximide; Petroleum distillates	3	YES	YES
89459-59	ENVI ACU CONTACT Insecticide	0.00	0.53	1	Phenylethyl propionate	3	NO	NO
5481-533-47000	PROZAP INSECT GUARD	0.00	0.35	1	DDVP	3	YES	NO
73049-39	DIPEL DF DRY FLOWABLE BIOLOGICAL INSECTICIDE	0.00	0.25	1	Bacillus thuringiensis, subsp. Kurstaki, strain ABTS-351, fermentation solids and solubles	3	NO	NO
71532-28-91026	FENVASTAR ECOCAP	0.00	0.05	1	Esfenvalerate	3	NO	NO
Herbicides								
62719-176	PATHFINDER II	215.54	0.00	383	Triclopyr, butoxyethyl ester	3	NO	NO
432-1580	DUPONT VIEWPOINT HERBICIDE	2.20	63.02	293	Aminocyclopyrachlor; Imazapyr; Metsulfuron-methyl	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox. Cat.	EPA Carcin	CA Dev. Toxin
62719-556	ACCORD XRT II	62.34	0.00	291	Glyphosate, dimethylammonium salt	3	NO	NO
228-397	RIVERDALE VANQUISH HERBICIDE	42.48	0.00	279	Dicamba, diglycolamine salt	3	NO	NO
62719-527	GARLON 4 ULTRA	45.41	5.56	220	Triclopyr	2	NO	NO
432-1516	ESPLANADE 200 SC	7.65	0.00	105	Indaziflam	3	NO	NO
100-937	PRIMO MAXX	38.12	0.00	93	Trinexapac-ethyl	3	NO	NO
62719-324	GLYPRO	23.22	0.00	85	Glyphosate, isopropylamine salt	3	NO	NO
524-579	ROUNDUP PROMAX	50.39	3.64	62	Glyphosate, potassium salt	3	NO	NO
241-437-67690	CLEARCAST HERBICIDE	18.84	0.00	56	Imazamox	3	NO	NO
86064-3	ARMOR TECH PGR 113 MC	5.57	93.41	55	Trinexapac-ethyl	3	NO	NO
89442-7	TRIN-PAC SELECT	29.86	0.00	48	Trinexapac-ethyl	3	NO	NO
62719-542	DIMENSION 2EW	56.84	0.00	40	Dithiopyr	2	NO	NO
100-1014	PACLOBUTRAZOL 2SC	14.28	0.00	38	Paclobutrazol	3	NO	NO
62719-566	TURFLON ESTER ULTRA	2.05	0.00	36	Triclopyr, butoxyethyl ester	3	NO	NO
352-401	DUPONT OUST HERBICIDE	0.00	4.73	35	Sulfometuron methyl	3	NO	NO
524-529	ROUNDUP PRO CONCENTRATE	43.15	0.00	34	Glyphosate, isopropylamine salt	3	NO	NO
10163-325	SCYTHE HERBICIDE	25.54	0.08	26	Nonanoic acid	2	NO	NO
1001-91	GWN-6010 PLANT GROWTH REGULATOR	0.47	25.13	22	Prohexadione calcium	3	NO	NO
524-517	ACCORD XL HERBICIDE	1.98	0.00	18	Glyphosate, isopropylamine salt	3	NO	NO
85208-1-93489	GREEN GOBBLER 20% VINEGAR WEED KILLER	34.00	0.00	17	Acetic acid	1	NO	NO
7969-327	PYLEX HERBICIDE	0.61	0.00	16	Topramezone	3	NO	NO
432-1230	PROXY GROWTH REGULATOR	114.44	0.00	15	Ethephon	1	NO	NO
9198-213	THE ANDERSONS 0.25% GRANULAR DITHIOPYR HERBICIDE	0.00	915.00	12	Dithiopyr	3	NO	NO
432-950	ACCLAIM EXTRA HERBICIDE	0.70	7.99	11	Fenoxaprop-P (+)	3	NO	NO
7969-272	DRIVE XLR8 HERBICIDE	24.53	0.00	9	Quinclorac	3	NO	NO
279-3265	F8426 HERBICIDE	0.51	0.00	9	Carfentrazone-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
62097-24-53883	PAC-LOW	16.25	0.00	8	Paclobutrazol	3	NO	NO
70299-23	AXXE BROAD SPECTRUM HERBICIDE	7.59	0.00	8	Nonanoic acid, ammonium salt	2	NO	NO
228-366	RAZOR HERBICIDE	0.67	0.00	8	Glyphosate, isopropylamine salt	3	NO	NO
62719-519	MILESTONE	0.23	0.00	8	Aminopyralid, triisopropanolamine salt	3	NO	NO
84009-27	GLYPHOSATE 41% SUPER CONCENTRATE HERBICIDE	0.05	0.00	8	Glyphosate, isopropylamine salt	2	NO	NO
228-379	DIABLO HERBICIDE	0.00	25.37	8	Dicamba, dimethylamine salt	3	NO	NO
2217-833	SPEED ZONE BROADLEAF HERBICIDE	39.09	0.00	7	2,4-D, 2-ethylhexyl ester; Carfentrazone-ethyl; Dicamba; Mecroprop-p	3	YES	NO
62719-40	GARLON 4	5.09	0.00	7	Triclopyr, butoxyethyl ester	3	NO	NO
62719-560	EF-1343	1.49	0.00	6	Florasulam	3	NO	NO
66222-151	ETHEPHON 2SL	15.16	109.38	5	Ethephon	1	NO	NO
62719-92	CONFRONT	7.93	0.00	5	Clopyralid, triethanolamine; Triclopyr, triethylamine salt	1	NO	NO
92967-3	AVENGER WEED KILLER	5.50	0.00	5	Limonene	3	NO	NO
42750-247	DUPONT KRENITE S BRUSH CONTROL AGENT	4.50	0.00	5	Fosamine, ammonium salt	3	NO	NO
7969-444	FINALE HERBICIDE	0.75	0.00	5	Glufosinate-ammonium	2	NO	NO
228-711	NUFARM PROSEDGE SELECTIVE HERBICIDE2	0.00	0.34	5	Halosulfuron-methyl	3	NO	NO
62719-687	VASTLAN	3.24	0.00	4	Triclopyr, Choline Salt	2	NO	NO
228-317	COOL POWER SELECTIVE HERBICIDE	2.73	0.00	4	Dicamba; MCPA, 2-ethyl hexyl ester; Triclopyr, butoxyethyl ester	3	NO	NO
62719-305	LONTREL TURF AND ORNAMENTAL	2.65	0.00	4	Clopyralid	3	NO	NO
81880-1-10163	SEDGEHAMMER	0.00	0.17	4	Halosulfuron-methyl	3	NO	NO
524-475	ROUNDUP ULTRA HERBICIDE	2.75	0.00	3	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
67702-8	H01 CONCENTRATE HERBICIDAL SOAP	1.21	0.00	3	Free fatty acids and/or amine salts	2	NO	NO
62719-427	DIMENSION 1EC TURF HERBICIDE	0.89	0.00	3	Dithiopyr	3	NO	NO
1381-192	CORNERSTONE PLUS	0.66	0.00	3	Glyphosate, isopropylamine salt	3	NO	NO
62719-486-534	GREEN YARD CRABGRASS PREVENTER WITH 0.1% DIMENSION	0.00	2,750.00	3	Dithiopyr	3	NO	NO
62719-445	DIMENSION* ULTRA 40WP	0.00	41.56	3	Dithiopyr	3	NO	NO
2217-696	BETAMEC 4 PRE-EMERGENCE GRASS KILLER	24.00	0.00	2	Bensulide	3	NO	NO
100-1139	BARRICADE 4FL	14.56	0.00	2	Prodiamine	3	YES	NO
53883-364	QUALI-PRO OXADIAZON SC	9.45	0.00	2	Oxadiazon	3	YES	YES
53883-399	Quali Pro Dithiopyr L	4.96	0.00	2	Dithiopyr	2	NO	NO
67702-26	Fiesta Herbicide	2.54	0.00	2	Iron HEDTA	3	NO	NO
100-1267	TENACITY	0.03	0.00	2	Mesotrione	3	NO	NO
62719-504-91636	SYNA TEK DIMENSION 0.15% PLUS FERTILIZER	0.00	3,000.00	2	Dithiopyr	3	NO	NO
228-615	CLASH SELECTIVE HERBICIDE	0.00	14.85	2	Dicamba, diglycolamine salt	3	NO	NO
53883-379	QUALI-PRO PRODIAMINE 4L	12.96	0.00	1	Prodiamine	3	YES	NO
14774-2	STRIKE 3	9.00	0.00	1	2,4-D, dimethylamine salt; Dicamba, dimethylamine salt; MCPP-P, dimethylamine salt	1	NO	NO
241-416	PENDULUM CS HERBICIDE	8.98	0.00	1	Pendimethalin	3	YES	NO
228-453-5905	BATTLESHIP 3	6.00	0.00	1	MCPA, dimethylamine salt; Triclopyr, triethylamine salt; Fluroxypyr 1-methylheptyl ester	1	NO	NO
432-1532	SPECTICLE TOTAL	3.13	0.00	1	Diquat dibromide; Indaziflam; Glyphosate, isopropylamine salt	3	NO	NO
53883-336	QUINCLORAC 1.5 L	2.25	0.00	1	Quinclorac, Dimethylamine Salt	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
228-741	NUP-16011 Herbicide	1.00	0.00	1	2,4-D, 2-ethylhexyl ester; Fluroxypyr 1-methylheptyl ester; Flumioxazin; Triclopyr, butoxyethyl ester	3	NO	NO
10404-43	LESCO THREE-WAY SELECTIVE HERBICIDE	1.00	0.00	1	2,4-D, dimethylamine salt; Dicamba, dimethylamine salt; MCP-P, dimethylamine salt	1	NO	NO
9688-293-8845	SPECTRACIDE WEED & GRASS KILLER 2	0.13	0.00	1	Dicamba, dimethylamine salt; Diquat dibromide; Fluazifop-P-butyl	3	NO	NO
62719-504-961	LEBANON PROSCAPE FERTILIZER WITH DIMENSION 0.15% FG TURF AND ORNAMENTA	0.00	8,000.00	1	Dithiopyr	3	NO	NO
62719-483-87245	CHOICE TURF PREMIUM LAWN CARE FERTILIZER WITH DIMENSION 0.125% HERBICI	0.00	7,500.00	1	Dithiopyr	3	NO	NO
62719-488-90561	NUTRITE PROFESSIONAL TURF FERTILIZER WITH DIMENSION 0.19% HERBICIDE	0.00	4,500.00	1	Dithiopyr	3	NO	NO
524-535	ROUNDUP QUIKPRO HERBICIDE	0.00	7.00	1	Glyphosate, monoammonium salt; Diquat dibromide	3	NO	NO
Fungicides								
100-1364	DACONIL ACTION	703.27	0.00	81	Acibenzolar-S-methyl; Chlorothalonil	2	YES	NO
432-942	BANOL TURF AND ORNAMENTAL FUNGICIDE	152.58	43.75	54	Propamocarb hydrochloride	3	NO	NO
53883-323-86064	ARMOR TECH TMI 2020XL	115.25	370.00	45	Thiophanate-methyl; Iprodione	3	YES	YES
432-1541	12ESP705 FUNGICIDE	0.00	2,243.02	44	Fosetyl-Al	3	NO	NO
53883-353	QUALI-PRO T-NEX	42.65	0.00	42	Trinexapac-ethyl	3	NO	NO
68539-3	T-22G BIOLOGICAL PLANT PROTECTANT GRANULES	0.00	111.00	36	Trichoderma harzianum rifai strain KRL-AG2	3	NO	NO
66222-117-86064	ARMOR TECH TEB360 XL	56.91	177.84	30	Tebuconazole	3	YES	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox. Cat.	EPA Carc in	CA Dev. Toxin
50534-202-100	MANICURE ULTREX TURF & ORNAMENTAL	0.00	979.40	28	Chlorothalonil	1	NO	NO
432-1446	TARTAN FLO FUNGICIDE	57.00	166.88	26	Triadimefon; Trifloxystrobin	3	YES	YES
264-1155	RHAPSODY ASO	211.60	0.00	24	QST 713 strain of dried Bacillus subtilis	3	NO	NO
66222-117	ORIUS 3.6F	51.88	0.00	24	Tebuconazole	3	YES	NO
432-1505	CHIPCO 26019T FUNGICIDE	145.83	306.25	21	Iprodione; Trifloxystrobin	3	YES	NO
432-890	ALIETTE WDG BRAND FUNGICIDE	0.00	752.56	21	Fosetyl-Al	3	NO	NO
60063-7-10404	LESCO MANICRUE 6FL	155.69	0.00	17	Chlorothalonil	2	YES	NO
7969-349	Xzemplar Fungicide	16.65	0.00	17	Fluxapyroxad	3	NO	NO
432-1445	BAYLETON FLO TURF AND ORNAMENTAL FUNGICIDE	30.33	0.00	15	Triadimefon	3	YES	YES
53883-310	QUALI-PRO CHLOROTHALONIL 720 SFT	165.56	0.00	13	Chlorothalonil	2	YES	NO
228-626	NUFARM T-METHYL PRO 4.5 F FUNGICIDE	61.78	114.16	13	Thiophanate-methyl	3	YES	YES
53883-313	QUALI-PRO CHLOROTHALONIL DF	0.00	1,089.71	13	Chlorothalonil	2	YES	NO
86064-1	ARMORTECH CLT 825 DF	0.00	232.00	13	Chlorothalonil	2	YES	NO
69526-13	CIVITAS	50.00	0.00	12	Mineral oil	3	NO	NO
228-633	NUFARM PROPICONAZOLE SPC EC FUNGICIDE	17.31	0.00	12	Propiconazole	2	YES	NO
53883-433	QUALI-PRO MEFENOXAM 2AQ	12.20	0.00	12	Mefenoxam	2	NO	NO
71512-20-100	SECURE	27.41	0.00	11	Fluazinam	2	YES	NO
100-1633	Secure Action	9.01	0.00	11	Fluazinam; Acibenzolar-S-methyl	3	YES	NO
59639-144	V-10116 VPP FUNGICIDE	0.75	92.65	11	Metconazole	3	NO	NO
68173-3-1001	AFFIRM WDG	0.69	74.61	11	Polyoxin D zinc salt	3	NO	NO
228-623-10404	LESCO SPECTATOR ULTRA 1.3 FUNGICIDE	19.23	0.00	10	Propiconazole	2	YES	NO
71512-13-279	SEGWAY FUNGICIDE	8.88	0.00	10	Cyazofamid	3	NO	NO
70299-12	ZEROTOL 2.0	2.42	0.00	10	Peroxyacetic acid; Hydrogen peroxide	1	NO	NO
53883-343	AZOXYSTROBIN 50 WG	0.00	8.39	10	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
70506-262	PEGASUS 6L	154.77	0.00	9	Chlorothalonil	2	YES	NO
228-739	NUP-15014 Fungicide	28.27	0.00	9	Tebuconazole; Fluazinam	3	YES	NO
7969-290	INSIGNIA SC INTRINSIC BRAND FUNGICIDE	15.28	0.00	9	Pyraclostrobin	2	NO	NO
42750- 261-53883	STROBE 2L	0.44	0.00	9	Azoxystrobin	3	NO	NO
100-1434	MEDALLION WDG	0.00	0.29	9	Fludioxonil	3	NO	NO
67702-2- 67690	CAMELOT O FUNGICIDE/BACTERICI DE	14.90	0.00	8	Copper octanoate	3	NO	NO
89442-37	Fluazinam 40SC Select	13.50	0.00	8	Fluazinam	3	YES	NO
87290-40- 93051	RightLine PROPI 1.3 MEC	0.00	252.29	8	Propiconazole	3	YES	NO
432-888- 10404	LESCO 18 PLUS TURF & ORNAMENTAL FUNGICIDE	49.72	0.00	7	Iprodione	3	YES	NO
89442-28	IPRODIONE 2F SELECT	35.00	0.00	7	Iprodione	3	YES	NO
100-1326	BANNER MAXX II	23.05	0.00	7	Propiconazole	3	YES	NO
1001-69	3336 F	4.23	0.00	7	Thiophanate- methyl	3	YES	YES
100-1093	HERITAGE FUNGICIDE	0.00	14.64	7	Azoxystrobin	3	NO	NO
432-888	CHIPCO 26019 FLO BRAND FUNGICIDE	124.65	0.00	6	Iprodione	3	YES	NO
5481-619	EQUUS 720 SST	94.81	0.00	6	Chlorothalonil	2	YES	NO
100-1347	CONCERT II	86.50	0.00	6	Propiconazole	1	YES	NO
100-1433	BRISKWAY	10.78	0.00	6	Azoxystrobin; Difenoconazole	3	YES	NO
228-737	NUP-15013 Fungicide	3.38	62.66	6	Fluazinam	3	YES	NO
70299-15	GC PRO	0.00	420.00	6	Sodium percarbonate	1	NO	NO
432-1223	PROSTAR 70 WP	0.00	5.93	6	Flutolanil	3	NO	NO
42750-99	TEBUCONAZOLE 3.6FL	32.24	0.00	5	Tebuconazole	3	YES	NO
228-630- 10404	LESCO TWOSOME FUNGICIDE	12.19	0.00	5	Iprodione; Thiophanate- methyl	3	YES	YES
228-623- 88975	PRIMERAONE PROPICONAZOLE 14.3	11.69	0.00	5	Propiconazole	2	YES	NO
89442-3	PPZ 41.8 SELECT	10.04	0.00	5	Propiconazole	2	YES	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox. Cat.	EPA Carcin	CA Dev. Toxin
71512-13-2217	SEGWAY FUNGICIDE	6.27	0.00	5	Cyazofamid	3	NO	NO
100-1600	A19649 200SC Turf	6.13	0.00	5	Pydiflumetofen	3	NO	NO
7969-350	LEXICON INTRINSIC BRAND FUNGICIDE	3.18	0.00	5	Fluxapyroxad; Pyraclostrobin	3	NO	NO
100-1654	A22070 Fungicide	36.00	0.00	4	Azoxystrobin; Propiconazole	2	YES	NO
69361-27	TEBUCONAZOLE 3.6F FUNGICIDE	16.00	0.00	4	Tebuconazole	3	YES	NO
89442-16	METALAXYL 4L SELECT	2.93	0.00	4	Metalaxyl	3	NO	NO
73806-1	K-PHITE 7LP Fungicide	2.13	0.00	4	Mono- and di-potassium salts of phosphorous acid	3	NO	NO
83100-1-83979	OFFSET 3.6F FUNGICIDE	2.00	0.00	4	Tebuconazole	3	YES	NO
7969-255	HONOR FUNGICIDE	1.38	37.44	4	Nicobifen; Pyraclostrobin	3	YES	NO
53883-393	CSI 15-114 Azoxystrobin	1.38	0.00	4	Azoxystrobin	3	NO	NO
7969-196	EMERALD FUNGICIDE	0.00	39.20	4	Nicobifen	2	YES	NO
60063-3	ECHO 825	275.00	64.00	3	Chlorothalonil	2	YES	NO
89442-14	THIOPHANATE METHYL 4.5F SELECT	24.61	0.00	3	Thiophanate-methyl	3	YES	YES
432-1529	TEBUCONAZOLE SC TURF AND ORNAMENTAL FUNGICIDE	22.45	0.00	3	Tebuconazole	3	YES	NO
50534-221-100	DACONIL WEATHER STIK ZN FLOWABLE FUNGICIDE	15.00	0.00	3	Chlorothalonil	2	YES	NO
42750-211	PROPICONAZOLE 41.8% EC	14.40	0.00	3	Propiconazole	2	YES	NO
432-1522	ES TC006A	3.50	76.56	3	Mono- and di-potassium salts of phosphorous acid	0	NO	NO
53883-454	CSI 18-257 Fluazinam	3.36	0.00	3	Fluazinam	3	YES	NO
100-892	ARBOTECT 20-S FUNGICIDE	3.16	0.00	3	Thiabendazole	3	YES	NO
84059-3-87865	REGALIA PTO BIOFUNGICIDE FOR USE ON TURF AND ORNAMENTALS	2.67	0.00	3	Reynoutria sachalinensis	3	NO	NO
70252-11-73220	QUALI-PRO MEFENOXAM 2 AQ	1.00	0.00	3	Mefenoxam	3	NO	NO
83070-1	TEE-OFF 4.5F	17.96	0.00	2	Thiophanate-methyl	3	YES	YES
100-1642	Appear II Fungicide	12.00	0.00	2	Mono- and di-potassium salts of phosphorous acid	3	NO	NO
87290-44-86064	ARMORTECH ZOXY 2 SC	11.00	0.00	2	Azoxystrobin	3	NO	NO
228-623	NUFARM PROPICONAZOLE SPC 14.3 MEC FUNGICIDE	8.88	0.00	2	Propiconazole	2	YES	NO
70506-612	PROPLANT TURF AND ORNAMENTAL FUNGICIDE	7.00	0.00	2	Propamocarb hydrochloride	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
70051-107-59807	TRIATHLON BA	4.00	0.00	2	Bacillus subtilis var. amyloliquefaciens strain D747	3	NO	NO
100-1477	Ascernity	2.50	0.00	2	Difenoconazole	3	YES	NO
70299-1	ZEROTOL ALGAECIDE/FUNGICIDE	2.25	0.00	2	Hydrogen peroxide	1	NO	NO
264-1155-68539	CEASE	2.00	0.00	2	QST 713 strain of dried Bacillus subtilis	3	NO	NO
7969-184	Insignia Fungicide	1.94	0.00	2	Pyraclostrobin	3	NO	NO
89442-46	FluazTeb Select	1.32	81.56	2	Fluazinam; Tebuconazole	3	YES	NO
100-1448	MEDALLION SC	1.03	0.00	2	Fludioxonil	3	NO	NO
279-3633	F6123-1 Fungicide	0.98	0.00	2	Flutriafol	3	NO	NO
53883-343-89442	AZOXY 50 WDG SELECT FUNGICIDE	0.73	4.00	2	Azoxystrobin	3	NO	NO
400-422-59807	TERRAZOLE L	0.50	0.00	2	Terrazole	1	NO	NO
432-890-10404	LESCO PRODIGY SIGNATURE	0.43	0.00	2	Fosetyl-Al	3	NO	NO
961-277	LEBANON TURF FUNGICIDE CONTAINS DACONIL	0.00	520.00	2	Chlorothalonil	3	YES	NO
62719-402-10404	LESCO MANCOZEB DG TURF AND ORNAMENTAL FUNGICIDE	0.00	96.00	2	Mancozeb	3	YES	NO
70506-187	MICROTHIOL DISPERS	0.00	40.00	2	Sulfur	3	NO	NO
71512-13-2217	GORDON'S PROFESSIONAL TURF & ORNAMENTAL PRODUCTS SEGWAY FUNGICIDE	0.00	18.05	2	Cyazofamid	3	NO	NO
100-1550	HERITAGE ACTION	0.00	13.75	2	Acibenzolar-S-methyl; Azoxystrobin	3	NO	NO
464-693-63288	CHEMICAR 15	80.00	0.00	1	Glutaraldehyde	1	NO	NO
53883-380	QUALI-PRO IPRO 2	60.00	0.00	1	Iprodione	3	YES	NO
94485-4	COMPANION® MAXX LIQUID BIOLOGICAL FUNGICIDE	19.00	0.00	1	Bacillus amyloliquefaciens strain ENV503	0	NO	NO
83070-8	ADVAN PROPAMOCARB	10.50	0.00	1	Propamocarb hydrochloride	3	NO	NO
86064-2	ARMOR TECH CLT 720 FL	10.00	0.00	1	Chlorothalonil	2	YES	NO
53883-375	QUALI-PRO IPRO 2SE	7.50	0.00	1	Iprodione	3	YES	NO
50534-211-100	DACONIL ZN FLOWABLE FUNGICIDE	6.00	0.00	1	Chlorothalonil	2	NO	NO
66222-134	THIOPHANATE METHYL 4.5 F	4.20	0.00	1	Thiophanate-methyl	3	YES	YES
86064-4	ARMOR TECH PPZ 143 MC	3.98	0.00	1	Propiconazole	2	YES	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox. Cat.	EPA Carcin	CA Dev. Toxin
228-628	NUFARM T-METHYL SPC 50 WSB FUNGICIDE	3.00	0.00	1	Thiophanate-methyl	3	YES	YES
228-652	NUFARM T-METHYL 4.5 F Fungicide	2.50	0.00	1	Thiophanate-methyl	3	YES	YES
89442-17	PROPICONAZOLE 14.3 SELECT	1.66	0.00	1	Propiconazole	3	YES	NO
7969-404	Maxtima Fungicide	1.00	0.00	1	Mefentrifluconazole	3	NO	NO
9198-115	THE ANDERSONS TURF FUNGICIDE WITH 5.0% DACONIL	0.00	480.00	1	Chlorothalonil	1	YES	NO
62719-388	FORE 80WP RAINSHIELD	0.00	33.00	1	Mancozeb	3	YES	NO
53883-375-86064	QUALI-PRO IPRO 2SE	0.00	32.81	1	Iprodione	3	YES	NO
89442-21	AZOXY 2SC SELECT	0.00	9.84	1	Azoxystrobin	3	NO	NO
4-62	BONIDE SULPHUR PLANT FUNGICIDE MICRONIZED SPRAY OR DUST	0.00	2.50	1	Sulfur	3	NO	NO
100-1364	DACONIL ACTION	703.27	0.00	81	Acibenzolar-S-methyl; Chlorothalonil	2	YES	NO
432-942	BANOL TURF AND ORNAMENTAL FUNGICIDE	152.58	43.75	54	Propamocarb hydrochloride	3	NO	NO
53883-323-86064	ARMOR TECH TMI 2020XL	115.25	370.00	45	Thiophanate-methyl; Iprodione	3	YES	YES
432-1541	12ESP705 FUNGICIDE	0.00	2,243.02	44	Fosetyl-Al	3	NO	NO
53883-353	QUALI-PRO T-NEX	42.65	0.00	42	Trinexapac-ethyl	3	NO	NO
Other (Repellents, Biochemical Pesticides, Etc.)								
4238-29	HYPOCHLORITE SOLUTION	96.25	0.00	42	Sodium hypochlorite	1	NO	NO
60061-142	PETTIT NEPTUNE 5 HARD HYBRID ABLATIVE ANTIFOULING PAINT	28.00	0.00	28	Copper oxide (ous)	2	NO	NO
59807-4	HORMODIN 1	0.00	0.57	13	IBA	3	NO	NO
14802-8-74466	MICROBE LIFE ALGAWAY 5.4 ALGAECIDE FOR PONDS	1.25	0.00	5	Poly(oxyethylene) (dimethylimino) ethylene (dimethylimino) ethylene dichloride	3	NO	NO
73049-15	PROGIBB 4% PLANT GROWTH REGULATOR SOLUTION	0.00	0.00	5	Gibberellins	2	NO	NO
63838-5	BROMMAX 7.1	75.00	0.00	1	Sodium bromide; Sodium hypochlorite	1	NO	NO
55943-1	HOT FOOT BIRD REPELLENT	0.00	3.00	1	Polybutenes	3	NO	NO

APPENDIX 2: Complete Listing of Pesticide Products Used by the Department of Parks and Recreation in 2021

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	3.30	1,029.16	971	Bromadiolone	3	NO	NO
12455-69	CONTRAC RODENTICIDE	0.00	845.74	639	Bromadiolone	3	NO	NO
7173-258	DIFETHIALONE PASTE PLACE PACKS	0.00	137.58	618	Difethialone	3	NO	NO
12455-148	Rat Ice	0.55	5,897.66	442	Carbon dioxide	2	NO	NO
12455-36	CONTRAC RAT AND MOUSE BAIT	0.00	255.31	265	Bromadiolone	3	NO	NO
7173-297	BROMADIOLONE PASTE 0901	0.00	38.10	143	Bromadiolone	3	NO	NO
12455-79	CONTRAC ALL-WEATHER BLOX	0.00	52.06	114	Bromadiolone	3	NO	NO
7173-238	GENERATION MEAL	0.00	175.50	79	Difethialone	3	NO	NO
12455-137	Rampage Pelleted Bait	0.00	7.31	55	Bromethalin	3	NO	NO
7173-205	GENERATION PELLETS	0.00	80.06	49	Difethialone	3	NO	NO
7173-202	MAKI MINI BLOCKS	0.00	16.57	38	Bromadiolone	3	NO	NO
7173-187	MAKI PARAFFINIZED PELLETS	0.00	37.73	32	Bromadiolone	3	NO	NO
7173-188	MAKI RAT AND MOUSE BAIT PACKS (PELLETS)	11.16	4.57	25	Bromadiolone	3	NO	NO
56-42	BAIT BLOCK RODENTICIDE WITH PEANUT BUTTER FLAVORIZ	0.00	14.44	25	Diphacinone	3	NO	NO
12455-139	Final Soft Bait	0.00	10.91	16	Brodifacoum	3	NO	NO
7173-218	GENERATION MINI BLOCKS	1.56	27.26	13	Difethialone	3	NO	NO
12455-95	FASTRAC ALL-WEATHER BLOX	0.00	3.50	10	Bromethalin	3	NO	NO
82744-1-56	JT EATON BAIT BLOCK 2G SECOND GENERATION RODENTICIDE	0.00	4.50	7	Bromadiolone	3	NO	NO
12455-89	FINAL ALL-WEATHER BLOX	0.00	2.50	6	Brodifacoum	3	NO	NO
12455-91	FINAL RODENTICIDE READY-TO-USE PLACE PAC	0.00	1.75	4	Brodifacoum	3	NO	NO
61282-97-56	JT Eaton™ Answer® Kills Mice with Reusable Bait Station A	0.00	1.63	4	Bromethalin	3	NO	NO
3240-42-12455	QUINTOX RAT AND MOUSE BAIT READY-TO-USE PLACE PAC	0.00	0.78	3	Cholecalciferol	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
7173-113	ROZOL TRACKING POWDER	0.00	0.63	2	Chlorophacinone	2	NO	NO
87235-1-88689	EZ SOFT - SOFT BAIT RODENTICIDE	0.00	0.62	2	Bromadiolone	3	NO	NO
100-1050	TALON-G RODENTICIDE BAIT PACK MINI-PELLETS WITH BI	0.00	0.55	1	Brodifacoum	3	NO	NO
Insecticides								
9688-190-8845	SPECTRACIDE DESTROYER BRAND WASP & HORNET KILLER	14.02	15.23	79	Cyhalothrin, lambda; Prallethrin	3	NO	NO
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	3.11	54	Indoxacarb	3	NO	NO
74779-17	RTSA 4% EMAMECTIN BENZOATE	56.24	0.00	41	Emamectin, benzoate	3	NO	NO
53883-244-66222	QUALI-PRO LAMBDA GC-0	12.87	21.81	33	Cyhalothrin, lambda	2	NO	NO
432-763	SUSPEND SC INSECTICIDE	0.19	0.31	31	Deltamethrin	3	NO	NO
86203-11-59639	SAFARI 20SG INSECTICIDE	0.00	10.03	30	Dinotefuran	3	NO	NO
1021-1815	EVERCIDE ESFENVALERATE 6.4% CS	5.60	3.66	26	Esfenvalerate	3	NO	NO
432-1312-67760	GARANT T&O 2F	24.19	0.00	24	Imidacloprid	3	NO	NO
70506-121	UPI-2005 EXP-06 RUP INSECTICIDE	6.39	0.00	24	Cyhalothrin, lambda	2	NO	NO
64405-2	REDZONE BAIT	0.00	8.41	23	Boric acid	3	NO	NO
53883-366	QUALI-PRO BIFENTHRIN GOLF & NURSERY 7 9F	14.79	0.00	22	Bifenthrin	3	YES	NO
100-1088	SCIMITAR GC INSECTICIDE	7.35	0.00	22	Cyhalothrin, lambda	3	NO	NO
100-1498	DUPONT ADVION ANT GEL	0.00	1.54	21	Indoxacarb	3	NO	NO
100-1543	MAINSRING GH & N	0.27	0.00	18	Cyantraniliprole	0	NO	NO
432-1312	MERIT 2F INSECTICIDE	28.46	2.34	17	Imidacloprid	3	NO	NO
62719-523	BLACKHAWK	0.94	69.84	15	Spinosad	3	NO	NO
48813-1-68539	SUFFOIL-X	2.24	0.00	14	Petroleum distillates	3	NO	NO
2724-351	ZOECON RF-259 EMULSIFIABLE CONCENTRATE	0.01	1.49	14	(7S)-Hydroprene	3	NO	NO
66222-203	QUALI-PRO IMIDACLOPRID 2F TURF & ORNAMENTAL INSECTICIDE	6.96	0.00	13	Imidacloprid	3	NO	NO
62719-291	CONSERVE SC TURF AND ORNAMENTAL	0.10	0.00	13	Spinosad	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
432-1369-59807	MARATHON II GREENHOUSE AND NURSERY INSECTICIDE	0.03	0.00	11	Imidacloprid	3	NO	NO
10163-324	M-PEDE INSECTICIDE/FUNGICIDE	0.33	0.00	10	Potassium laurate	2	NO	NO
100-1489	DUPONT ACELEPRYN INSECTICIDE	15.79	0.00	9	DPX-E2Y45	0	NO	NO
83100-6-88975	PRIMERAONE IMIDACLOPRID 2F INSECTICIDE	7.06	0.00	9	Imidacloprid	3	NO	NO
432-1471	SPIROTETRAMAT 240 SC GREENHOUSE AND NURSERY INSECTICIDE/MITICIDE	0.06	0.00	9	Spirotetramat	3	NO	NO
100-1551	Ference	7.20	0.00	8	Cyantraniliprole	0	NO	NO
74578-10	TREE-AGE G4	2.54	0.00	8	Emamectin, benzoate	3	NO	NO
499-550	TC-323	44.77	0.00	7	Prallethrin	3	NO	NO
70051-2-59807	TRIACT 70	1.97	0.00	6	Neem oil	3	NO	NO
71711-4-67690	SEPRO AKARI 5SC MITICIDE/INSECTICIDE	0.42	0.00	6	Fenpyroximate	2	NO	NO
2724-793	RF2067-EW	0.22	0.00	6	(S)-Kinoprene	3	NO	NO
100-1487	PROVAUNT	0.56	39.15	5	Indoxacarb	3	NO	NO
59639-170-74779	TRANSTECT 70WSP INSECTICIDE	0.22	0.00	5	Dinotefuran	3	NO	NO
53883-371	QUALI-PRO ABAMECTIN 0.15 EC	0.05	0.00	5	Avermectin	2	NO	YES
400-508-59807	FLORAMITE SC	0.04	0.00	5	Bifenazate	3	NO	NO
100-1636	Provaunt WDG	0.00	22.43	5	Indoxacarb	3	NO	NO
6218-47	SUMMIT B.T.I. BRIQUETS	0.00	1.57	5	Bacillus thuringiensis subspecies israelensis strain BMP 144	3	NO	NO
85306-1	SELECT TCS	0.00	0.01	5	Fipronil	3	YES	NO
397-13	STERI-FAB	2.13	0.00	4	Phenothrin; Isopropyl alcohol; Alkyl (60%C14, 25%C12, 15%C16) dimethylbenzyl ammonium chloride; Didecyl dimethyl ammonium chloride	2	NO	NO
432-1363	TEMPO SC INSECTICIDE	1.26	0.00	4	Cyfluthrin, beta	3	NO	NO
100-1483	ADVION INSECT GRANULE	0.00	10.19	4	Indoxacarb	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
73049-38	VECTOBAC 12AS BIOLOGICAL LARVICIDE	0.00	0.08	4	Bacillus thuringiensis, subsp. Israelensis, strain AM 65-52	3	NO	NO
5481-643	DYLOX 420 SL TURF AND ORNAMENTAL INSECTICIDE	35.00	0.00	3	Trichlorfon	3	YES	NO
69526-5	PURESPRAY SPRAY OIL 10E	20.00	0.00	3	Mineral oil	3	NO	NO
86869-5	LAMBDA SELECT	0.59	0.00	3	Cyhalothrin, lambda	2	NO	NO
4-80	BONIDE HORTICULTURAL AND DORMANT SPRAY OIL	0.23	0.00	3	Mineral oil	3	NO	NO
59639-96	DISTANCE INSECT GROWTH REGULATOR	0.14	0.00	3	Pyriproxyfen	3	NO	NO
2724-476	ENSTAR II INSECT GROWTH REGULATOR (ENSTAR 5E)	0.10	0.00	3	(S)-Kinoprene	2	NO	NO
81880-29-10163	Sanmite SC Miticide Insecticide	0.03	0.00	3	Pyridaben	3	NO	NO
5481-641	DYLOX 6.2 GRANULAR INSECTICIDE	0.00	1,380.00	3	Trichlorfon	3	YES	NO
432-1264	MAXFORCE FC ANT KILLER BAIT GEL	0.00	0.00	3	Fipronil	3	YES	NO
279-3457	TRIPLE CROWN GOLF INSECTICIDE	7.27	0.00	2	Bifenthrin; Cypermethrin, zeta; Imidacloprid	2	YES	NO
89442-24	BIFEN G/N 7.9SC SELECT	1.37	0.00	2	Bifenthrin	3	YES	NO
70506-24	UP-STAR GOLD INSECTICIDE	1.21	0.00	2	Bifenthrin	3	YES	NO
241-392	PHANTOM TERMITICIDE-INSECTICIDE	0.84	0.00	2	Chlorfenapyr	3	YES	NO
70051-9-59807	AZATIN O BIOLOGICAL INSECTICIDE	0.06	0.00	2	Azadirachtin	3	NO	NO
499-557	Alpine WSG	0.00	21.05	2	Novaluron	3	NO	NO
432-1318	MERIT 75 WSP	0.00	6.00	2	Imidacloprid	3	NO	NO
48813-1	BRANDT STS HORTICULTURAL OIL	0.00	0.04	2	Petroleum distillates	3	NO	NO
432-1227-10404	LESCO SEVIN SL	6.19	0.00	1	Carbaryl	3	YES	YES
279-3155	TALSTAR NURSERY FLOWABLE INSECTICIDE/MITICIDE	4.69	0.00	1	Bifenthrin	3	YES	NO
228-695	MALLET 2F T&O INSECTICIDE	3.13	0.00	1	Imidacloprid	3	NO	NO
66222-19	CHLORPYRIFOS 4E AG	2.50	0.00	1	Chlorpyrifos	2	NO	YES
2217-937	SAGACITY 10SL	0.75	0.00	1	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
100-1066	DEMAND CS INSECTICIDE	0.12	0.00	1	Cyhalothrin, lambda	3	NO	NO
2724-351-432	TURBOCIDE GOLD WITH GENTROL	0.01	0.00	1	(7S)-Hydroprene	3	NO	NO
432-763-62719	SUSPEND SC	0.01	0.00	1	Deltamethrin	3	NO	NO
228-501	MALLET 0.5 G INSECTICIDE	0.00	300.00	1	Imidacloprid	3	NO	NO
69526-17	CIVITAS ONE	0.00	82.03	1	Mineral oil	3	NO	NO
92564-40	DYLOX 9.3% INSECT GRANULES	0.00	30.00	1	Trichlorfon	3	YES	NO
499-370	PT 370 ASCEND FIRE ANT STOPPER BAIT	0.00	1.00	1	Avermectin	3	NO	YES
1021-815	PYROCIDE INTERMEDIATE 6605	0.00	1.00	1	Carbaryl; Pyrethrins; Piperonyl butoxide; N-octyl bicycloheptene dicarboximide; Petroleum distillates	3	YES	YES
73049-39	DIPEL DF DRY FLOWABLE BIOLOGICAL INSECTICIDE	0.00	0.25	1	Bacillus thuringiensis, subsp. Kurstaki, strain ABTS-351, fermentation solids and solubles	3	NO	NO
71532-28-91026	FENVASTAR ECOCAP	0.00	0.05	1	Esfenvalerate	3	NO	NO
Herbicides								
62719-527	GARLON 4 ULTRA	45.33	5.56	219	Triclopyr	2	NO	NO
62719-176	PATHFINDER II	100.96	0.00	144	Triclopyr, butoxyethyl ester	3	NO	NO
100-937	PRIMO MAXX	38.12	0.00	93	Trinexapac-ethyl	3	NO	NO
62719-324	GLYPRO	23.22	0.00	85	Glyphosate, isopropylamine salt	3	NO	NO
524-579	ROUNDUP PROMAX	50.39	3.64	62	Glyphosate, potassium salt	3	NO	NO
241-437-67690	CLEARCAST HERBICIDE	18.84	0.00	56	Imazamox	3	NO	NO
86064-3	ARMOR TECH PGR 113 MC	5.57	93.41	55	Trinexapac-ethyl	3	NO	NO
89442-7	TRIN-PAC SELECT	29.86	0.00	48	Trinexapac-ethyl	3	NO	NO
62719-542	DIMENSION 2EW	56.84	0.00	40	Dithiopyr	2	NO	NO
100-1014	PACLOBUTRAZOL 2SC	14.28	0.00	38	Paclobutrazol	3	NO	NO
352-401	DUPONT OUST HERBICIDE	0.00	4.73	35	Sulfometuron methyl	3	NO	NO
524-529	ROUNDUP PRO CONCENTRATE	43.15	0.00	34	Glyphosate, isopropylamine salt	3	NO	NO
10163-325	SCYTHE HERBICIDE	25.54	0.08	26	Nonanoic acid	2	NO	NO
1001-91	GWN-6010 PLANT GROWTH REGULATOR	0.47	25.13	22	Prohexadione calcium	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
524-517	ACCORD XL HERBICIDE	1.98	0.00	18	Glyphosate, isopropylamine salt	3	NO	NO
85208-1-93489	GREEN GOBBLER 20% VINEGAR WEED KILLER	34.00	0.00	17	Acetic acid	1	NO	NO
7969-327	PYLEX HERBICIDE	0.61	0.00	16	Topramezone	3	NO	NO
432-1230	PROXY GROWTH REGULATOR	114.44	0.00	15	Ethephon	1	NO	NO
9198-213	THE ANDERSONS 0.25% GRANULAR DITHIOPYR HERBICIDE	0.00	915.00	12	Dithiopyr	3	NO	NO
432-950	ACCLAIM EXTRA HERBICIDE	0.70	7.99	11	Fenoxaprop-P (+)	3	NO	NO
7969-272	DRIVE XLR8 HERBICIDE	24.53	0.00	9	Quinclorac	3	NO	NO
279-3265	F8426 HERBICIDE	0.51	0.00	9	Carfentrazone-ethyl	3	NO	NO
62097-24-53883	PAC-LOW	16.25	0.00	8	Paclobutrazol	3	NO	NO
70299-23	AXXE BROAD SPECTRUM HERBICIDE	7.59	0.00	8	Nonanoic acid, ammonium salt	2	NO	NO
62719-556	ACCORD XRT II	2.67	0.00	8	Glyphosate, dimethylammonium salt	3	NO	NO
228-366	RAZOR HERBICIDE	0.67	0.00	8	Glyphosate, isopropylamine salt	3	NO	NO
62719-519	MILESTONE	0.23	0.00	8	Aminopyralid, triisopropanolamine salt	3	NO	NO
84009-27	GLYPHOSATE 41% SUPER CONCENTRATE HERBICIDE	0.05	0.00	8	Glyphosate, isopropylamine salt	2	NO	NO
228-379	DIABLO HERBICIDE	0.00	25.37	8	Dicamba, dimethylamine salt	3	NO	NO
2217-833	SPEED ZONE BROADLEAF HERBICIDE	39.09	0.00	7	2,4-D, 2-ethylhexyl ester; Carfentrazone-ethyl; Dicamba; Mecroprop-p	3	YES	NO
62719-40	GARLON 4	5.09	0.00	7	Triclopyr, butoxyethyl ester	3	NO	NO
62719-560	EF-1343	1.49	0.00	6	Florasulam	3	NO	NO
66222-151	ETHEPHON 2SL	15.16	109.38	5	Ethephon	1	NO	NO
62719-92	CONFRONT	7.93	0	5	Clopyralid, triethanolamine; Triclopyr, triethylamine salt	1	NO	NO
92967-3	AVENGER WEED KILLER	5.50	0	5	Limonene	3	NO	NO
228-711	NUFARM PROSEDGE SELECTIVE HERBICIDE2	0.00	0	5	Halosulfuron-methyl	3	NO	NO

EPA Reg. #	EPA Product Name	Volume (Gals)	Weight (Lbs)	No. Appl's.	Active Ingredient(s)	EPA Tox Cat	EPA Carcin	CA Dev. Toxin
62719-687	VASTLAN	3.24	0	4	Triclopyr, Choline Salt	2	NO	NO
228-317	COOL POWER SELECTIVE HERBICIDE	2.73	0	4	Dicamba; MCPA, 2-ethyl hexyl ester; Triclopyr, butoxyethyl ester	3	NO	NO
62719-305	LONTREL TURF AND ORNAMENTAL	2.65	0.00	4	Clopyralid	3	NO	NO
81880-1-10163	SEDGEHAMMER	0.00	0.17	4	Halosulfuron-methyl	3	NO	NO
524-475	ROUNDUP ULTRA HERBICIDE	2.75	0.00	3	Glyphosate, isopropylamine salt	3	NO	NO
67702-8	H01 CONCENTRATE HERBICIDAL SOAP	1.21	0.00	3	Free fatty acids and/or amine salts	2	NO	NO
62719-427	DIMENSION 1EC TURF HERBICIDE	0.89	0.00	3	Dithiopyr	3	NO	NO
62719-486-534	GREEN YARD CRABGRASS PREVENTER WITH 0.1% DIMENSION	0.00	2,750.00	3	Dithiopyr	3	NO	NO
62719-445	DIMENSION* ULTRA 40WP	0.00	41.56	3	Dithiopyr	3	NO	NO
2217-696	BETAMEC 4 PRE-EMERGENCE GRASS KILLER	24.00	0.00	2	Bensulide	3	NO	NO
100-1139	BARRICADE 4FL	14.56	0.00	2	Prodiamine	3	YES	NO
53883-364	QUALI-PRO OXADIAZON SC	9.45	0.00	2	Oxadiazon	3	YES	YES
53883-399	Quali Pro Dithiopyr L	4.96	0.00	2	Dithiopyr	2	NO	NO
67702-26	Fiesta Herbicide	2.54	0.00	2	Iron HEDTA	3	NO	NO
100-1267	TENACITY	0.03	0.00	2	Mesotrione	3	NO	NO
62719-504-91636	SYNA TEK DIMENSION 0.15% PLUS FERTILIZER	0.00	3,000.00	2	Dithiopyr	3	NO	NO
228-615	CLASH SELECTIVE HERBICIDE	0.00	14.85	2	Dicamba, diglycolamine salt	3	NO	NO
53883-379	QUALI-PRO PRODIAMINE 4L	12.96	0.00	1	Prodiamine	3	YES	NO
14774-2	STRIKE 3	9.00	0.00	1	2,4-D, dimethylamine salt; Dicamba, dimethylamine salt; MCPP-P, dimethylamine salt	1	NO	NO
241-416	PENDULUM CS HERBICIDE	8.98	0.00	1	Pendimethalin	3	YES	NO
228-453-5905	BATTLESHIP 3	6.00	0.00	1	MCPA, dimethylamine salt; Triclopyr, triethylamine salt; Fluroxypyr 1-methylheptyl ester	1	NO	NO
432-1532	SPECTICLE TOTAL	3.13	0.00	1	Diquat dibromide; Indaziflam; 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
53883-336	QUINCLORAC 1.5 L	2.25	0.00	1	Quinclorac, Dimethylamine Salt	3	NO	NO
10404-43	LESCO THREE-WAY SELECTIVE HERBICIDE	1.00	0.00	1	2,4-D, dimethylamine salt; Dicamba, dimethylamine salt; MCP-P, dimethylamine salt	1	NO	NO
228-741	NUP-16011 Herbicide	1.00	0.00	1	2,4-D, 2-ethylhexyl ester; Fluroxypyr 1-methylheptyl ester; Flumioxazin; Triclopyr, butoxyethyl ester	3	NO	NO
62719-566	TURFLON ESTER ULTRA	0.59	0.00	1	Triclopyr, butoxyethyl ester	3	NO	NO
62719-504-961	LEBANON PROSCAPE FERTILIZER WITH DIMENSION 0.15% FG TURF AND ORNAMENTA	0.00	8,000.00	1	Dithiopyr	3	NO	NO
62719-483-87245	CHOICE TURF PREMIUM LAWN CARE FERTILIZER WITH DIMENSION 0.125% HERBICI	0.00	7,500.00	1	Dithiopyr	3	NO	NO
62719-488-90561	NUTRITE PROFESSIONAL TURF FERTILIZER WITH DIMENSION 0.19% HERBICIDE	0.00	4,500.00	1	Dithiopyr	3	NO	NO
524-535	ROUNDUP QUIKPRO HERBICIDE	0.00	7.00	1	Glyphosate, monoammonium salt; Diquat dibromide	3	NO	NO
Fungicides								
100-1364	DACONIL ACTION	703.27	0.00	81	Acibenzolar-S-methyl; Chlorothalonil	2	YES	NO
432-942	BANOL TURF AND ORNAMENTAL FUNGICIDE	152.58	43.75	54	Propamocarb hydrochloride	3	NO	NO
53883-323-86064	ARMOR TECH TMI 2020XL	115.25	370.00	45	Thiophanate-methyl; Iprodione	3	YES	YES
432-1541	12ESP705 FUNGICIDE	0.00	2,243.02	44	Fosetyl-Al	3	NO	NO
53883-353	QUALI-PRO T-NEX	42.65	0.00	42	Trinexapac-ethyl	3	NO	NO
68539-3	T-22G BIOLOGICAL PLANT PROTECTANT GRANULES	0.00	111.00	36	Trichoderma harzianum rifai strain KRL-AG2	3	NO	NO
66222-117-86064	ARMOR TECH TEB360 XL	56.91	177.84	30	Tebuconazole	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
50534-202-100	MANICURE ULTREX TURF & ORNAMENTAL	0.00	979.40	28	Chlorothalonil	1	NO	NO
432-1446	TARTAN FLO FUNGICIDE	57.00	166.88	26	Triadimefon; Trifloxystrobin	3	YES	YES
264-1155	RHAPSODY ASO	211.60	0.00	24	QST 713 strain of dried Bacillus subtilis	3	NO	NO
66222-117	ORIOUS 3.6F	51.88	0.00	24	Tebuconazole	3	YES	NO
432-1505	CHIPCO 26019T FUNGICIDE	145.83	306.25	21	Iprodione; Trifloxystrobin	3	YES	NO
432-890	ALIETTE WDG BRAND FUNGICIDE	0.00	752.56	21	Fosetyl-Al	3	NO	NO
60063-7-10404	LESCO MANICRUE 6FL	155.69	0.00	17	Chlorothalonil	2	YES	NO
7969-349	Xzemplar Fungicide	16.65	0.00	17	Fluxapyroxad	3	NO	NO
432-1445	BAYLETON FLO TURF AND ORNAMENTAL FUNGICIDE	30.33	0.00	15	Triadimefon	3	YES	YES
53883-310	QUALI-PRO CHLOROTHALONIL 720 SFT	165.56	0.00	13	Chlorothalonil	2	YES	NO
228-626	NUFARM T-METHYL PRO 4.5 F FUNGICIDE	61.78	114.16	13	Thiophanate-methyl	3	YES	YES
53883-313	QUALI-PRO CHLOROTHALONIL DF	0.00	1,089.71	13	Chlorothalonil	2	YES	NO
86064-1	ARMORTECH CLT 825 DF	0.00	232.00	13	Chlorothalonil	2	YES	NO
69526-13	CIVITAS	50.00	0.00	12	Mineral oil	3	NO	NO
228-633	NUFARM PROPICONAZOLE SPC EC FUNGICIDE	17.31	0.00	12	Propiconazole	2	YES	NO
53883-433	QUALI-PRO MEFENOXAM 2AQ	12.20	0.00	12	Mefenoxam	2	NO	NO
71512-20-100	SECURE	27.41	0.00	11	Fluazinam	2	YES	NO
100-1633	Secure Action	9.01	0.00	11	Fluazinam; Acibenzolar-S-methyl	3	YES	NO
59639-144	V-10116 VPP FUNGICIDE	0.75	92.65	11	Metconazole	3	NO	NO
68173-3-1001	AFFIRM WDG	0.69	74.61	11	Polyoxin D zinc salt	3	NO	NO
228-623-10404	LESCO SPECTATOR ULTRA 1.3 FUNGICIDE	19.23	0.00	10	Propiconazole	2	YES	NO
71512-13-279	SEGWAY FUNGICIDE	8.88	0.00	10	Cyazofamid	3	NO	NO
70299-12	ZEROTOL 2.0	2.42	0.00	10	Peroxyacetic acid; Hydrogen peroxide	1	NO	NO
53883-343	AZOXYSTROBIN 50 WG	0.00	8.39	10	Azoxystrobin	3	NO	NO
70506-262	PEGASUS 6L	154.77	0.00	9	Chlorothalonil	2	YES	NO
228-739	NUP-15014 Fungicide	28.27	0.00	9	Tebuconazole; Fluazinam	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
7969-290	INSIGNIA SC INTRINSIC BRAND FUNGICIDE	15.28	0.00	9	Pyraclostrobin	2	NO	NO
42750-261-53883	STROBE 2L	0.44	0.00	9	Azoxystrobin	3	NO	NO
100-1434	MEDALLION WDG	0.00	0.29	9	Fludioxonil	3	NO	NO
67702-2-67690	CAMELOT O FUNGICIDE/BACTER ICIDE	14.90	0.00	8	Copper octanoate	3	NO	NO
89442-37	Fluazinam 40SC Select	13.50	0.00	8	Fluazinam	3	YES	NO
87290-40-93051	RightLine PROPI 1.3 MEC	0.00	252.29	8	Propiconazole	3	YES	NO
432-888-10404	LESCO 18 PLUS TURF & ORNAMENTAL FUNGICIDE	49.72	0.00	7	Iprodione	3	YES	NO
89442-28	IPRODIONE 2F SELECT	35.00	0.00	7	Iprodione	3	YES	NO
100-1326	BANNER MAXX II	23.05	0.00	7	Propiconazole	3	YES	NO
1001-69	3336 F	4.23	0.00	7	Thiophanate- methyl	3	YES	YES
100-1093	HERITAGE FUNGICIDE	0.00	14.64	7	Azoxystrobin	3	NO	NO
432-888	CHIPCO 26019 FLO BRAND FUNGICIDE	124.65	0.00	6	Iprodione	3	YES	NO
5481-619	EQUUS 720 SST	94.81	0.00	6	Chlorothalonil	2	YES	NO
100-1347	CONCERT II	86.50	0.00	6	Propiconazole	1	YES	NO
100-1433	BRISKWAY	10.78	0.00	6	Azoxystrobin; Difenoconazole	3	YES	NO
228-737	NUP-15013 Fungicide	3.38	62.66	6	Fluazinam	3	YES	NO
70299-15	GC PRO	0.00	420.00	6	Sodium percarbonate	1	NO	NO
432-1223	PROSTAR 70 WP	0.00	5.93	6	Flutolanil	3	NO	NO
42750-99	TEBUCONAZOLE 3.6FL	32.24	0.00	5	Tebuconazole	3	YES	NO
228-630-10404	LESCO TWOSOME FUNGICIDE	12.19	0.00	5	Iprodione; Thiophanate- methyl	3	YES	YES
228-623-88975	PRIMERAONE PROPICONAZOLE 14.3	11.69	0.00	5	Propiconazole	2	YES	NO
89442-3	PPZ 41.8 SELECT	10.04	0.00	5	Propiconazole	2	YES	NO
71512-13-2217	SEGWAY FUNGICIDE	6.27	0.00	5	Cyazofamid	3	NO	NO
100-1600	A19649 200SC Turf	6.13	0.00	5	Pydiflumetofen	3	NO	NO
7969-350	LEXICON INTRINSIC BRAND FUNGICIDE	3.18	0.00	5	Fluxapyroxad; Pyraclostrobin	3	NO	NO
100-1654	A22070 Fungicide	36.00	0.00	4	Azoxystrobin; Propiconazole	2	YES	NO
69361-27	TEBUCONAZOLE 3.6F FUNGICIDE	16.00	0.00	4	Tebuconazole	3	YES	NO
89442-16	METALAXYL 4L SELECT	2.93	0.00	4	Metalaxyl	3	NO	NO
73806-1	K-PHITE 7LP Fungicide	2.13	0.00	4	Mono- and di- potassium salts of phosphorous acid	3	NO	NO
83100-1-83979	OFFSET 3.6F FUNGICIDE	2.00	0.00	4	Tebuconazole	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
7969-255	HONOR FUNGICIDE	1.38	37.44	4	Nicobifen; Pyraclostrobin	3	YES	NO
53883-393	CSI 15-114 Azoxystrobin	1.38	0.00	4	Azoxystrobin	3	NO	NO
7969-196	EMERALD FUNGICIDE	0.00	39.20	4	Nicobifen	2	YES	NO
60063-3	ECHO 825	275.00	64.00	3	Chlorothalonil	2	YES	NO
89442-14	THIOPHANATE METHYL 4.5F SELECT	24.61	0.00	3	Thiophanate- methyl	3	YES	YES
432-1529	TEBUCONAZOLE SC TURF AND ORNAMENTAL FUNGICIDE	22.45	0.00	3	Tebuconazole	3	YES	NO
50534-221-100	DACONIL WEATHER STIK ZN FLOWABLE FUNGICIDE	15.00	0.00	3	Chlorothalonil	2	YES	NO
42750-211	PROPICONAZOLE 41.8% EC	14.40	0.00	3	Propiconazole	2	YES	NO
432-1522	ES TC006A	3.50	76.56	3	Mono- and di- potassium salts of phosphorous acid	0	NO	NO
53883-454	CSI 18-257 Fluazinam	3.36	0.00	3	Fluazinam	3	YES	NO
100-892	ARBOTECT 20-S FUNGICIDE	3.16	0.00	3	Thiabendazole	3	YES	NO
84059-3-87865	REGALIA PTO BIOFUNGICIDE FOR USE ON TURF AND ORNAMENTALS	2.67	0.00	3	Reynoutria sachalinensis	3	NO	NO
70252-11-73220	QUALI-PRO MEFENOXAM 2 AQ	1.00	0.00	3	Mefenoxam	3	NO	NO
83070-1	TEE-OFF 4.5F	17.96	0.00	2	Thiophanate- methyl	3	YES	YES
100-1642	Appear II Fungicide	12.00	0.00	2	Mono- and di- potassium salts of phosphorous acid	3	NO	NO
87290-44-86064	ARMORTECH ZOXY 2 SC	11.00	0.00	2	Azoxystrobin	3	NO	NO
228-623	NUFARM PROPICONAZOLE SPC 14.3 MEC FUNGICIDE	8.88	0.00	2	Propiconazole	2	YES	NO
70506-612	PROPLANT TURF AND ORNAMENTAL FUNGICIDE	7.00	0.00	2	Propamocarb hydrochloride	3	NO	NO
70051-107-59807	TRIATHLON BA	4.00	0.00	2	Bacillus subtilis var. amyloliquefaciens strain D747	3	NO	NO
100-1477	Ascernity	2.50	0.00	2	Difenoconazole	3	YES	NO
70299-1	ZEROTOL ALGAECIDE/FUNGIC IDE	2.25	0.00	2	Hydrogen peroxide	1	NO	NO
264-1155-68539	CEASE	2.00	0.00	2	QST 713 strain of dried Bacillus subtilis	3	NO	NO
7969-184	Insignia Fungicide	1.94	0.00	2	Pyraclostrobin	3	NO	NO
89442-46	FluazTeb Select	1.32	81.56	2	Fluazinam; Tebuconazole	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
100-1448	MEDALLION SC	1.03	0.00	2	Fludioxonil	3	NO	NO
279-3633	F6123-1 Fungicide	0.98	0.00	2	Flutriafol	3	NO	NO
53883-343-89442	AZOXY 50 WDG SELECT FUNGICIDE	0.73	4.00	2	Azoxystrobin	3	NO	NO
400-422-59807	TERRAZOLE L	0.50	0.00	2	Terrazole	1	NO	NO
432-890-10404	LESCO PRODIGY SIGNATURE	0.43	0.00	2	Fosetyl-Al	3	NO	NO
961-277	LEBANON TURF FUNGICIDE CONTAINS DACONIL	0.00	520.00	2	Chlorothalonil	3	YES	NO
62719-402-10404	LESCO MANCOZEB DG TURF AND ORNAMENTAL FUNGICIDE	0.00	96.00	2	Mancozeb	3	YES	NO
70506-187	MICROTHIOL DISPERS	0.00	40.00	2	Sulfur	3	NO	NO
71512-13-2217	GORDON'S PROFESSIONAL TURF & ORNAMENTAL PRODUCTS SEGWAY FUNGICIDE	0.00	18.05	2	Cyazofamid	3	NO	NO
100-1550	HERITAGE ACTION	0.00	13.75	2	Acibenzolar-S- methyl; Azoxystrobin	3	NO	NO
464-693-63288	CHEMICAR 15	80.00	0.00	1	Glutaraldehyde	1	NO	NO
53883-380	QUALI-PRO IPRO 2	60.00	0.00	1	Iprodione	3	YES	NO
94485-4	COMPANION® MAXX LIQUID BIOLOGICAL FUNGICIDE	19.00	0.00	1	Bacillus amyloliquefaciens strain ENV503	0	NO	NO
83070-8	ADVAN PROPAMOCARB	10.50	0.00	1	Propamocarb hydrochloride	3	NO	NO
86064-2	ARMOR TECH CLT 720 FL	10.00	0.00	1	Chlorothalonil	2	YES	NO
53883-375	QUALI-PRO IPRO 2SE	7.50	0.00	1	Iprodione	3	YES	NO
50534-211-100	DACONIL ZN FLOWABLE FUNGICIDE	6.00	0.00	1	Chlorothalonil	2	NO	NO
66222-134	THIOPHANATE METHYL 4.5 F	4.20	0.00	1	Thiophanate- methyl	3	YES	YES
86064-4	ARMOR TECH PPZ 143 MC	3.98	0.00	1	Propiconazole	2	YES	NO
228-628	NUFARM T-METHYL SPC 50 WSB FUNGICIDE	3.00	0.00	1	Thiophanate- methyl	3	YES	YES
228-652	NUFARM T-METHYL 4.5 F Fungicide	2.50	0.00	1	Thiophanate- methyl	3	YES	YES
89442-17	PROPICONAZOLE 14.3 SELECT	1.66	0.00	1	Propiconazole	3	YES	NO
7969-404	Maxtima Fungicide	1.00	0.00	1	Mefentrifluconazole	3	NO	NO
9198-115	THE ANDERSONS TURF FUNGICIDE WITH 5.0% DACONIL	0.00	480.00	1	Chlorothalonil	1	YES	NO
62719-388	FORE 80WP RAINSHIELD	0.00	33.00	1	Mancozeb	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
53883-375-86064	QUALI-PRO IPRO 2SE	0.00	32.81	1	Iprodione	3	YES	NO
89442-21	AZOXY 2SC SELECT	0.00	9.84	1	Azoxystrobin	3	NO	NO
4-62	BONIDE SULPHUR PLANT FUNGICIDE MICRONIZED SPRAY OR DUST	0.00	2.50	1	Sulfur	3	NO	NO
Other (Repellents, Biochemical Pesticides, Etc.)								
4238-29	HYPOCHLORITE SOLUTION	96.25	0.00	42	Sodium hypochlorite	1	NO	NO
60061-142	PETTIT NEPTUNE 5 HARD HYBRID ABLATIVE ANTIFOULING PAINT	28.00	0.00	28	Copper oxide (ous)	2	NO	NO
59807-4	HORMODIN 1	0.00	0.57	13	IBA	3	NO	NO
14802-8-74466	MICROBE LIFE ALGAWAY 5.4 ALGAECIDE FOR PONDS	1.25	0.00	5	Poly(oxyethylene) (dimethylimino) ethylene (dimethylimino) ethylene dichloride	3	NO	NO
73049-15	PROGIBB 4% PLANT GROWTH REGULATOR SOLUTION	0.00	0.00	5	Gibberellins	2	NO	NO
63838-5	BROMMAX 7.1	75.00	0.00	1	Sodium bromide; Sodium hypochlorite	1	NO	NO

APPENDIX 3: Complete Listing of “Best Management Practices” Insecticides Used Citywide in 2021

EPA Reg. #	EPA Prod Name	Volume in Gallons	Weight in Pounds	Total Applications	Active Ingredient Data
73049-429	VECTOMAX FG	0.00	18809.51	515,780	Bacillus sphaericus; Bacillus thuringiensis, subsp. Israelensis, strain AM 65-52
100-1484	DUPONT ADVION COCKROACH GEL BAIT	0.00	780.10	29,255	Indoxacarb
64405-2	REDZONE BAIT	0.00	1061.54	7,351	Boric acid
1021-2593	VENDETTA PLUS COCKROACH GEL BAIT	0.02	154.62	6,906	Avermectin; Pyriproxyfen
1021-2796	MGK Formula 3113	0.00	92.80	5,470	Clothianidin; Pyriproxyfen
432-1460	MAXFORCE FC ROACH KILLER BAIT GEL F.05	0.01	54.18	3,526	Fipronil
73079-14	IMIDACLOPRID GRANULAR BAIT	0.00	586.38	1,891	Imidacloprid
432-1257	MAXFORCE ROACH BAIT F.05	0.00	33.05	1,489	Fipronil
73766-1	GOURMET ANT BAIT GEL	0.27	21.42	1,410	Disodium octaborate tetrahydrate
432-1259	PRODUCT: RBF5	0.00	24.96	1,114	Fipronil
73079-4	BORACTIN INSECTICIDE POWDER	1.80	251.86	1,064	Boric acid
100-1486	DUPONT ADVION COCKROACH BAIT ARENA	0.00	692.65	887	Indoxacarb
100-1498	DUPONT ADVION ANT GEL	0.02	28.41	657	Indoxacarb
100-1501	DUPONT ARILON INSECTICIDE	432.05	0.00	337	Indoxacarb
7173-304	BROMETHALIN SOFT BAIT	0.00	176.27	202	Bromethalin
64405-2	ECOLOGICAL ANT & INSECT BAIT	0.00	46.08	196	Boric acid
432-1506	MAXFORCE QUANTUM ANT BAIT	0.00	6.33	185	Imidacloprid
432-1375	PRE-EMPT FLY BAIT	0.00	50.81	177	Imidacloprid; (Z)-9- Tricosene
100-1290	OPTIGARD COCKROACH GEL BAIT	0.00	16.94	149	Emamectin, benzoate
1021-1828	MGK ROACH BAIT 2822	0.00	16.83	146	Avermectin
1021-1603	NYLAR 10EC	52.69	0.00	136	Pyriproxyfen
499-370	PT 370 ASCEND FIRE ANT STOPPER BAIT	0.00	24.37	134	Avermectin
6218-47	SUMMIT B.T.I. BRIQUETS	0.00	23.16	111	Bacillus thuringiensis subspecies Israelensis strain BMP 144
432-1455	BES 0026 FLY SPOT BAIT	2.24	19.45	108	Imidacloprid; (Z)-9- Tricosene
73049-10	VECTOBAC G BIOLOGICAL LARVICIDE GRANULES	0.00	38121.31	87	Bacillus thuringiensis, subsp. Israelensis, strain AM 65-52
2724-352	ZOECON RF-291 EMULSIFIABLE CONCENTRATE WITH PRECOR	0.60	0.00	80	S-Methoprene
62577-12	ECOPCO ACU	8.57	0.00	70	Phenylethyl propionate
73049-20	VECTOLEX CG BIOLOGICAL LARVICIDE	0.00	16218.11	64	Bacillus sphaericus
432-1256	MAXFORCE FC ANT BAIT STATIONS	0.00	0.92	63	Fipronil
73079-6	GREEN ZONE GRANULAR BAIT	0.00	7.46	58	Boric acid

64405-8	NIBOR BORATE INSECTICIDE AND FUNGICIDE	13.63	9.49	44	Disodium octaborate tetrahydrate
92028-3	SureKill Roach Gel Bait	0.00	3.68	29	Imidacloprid
62719-523	BLACKHAWK	0.94	69.84	15	Spinosad
48813-1	SUFFOIL-X	2.24	0.00	14	Petroleum distillates
62719-291	CONSERVE SC TURF AND ORNAMENTAL	0.10	0.00	13	Spinosad
100-1483	ADVION INSECT GRANULE	0.00	16.19	13	Indoxacarb
2724-375	ALTOSID BRIQUETS	0.00	2.58	11	S-Methoprene
10163-324	M-PEDE INSECTICIDE/FUNGICIDE	0.33	0.00	10	Potassium laurate
73079-2	INTICE GRANULAR BAIT	0.00	0.17	8	Boric acid
70051-2	TRIACT 70	1.97	0.00	6	Neem oil
100-1487	PROVAUNT	0.56	39.15	5	Indoxacarb
100-1636	Provaunt WDG	0.00	22.43	5	Indoxacarb
499-406	AVERT PRESCRIPTION TREATMENT TC 93A BAIT	0.00	0.02	5	Avermectin
85306-1	SELECT TCS	0.00	0.01	5	Fipronil
432-1255	MAXFORCE GRANULAR INSECT BAIT	0.00	2.06	4	Hydramethylnon
100-1485	DUPONT ADVION ANT BAIT ARENA	0.00	0.08	4	Indoxacarb
73049-38	VECTOBAC 12AS BIOLOGICAL LARVICIDE	0.00	0.08	4	Bacillus thuringiensis, subsp. Israelensis, strain AM 65-52
432-1264	MAXFORCE FC ANT KILLER BAIT GEL	0.00	0.02	4	Fipronil
59639-96	DISTANCE INSECT GROWTH REGULATOR	0.14	0.00	3	Pyriproxyfen
53883-335	N + P Regulator	0.02	0.00	3	Pyriproxyfen; Novaluron
241-313	SIEGE PBS GEL INSECTICIDE	0.00	4.00	3	Hydramethylnon
1021-2818	SUMILARV 0.5G SACHETS (WSP)	0.00	3.31	3	Pyriproxyfen
73079-12	SILICIDE(TM)	0.00	1.06	2	Diatomaceous earth
432-1262	MAXFORCE IBH10	0.00	1.00	2	Hydramethylnon
100-1481	DUPONT ADVION FIRE ANT BAIT	0.00	0.63	2	Indoxacarb
499-527	PRESCRIPTION TREATMENT BRAND ALPINE DUST INSECTICIDE	0.00	0.38	2	Dinotefuran; Diatomaceous earth
48813-1	BRANDT STS HORTICULTURAL OIL	0.00	0.04	2	Petroleum distillates
73049-501	VBC-60394 FG BIOLOGICAL LARVICIDE FINE GRANULE	0.00	5.00	1	Bacillus thuringiensis, subsp. Israelensis, strain AM 65-52
432-1254	MAXFORCE PROFESSIONAL INSECT CONTROL ROACH KILLER	0.00	1.98	1	Hydramethylnon
73729-1	DIATOMACEOUS EARTH CRAWLING INSECT KILLER	0.00	1.00	1	Diatomaceous earth
89459-59	ENVI ACU CONTACT Insecticide	0.00	0.53	1	Phenylethyl propionate
73049-39	DIPEL DF DRY FLOWABLE BIOLOGICAL INSECTICIDE	0.00	0.25	1	Bacillus thuringiensis, subsp. Kurstaki, strain ABTS-351, fermentation solids and solubles