



SF Environment

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A Department of the City and County of San Francisco

Checklist for City-Owned Properties

SF Reduced Risk Pesticide List & Summary of the SF Integrated Pest Management Ordinance

View this online at sfenvironment.org/ipmchecklist to click webpages underlined below.

If you've already read page 1-3, go to the SF Reduced Risk Pesticide List on page 4.

San Francisco's Integrated Pest Management (IPM) Ordinance was passed in 1996, and has been widely emulated by other public agencies. In 2006, SF's IPM Program received the National Integrated Pest Management (IPM) Achievement Award for being "a model for government agencies nationwide."

Who Must Comply with the IPM Ordinance?

Anyone (City employees, landscape or structural pest control contractors) **who manages pests** (unwanted organisms such as insects, rodents, birds, or weeds) **for properties:**

- **Owned by the City**
- **Leased from the City** (lease signed after 1996)
- For example, golf courses on City property, vendors at SF Airport, lands owned by SF Gov't but situated in other counties, offices, hospitals, jails.

For City Depts. that lease from private companies, try [Safer Pest Control Techniques, Contractors, Contract Language](#).

Checklist for City-Owned Properties

1. [Read the SF IPM Ordinance](#). As appropriate, check your department's IPM Plan.
2. [Use IPM methods for pest management](#).

Emphasize prevention and non-chemical control methods. Monitor for pests before treating. Use least-hazardous chemical pesticides only as a last resort. The IPM Ordinance is based on the Precautionary Principle, and so it is important to **ask yourself, "is pesticide use necessary?"** For example, it is **acceptable to have daisies in a park but not on a golf course.**

PEST	WHAT TO DO
Ants, Cockroaches, Rodents, Pigeons, or Other Pests – Within 10 Feet Of Building	<ul style="list-style-type: none"> ✓ City Depts. that do <u>not</u> hire City employees for structural pest control should call Pestec (415-587-6817), the vendor of the citywide contract from 2/1/2008 to 12/31/2010. ✓ City Depts. are responsible for pigeons on their own structures (i.e., if pigeons are on a power line, the power company is responsible). ✓ Check out strategies for managing specific pests, including SF IPM Program recommendations for Roof & Norway Rat Management.
Termites, Mold, Wood-Destroying Pests	Ask SFE, Chris.Geiger@sfgov.org , (415)355-3759.
Public Health Pest Control (Rats in Sewers, Mosquitoes In Catchment Basins)	Call Pestec , Citywide Pest Control Contractor, (415) 587-6817.

PEST	WHAT TO DO
Landscape (Weeds, Gophers, Insect Plant Pests)	<p>There is no Citywide contract for landscapes. City Dept. staff should:</p> <ol style="list-style-type: none"> 1. Check out strategies for managing specific pests, including SF IPM Program recommendations for Gopher Management, Ground Cover for Weed Reduction. 2. Use Bay Friendly Landscaping Guidelines, which: <ul style="list-style-type: none"> ✓ Are suited to our local climate, soils and topography ✓ Reduce waste & help meet recycling goals ✓ Reduce water use on landscapes by 50% or more ✓ Prevent or reduce storm water pollution to our local creeks and bay ✓ Lower maintenance associated with mowing and shearing ✓ Reduce greenhouse gas emissions <p>City Depts. that hire landscape pest control contractors should include the following in contract specifications:</p> <ol style="list-style-type: none"> 1. This Checklist for City-Owned Properties. 2. Language such as: Notwithstanding other sections in this contract, the Contractor will use pesticides (including insecticides, herbicides/weed-killers, fungicides, rodenticides) <i>only</i> as a method of last resort, and only after exploring all applicable non-chemical options. Only pesticide products listed on the San Francisco Reduced-Risk Pesticide List (SFEnvironment.org/ipmchecklist) may be used on City properties (SF Environment Code, Chapter 3), and must be used in a manner consistent with limitations described on the RRPL and the US EPA label. 3. Bay-Friendly Maintenance Specifications

3. If pesticides must be used, do the following:

- a) If you are applying pesticides, **attend SFE’s Annual Pesticide Safety Trainings**, a training required by CA law. For details on pesticide licensing, visit the [CA Department of Pesticide Regulation \(DPR\) Licensing and Certification Program](#). Contractors (non-City employees) working on City properties are welcome on a space-available basis.
- b) **For landscape pest control, a written recommendation is required from a licensed agricultural Pest Control Advisor (PCA)**. If you hire a PCA that is not a City staff, email the written recommendation to Chris.Geiger@sfgov.org (415-355-3759).
- c) **Use only products in the SF Approved Reduced-Risk Pesticide List** (*page 4*).
 - i) Do not use explosive devices.
- d) **Post this [Pesticide Posting and Public Awareness Notice](#) (Chinese) (Spanish):**
 - i) **At least 3 days before** application of the pesticide and remain posted **at least 4 days after**.
 - ii) If applied in an enclosed area, at every entry point where the pesticide is applied.
 - iii) If applied in an open area, post in highly visible locations around the perimeter.
 - iv) For pesticides used in rights-of-way, baits, or emergencies, see [IPM Ordinance Sec. 304](#).
- e) **Submit Pesticide Use Reports to SF Dept. of Environment every Aug. 1** (for use from Jan. 1-June 30) and **Feb. 1** (for use from July 1-Dec.31). This report is different from the report you are required to send to the County Agricultural Commissioner.
 - ✓ Make sure your Dept. IPM Coordinator reports *all pesticide uses, even pesticides used by contractors*. For more info, contact Chris.Geiger@sfgov.org, 415-355-3759.

4. Sign up for emails of new SF Approved IPM products & trainings!

5. Attend monthly SF IPM Technical Advisory Committee (TAC) meetings:

✓ **Why attend?**

- Help set the City's IPM priorities
- Give input on products to include in the SF Reduced-Risk Pesticide List (*page 4 in this packet*)
- Get trained in the latest IPM practices (*i.e., using compost teas, controlling ants*)

✓ **Who must attend:**

- **IPM Coordinators from these SF City Depts.:** Public Health, Metropolitan Transportation Agency, Port, Recreation & Parks, Public Utilities Commission, Public Works, SF International Airport. IPM Coordinators should share information from TAC meetings with anyone managing pests on their properties, including site managers, maintenance staff, and tenants leasing city-owned property.
- **Citywide Structural Pest Control Contractor** ([Pestec](#)) serving City Depts.

✓ **IPM TAC meetings are free and open to the public.** City pest control staff are particularly encouraged to join us.



DRAFT 2010 San Francisco Reduced-Risk Pesticide List for City-Owned Properties

SF Department of the Environment (SFE)

How to Use this List

The following list includes pesticide products approved for use under the SF Integrated Pest Management (IPM) Ordinance (Adopted 10/96, Chapter 3, SF Environmental Code).

This pesticide list should not be used in place of an IPM program. Pesticides should be the last resort, when all other tactics have failed (i.e., sanitation improvements, pest prevention, non-chemical management measures).

This list is for institutions, not for homes. Many pesticides on the list were added for specialized purposes not found in residential settings. To find out how homeowners can use few or no pesticides to manage common pest problems, visit: SFEnvironment.org/IPM.

City Dept. staff or contractors: Apply for exemption to use a pesticide that is:

- ✓ **Not** in the SF Reduced-Risk Pesticide List –OR–
- ✓ **In** the SF Reduced-Risk Pesticide List **but used different than described** in the *Pesticide Limitations column*.

The IPM Coordinator for your City Dept. must:

1. **Fill out this [Pesticide Exemption Request](#).** Allow at least 2 days for your request to be processed. SF Dept. of Environment will only grant exemptions in cases of:
 - a. Well-documented need for the pesticide and when all other alternatives have been tried or deemed impractical –OR–
 - b. For trial use of new reduced risk products
 - c. More questions? Contact Chris.Geiger@sfgov.org and call 415-355-3759.
2. **Justify your use of a pesticide at an annual public hearing**, if you used a pesticide:
 - a. That SF Dept. of Environment approved for exemption
 - b. That is higher risk and listed as *Most Limited Use* in the SF Reduced-Risk Pesticide List

For more info on *How SF's Reduced-Risk Pesticide List Was Developed*, visit: sfeenvironment.org/ipmchecklist

Sub-category	Product Name	Difference from 2010 List	Pesticide Hazard Tier	Pesticide Use Limitation Type	Pesticide Use Limitations	EPA Reg. No.	Ingredients
Insecticide	20 Mule Team Tim-Bor Industrial		Most hazardous (Tier I)	More Limited	For control and prevention of termites, wood-destroying beetles, and carpenter ants. Recommendation of Branch III pest control operator required for termites and beetles; recommendation of Branch II pest control operator required for carpenter ants. <i>Most hazardous (Tier I) status is due to male reproductive hazards, but exposure scenarios suggest minimal risk</i>	1624-39	disodium octaborate, tetrahydrate 98%
Fungicide	3336 WP Turf & Ornamental Fungicide		Most hazardous (Tier I)	Most Limited: justify use at public hearing	For use on golf courses only. HIGH PRIORITY TO FIND ALTERNATIVE	1001-63	thiophanate-methyl 50%
Insecticide	Advion Ant Bait Arena (Dupont)	CHANGED 2010: Erroneously listed as Tier I hazard level. Soil persistence is not an issue given current use patterns.	Least hazardous (Tier III)	Least Limited		352-664	Indoxacarb 0.1%
Insecticide	Advion Ant Gel (Dupont)		Least hazardous (Tier III)	Least Limited		352-746	Indoxacarb 0.05%
Insecticide	Advion Cockroach Bait Arena		Least hazardous (Tier III)	Least Limited		352-668	Indoxacarb 0.5%
Insecticide	Advion Cockroach Gel Bait		Least hazardous (Tier III)	Least Limited		352-652	Indoxacarb 0.6%
Mosquito control - other	Agnique MMF-G	CHANGED 2010: Corrected hazard tier to Tier II (more hazardous) from Tier I. Corrected product name from "Agnique MMF-G, AGNIQUE MMF GR MOSQUITO LARVICIDE & PUPICIDE" to Agnique MMF-G. Removed inactive EPA registration number 2302-14. Removed limitation language: "Mosquito larvicide for standing water, human health concerns, especially where spreading a distance along the surface is not critical." Human health concerns not well founded. Added language on late instar larvae and pupae per Pestec recommendation.	More hazardous (Tier II)	More Limited	Use for late instar mosquito larvae and pupae, in combination with microbial products.	53263-30	poly(oxy-1,2-ethanediyl), alpha-isodecyl-omega-hydroxy-phosphate 32%
Fungicide	Agri-Fos Systemic Fungicide		Least hazardous (Tier III)	Least Limited	For use on high-value oaks (<i>Quercus</i> spp.) susceptible to Sudden Oak Death	71962-1	potassium phosphite 45.8%

Sub-category	Product Name	Difference from 2010 List	Pesticide Hazard Tier	Pesticide Use Limitation Type	Pesticide Use Limitations	EPA Reg. No.	Ingredients
Herbicide	Andersons Golf Products K-O-G Weed Control (equivalent to ProTurf K-O-G Weed Control)	CHANGED 2010: Removed inactive EPA number 538-112-AA-538.	Most hazardous (Tier I)	Most Limited: justify use at public hearing	Spot application only for for Soliva sessilis and Cotula mexicana in golf greens when hand-weeding is not feasible. Not for use in Sharp Park or area or endangered species areas. HIGH PRIORITY TO FIND ALTERNATIVE.	9198-184	dicamba 0.7%
Fungicide	Andersons Golf Products Systemic Fungicide (equivalent to Proturf)		Most hazardous (Tier I)	Most Limited: justify use at public hearing	Greens, highest profile athletic fields. HIGH PRIORITY TO FIND ALTERNATIVE	538-88 (or 9198-187)	thiophanate-methyl 2.3%
Herbicide	Aquamaster Herbicide (equivalent to Rodeo)		More hazardous (Tier II)	More Limited	May damage non-target plants. Use for emergent plants in ponds, lakes, drainage canals, and areas around water or within watershed areas. Only as a last resort when other management practices are ineffective. NOTE: Equivalent to "Rodeo Emerged Aquatic Weed and Brush Herbicide," an older product. Rodeo in storage may be used under the same limitations. Note prohibition on use within buffer zone (generally 60 feet) around water bodies in red-legged frog habitat.	524-343	glyphosate, isopropylamine salt 53.8%
Insecticide	Avid 0.15EC Miticide/Insecticide	CHANGED 2010: Removed inactive product registration number (618-96). Added "High priority to find replacement" language.	Most hazardous (Tier I)	Most Limited	For nursery and greenhouse use only. HIGH PRIORITY TO FIND REPLACEMENT.	100-896	abamectin 2%
Insecticide	Azatin XL	CHANGED 2010: Changed limitation language from "Biological product but some concern over bee toxicity" to "do not apply on flowering plants when bees are active."	Least hazardous (Tier III)	More Limited	Nurseries and established plants for interiorscapes. Do not apply on flowering plants when bees are active.	70051-27	azadirachtin 3%
Insecticide	Azatrol EC Insecticide		More hazardous (Tier II)	More Limited		2217-836	Azadirachtin (2328) 1.2%
Insecticide	BotaniGard ES		Least hazardous (Tier III)	Least Limited	Control of thrips on landscaped plants. Do not apply on flowering plants when bees are active.	65626-8 [INACTIVE]	Beauveria bassiana strain GHA 11.3%
Adjuvant	CMR Silicone Surfactant	CHANGED FOR 2010: Limitation used to read "Use other alternatives pending new review of siloxanes." However, preliminary data on cancer studies in mice referred to D5 Siloxanes, not this active ingredient.	Least hazardous (Tier III)	More Limited		105077-5-50025	polymethylsiloxane, nonionic
Insecticide	Conserve SC Turf and Ornamental		Least hazardous (Tier III)	Least Limited	For use as a last resort in greenhouses. If feasible, alternate with other products to avoid the development of resistance.	62719-291	spinosad 11.6%

Sub-category	Product Name	Difference from 2010 List	Pesticide Hazard Tier	Pesticide Use Limitation Type	Pesticide Use Limitations	EPA Reg. No.	Ingredients
Rodenticide	Contrac All-Weather Blox	CHANGED in '10: New data on the secondary toxicity of single-feed rodenticides caused San Francisco to severely restrict the use of these products in 2007 to sewers and certain commercial establishments operating on City property. The purpose of the latter exemption was to accommodate restaurants facing citation or	Most hazardous (Tier I)	Most Limited: justify use at public hearing	For use only in City-owned sewer lines, San Francisco International Airport Terminal Areas, or for commercial lessees on city properties that are not adjacent to natural areas. In commercial establishments, use of product shall be a last resort after other, less-toxic measures have been implemented, including sanitation and trapping, and only where a significant public health hazard is recognized. In all cases, monitoring shall be used whenever	12455-79	bromadiolone 0.005%
Insecticide	Dipel Pro DF		Least hazardous (Tier III)	Least Limited		73049-39	Bacillus thuringiensis, Subsp.
Insecticide	Earth-Tone Horticultural Oil		Least hazardous (Tier III)	More Limited		67702-4	canola oil 96%
Insecticide	EcoExempt G		Least hazardous (Tier III)	Least Limited	Do not use in enclosed areas.	Exempt from EPA	eugenol (clove oil) 2.9%, thyme
Insecticide	Enstar II Insect Growth Regulator (Enstar 5E)	CHANGED 2010: Removed inactive EPA registration number (55947-82)	Least hazardous (Tier III)	Least Limited	Nurseries, roses.	2724-476	S-kinoprene 64.1%
Herbicide	Garlon 4		Most hazardous (Tier I)	Most Limited: justify use at public hearing	Use only for targeted treatments of invasive exotics via dabbing or injection. May use for targeted spraying only when dabbing or injection are not feasible, and only with use of a respirator. HIGH PRIORITY TO FIND ALTERNATIVE	62719-40	triclopyr, butoxyethyl ester 61.6%; nonpetroleum-based methylated
Herbicide	Garlon 4 Ultra		Most hazardous (Tier I)	Most Limited: justify use at public hearing	Use only for targeted treatments of invasive exotics via dabbing or injection. HIGH PRIORITY TO FIND ALTERNATIVE.	62719-527	triclopyr, butoxyethyl ester 60.45%
Insecticide	Gentrol Point Source Roach Control Device		Least hazardous (Tier III)	Least Limited		2724-469	Hydroprene 96%
Fungicide	Heritage Fungicide		Most hazardous (Tier I)	Most Limited: justify use at public hearing	Consider/emphasize use of compost tea for preventative; improve aeration and monitoring programs. To be used only as a spot treatment on high profile sports greens.	100-1093	azoxystrobin 50%
Insecticide	Javelin WG Biological Insecticide	CHANGED 2010: Updated product name	Least hazardous (Tier III)	Least Limited		70051-66	Bacillus thuringiensis (berliner),

Sub-category	Product Name	Difference from 2010 List	Pesticide Hazard Tier	Pesticide Use Limitation Type	Pesticide Use Limitations	EPA Reg. No.	Ingredients
Insecticide	JMS Stylet Oil or JMS Organic Stylet Oil	CHANGED 2010: Combined with listing for Organic stylet oil. Replaced limitations language "Use up existing stock only for Rec&Park and SFIA. Explore bio-based alternatives. Earth-Tone Horticultural Oil (equivalent to Concern For The Earth, For the Earth Pesticidal Spray Oil Dormant And Growing Season Insect Spray)." Same formulation has received OMRI certification; small amounts required.	More hazardous (Tier II)	Least Limited		65564-1	petroleum distillates, refined 97.1%
Rodenticide	JT Eaton Apple Bait Block Rodenticide	CHANGED 2010: Restricted to use for rats only, due to general ineffectiveness of baits against gophers. Replaced previous limitation language, "Concern over 2nd poisoning, see site specific limits."	More hazardous (Tier II)	More Limited	See Site-Specific Limitations in last page. For rat control only in situations with high public health concerns, where trapping is infeasible. In all cases, monitoring shall be used whenever feasible to minimize rodenticide use. HIGH PRIORITY TO FIND ALTERNATIVE.	56-41	diphacinone 0.005%
Rodenticide	JT Eaton Bait Block Rodenticide with Peanut Butter Flavorizer	CHANGED 2010: Restricted to use for rats only, due to general ineffectiveness of baits against gophers. Removed previous limitation language, "Damage to: dams, levees, athletic fields, active recreation areas, structures, high cultural value or landmark areas. Public Health concerns." Updated product name (removed "molasses").	More hazardous (Tier II)	More Limited	See Site-Specific Limitations in last page. For rat control only in situations with high public health concerns, where trapping is infeasible. In all cases, monitoring shall be used whenever feasible to minimize rodenticide use. HIGH PRIORITY TO FIND ALTERNATIVE.	56-42	diphacinone 0.005%
Fungicide	Kaligreen		Least hazardous (Tier III)	Least Limited	Watch for phytotoxicity.	70231-1 (INACTIVE)	potassium bicarbonate 82%
Insecticide	Marathon 1% Granular Greenhouse & Nursery	CHANGED 2010: Updated EPA registration number.	Most hazardous (Tier I)	Most Limited: justify use at public hearing	Nursery use for control of white fly, not for use in propagation beds. Only effective on quick-growing plants. HIGH PRIORITY TO FIND ALTERNATIVE	3125-452-AA (INACTIVE) 432-	imidacloprid 1%
Insecticide	Marathon II Granular Greenhouse & Nursery		Most hazardous (Tier I)	Most Limited	Nursery use only for control of mealybug, scale, and other insects. Only for use on fast-growing specimen plants for which Marathon 1% work.	432-1369	imidacloprid 21.4%
Insecticide	Professional Insect Control Ant Bait Stations	CHANGED 2010: Removed inactive EPA registration number 64248-10.	More hazardous (Tier II)	Least Limited		432-1256	fipronil 0.01%
Insecticide	Maxforce FC Professional Insect Control Roach Bait Stations	CHANGED 2010: Removed inactive EPA registration number 64248-11	More hazardous (Tier II)	Least Limited		432-1257	fipronil 0.05%

Sub-category	Product Name	Difference from 2010 List	Pesticide Hazard Tier	Pesticide Use Limitation Type	Pesticide Use Limitations	EPA Reg. No.	Ingredients
Insecticide	Maxforce FC Professional Insect Control Roach Killer Bait Gel	CHANGED 2010: Removed inactive EPA registration number 64248-14	Least hazardous (Tier III)	More Limited		432-1259	fipronil 0.01%
Herbicide	Milestone		Most hazardous (Tier I)	Most Limited: justify use at public hearing	For invasive species in natural areas where other alternatives are ineffective, especially for invasive legumes and composites such as yellow star thistle and purple star thistle. <i>Listed as Tier I due to persistence but toxicity & potential exposure are very low.</i>	62719-519	Aminopyralid, trii-sopropolamine salt (5928) 40.6%
Mosquito control - microbial	Mosquito control - microbial	CHANGED 2010: Changed limitation wording from "A-Allowed" to "Least Limited."	Least hazardous (Tier III)	Least Limited	Any microbial mosquito larvicide with active ingredients <i>Bacillus thuringiensis</i> (Berliner or Israelensis) or <i>Bacillus sphaericus</i> is categorized as "Least limited."		
Insecticide	M-pede Insecticide/Fungicide	CHANGED 2010: Removed inactive EPA registration number 53219-6	Least hazardous (Tier III)	More Limited	Nursery, specialty gardens, and Africanized Honey Bees.	62719-515	potash soap 49%
Insecticide	Niban Granular Bait (equivalent to Terro Multipurpose Ant Bait)		Least hazardous (Tier III)	Least Limited	Outdoor restricted to planted areas, prefer containers; indoor must be in containers or inaccessible to humans. <i>Tier I status is due to reproductive toxicity but exposure scenarios suggest minimal risk</i>	64405-2-AA	boric acid 5%
Insecticide	OhYeah!		Least hazardous (Tier III)	More Limited		Exempt from EPA	sodium lauryl sulfate
Insecticide	Orange Guard	CHANGED 2010: Changed limitation type to "more limited" in keeping with skin sensitization and scent issues.	Most hazardous (Tier I)	More Limited	Minimize use in enclosed areas due to scent. Wear protective equipment. Potential aquatic hazard - do not apply directly to water.	61887-1	d-limonene 5.8%
Herbicide	Oust XP Herbicide (DuPont)		Most hazardous (Tier I)	Most Limited: justify use at public	For use only on airport operational areas subject to FAA requirements. HIGH PRIORITY TO FIND ALTERNATIVE	352-601	sulfometuron-methyl 75%
Insecticide	Prescription Treatment Brand 381B Advance Liquid Ant	CHANGED 2010: Updated product name - added "381B". Removed inactive EPA registration number 56-72	Most hazardous (Tier I)	Least Limited	<i>Tier I status is due to reproductive toxicity but exposure scenarios suggest minimal risk</i>	499-491	borax 1.3%
Insecticide	Prescription Treatment Brand Avert Cockroach Bait Station, Formula 1	CHANGED 2010: Updated product name - added "Formula 1"	Most hazardous (Tier I)	Least Limited	Phase out - use existing supplies. <i>Tier I status is due to reproductive toxicity but exposure scenarios suggest minimal risk</i>	499-467	abamectin 0.05%
Insecticide	Treatment Brand Avert Cockroach Gel Bait Formula 3		More hazardous (Tier II)	More Limited	Phase out - use existing supplies. <i>Tier I status is due to reproductive toxicity but exposure scenarios suggest minimal risk</i>	499-410	abamectin 0.05%
Insecticide	Prescription Treatment Brand Wasp-Freeze Wasp and Hornet		More hazardous (Tier II)	More Limited	Use only when a concern for public safety. Consider Victor Poison Free Wasp & Hornet Killer as a first resort.	499-362	phenothrin 12%, d-trans allethrin .129%, CO2

Sub-category	Product Name	Difference from 2010 List	Pesticide Hazard Tier	Pesticide Use Limitation Type	Pesticide Use Limitations	EPA Reg. No.	Ingredients
Fungicide	Rootone F Brand Rooting Hormone		Most hazardous (Tier I)	Most Limited: justify use at public hearing	Nursery use only. Problem with mixing and storage due to talc. Consider gels, liquids, or Dip'n Grow as alternatives. Use existing stock. May be removed from this list.	264-499	Thiram 4.04%, NAD .2%
Fungicide	RootShield Granules, TurfShield Granules		Least hazardous (Tier III)	Least Limited		68539-3	Trichoderma harzianum Rifai Strain Krl-Ag2 (3977) 1.15%
Herbicide	Roundup Promax	ADDED 2010 - by request from IPM TAC. Confirming inert content	More hazardous (Tier II)	More Limited	Spot application of areas inaccessible or too dangerous for hand methods, right of ways, utility access, or fire prevention. Use for cracks in hardscape, decomposed granite and edging only as last resort. OK for renovations but must put in place weed prevention measures. Note prohibition on use within buffer zone (generally 60 feet) around water bodies in red-legged frog habitat.	524-579	48.7% of glyphosate, isopropylamine salt
Herbicide	Roundup Pro Herbicide	CHANGED 2010: Removed 'use existing stock' notation.	More hazardous (Tier II)	More Limited	Spot application of areas inaccessible or too dangerous for hand methods, right of ways, utility access, or fire prevention. Use for cracks in hardscape, decomposed granite and edging only as last resort. OK for renovations but must put in place weed prevention measures. Note prohibition on use within buffer zone (generally 60 feet) around water bodies in red-legged frog habitat.	524-475	glyphosate, isopropylamine salt 41%
Herbicide	Roundup ProDry Herbicide	CHANGED FOR 2010: Removed 'use existing stock' note since product is still registered.	More hazardous (Tier II)	More Limited	Same limitations as Roundup Pro.	524-505	glyphosate, ammonium salt 71.4%
Insecticide	Safer Brand Ant & Crawling Insect Killer		Least hazardous (Tier III)	Least Limited		59913-1	Diatomaceous earth 77.69%
Insecticide	Saf-T-Side		More hazardous (Tier II)	More Limited	Use up existing stock only. Try Spraytech first.	48813-1	paraffinic oil 80%
Herbicide	Sapphire	ADDED 2010	More hazardous (Tier II)	More Limited	Only use on City-owned golf courses.	62719-547	Penoxsulam
Molluscicide	Sluggo Slug and Snail Bait		Least hazardous (Tier III)	Least Limited		67702-3	Phosphoric acid, iron(3+) salt (1:1) 1%
Algaecide	Sonar A.S.		Least hazardous (Tier III)	More Limited	Emergent plants in ponds, lakes, drainage canals. Only as a last resort when other mgmt. practices are ineffective.	67690-4	fluridone 41.7%

Sub-category	Product Name	Difference from 2010 List	Pesticide Hazard Tier	Pesticide Use Limitation Type	Pesticide Use Limitations	EPA Reg. No.	Ingredients
Adjuvant	Spraytech Oil		Least hazardous (Tier III)	Least Limited	Consider using this instead of JMS Stylet Oil for aphids and other insects.	65328-50001	soybean oil
Insecticide	Terro Ant Killer II, Terro Ant Killer II Liquid Ant Baits, Terro-PCO		Most hazardous (Tier I)	Least Limited	<i>Tier I status is due to reproductive toxicity but exposure scenarios suggest minimal risk</i>	149-8	sodium tetraborate decahydrate 5.4%
Rodenticide	Top Gun All Weather Bait Block Rodenticide	CHANGED in '10: New data on the secondary toxicity of single-feed rodenticides caused San Francisco to severely restrict the use of these products in 2007 to sewers and certain commercial establishments operating on City property. The purpose of the latter exemption was to accommodate restaurants facing citation or closure due to rodent infestations.	More hazardous (Tier II)	Most Limited: justify use at public hearing	For use only in City-owned sewer lines, San Francisco International Airport Terminal Areas, or for commercial lessees on city properties that are not adjacent to natural areas. In commercial establishments, use of product shall be a last resort after other, less-toxic measures have been implemented, including sanitation and trapping, and only where a significant public health hazard is recognized. In all cases, monitoring shall be used whenever feasible to minimize rodenticide use.	67517-66	bromethalin 0.01%
Herbicide	Turflon Ester		Most hazardous (Tier I)	Most Limited: justify use at public hearing	Targeted treatment of turf; broadcast application requires exemption. HIGH PRIORITY TO FIND ALTERNATIVE. Note prohibition on use within buffer zone (generally 60 feet) around water bodies in red-legged frog habitat.	62719-258	triclopyr, butoxyethyl ester 61.6%
Insecticide	Victor Poison Free Flying Insect Killer		Least hazardous (Tier III)	Least Limited	Limit use indoors.	exempt from EPA Reg.	Mint Oil 4.0%, Sodium Lauryl Sulfate 0.1%, Inert Ingredients
Insecticide	Victor Poison Free Wasp & Hornet Killer		Least hazardous (Tier III)	Least Limited	Try this instead of PT Brand Wasp Freeze	exempt from EPA Reg. UPC #00728 681360	Mint Oil 8.0%, Sodium Lauryl Sulfate 1.0%, Inert Ingredients 91.0% Water
Mosquito control - insect growth regulators	Zoecon Altosid Briquets	CHANGED 2010: Corrected hazard tier to Tier II ("more hazardous"). Changed language from "Not for use in estuarine environments, except for San Mateo Mosquito Abatement District applications at airport and Sharp Park. For City catchment basins, microbial products are preferred when feasible"	Most hazardous (Tier I)	More Limited	Use for tanks with limited access, or other areas where frequent treatments are infeasible. For City catchment basins, microbial products are preferred. Not for use in estuarine environments except under control of San Mateo Mosquito Abatement District.	2724-375	S-Methoprene (5026) 8.62%

Sub-category	Product Name	Difference from 2010 List	Pesticide Hazard Tier	Pesticide Use Limitation Type	Pesticide Use Limitations	EPA Reg. No.	Ingredients
Mosquito control - insect growth regulators	Zoecon Altosid Liquid Larvicide Mosquito Growth Regulator, Zoecon Altosid Liquid Larvicide	CHANGED 2010: Corrected hazard tier to Tier II ("more hazardous"). Changed language from "Not for use in estuarine environments, except for San Mateo Mosquito Abatement District applications at airport and Sharp Park. For City catchment basins, microbial products are preferred when feasible"	More hazardous (Tier II)	More Limited	Use for tanks with limited access, or other areas where frequent treatments are infeasible. For City catchment basins, microbial products are preferred. Not for use in estuarine environments except under control of San Mateo Mosquito Abatement District.	2724-392	S-Methoprene (5026) 5%
Mosquito control - insect growth regulators	Zoecon Altosid Pellets, Zoecon Altosid Pellets WSP	CHANGED 2010: Corrected product names - removed "ZOECON RF-330 ALTOSID PELLETS". Corrected hazard tier to Tier II ("more hazardous"). Changed language from "Not for use in estuarine environments, except for San Mateo Mosquito Abatement District applications at airport and Sharp Park. For City catchment basins, microbial products are preferred when feasible"	More hazardous (Tier II)	More Limited	Use for tanks with limited access, or other areas where frequent treatments are infeasible. For City catchment basins, microbial products are preferred. Not for use in estuarine environments except under control of San Mateo Mosquito Abatement District.	2724-448	S-Methoprene (5026) 4.25%
Mosquito control - insect growth regulators	Zoecon Altosid XR Extended Residual Briquets	CHANGED 2010: Corrected product name - removed alternate name " ZOECON RF-292 BRIQUET." Corrected hazard tier to Tier II ("more hazardous"). Changed language from "Not for use in estuarine environments, except for San Mateo Mosquito Abatement District applications at airport and Sharp Park. For City catchment basins, microbial products are preferred when feasible"	More hazardous (Tier II)	More Limited	Use for tanks with limited access, or other areas where frequent treatments are infeasible. For City catchment basins, microbial products are preferred. Not for use in estuarine environments except under control of San Mateo Mosquito Abatement District.	2724-421	S-Methoprene (5026) 2.1%
Mosquito control - insect growth regulators	Zoecon Altosid XR-G (was called) ZOECON 9010 GR (now called)	CHANGED 2010: Corrected product name - removed "ZOECON 9010 GR." Corrected hazard tier to Tier II ("more hazardous"). Changed language from "Not for use in estuarine environments, except for San Mateo Mosquito Abatement District applications at airport and Sharp Park. For City catchment basins, microbial products are preferred when feasible"	More hazardous (Tier II)	More Limited	Use for tanks with limited access, or other areas where frequent treatments are infeasible. For City catchment basins, microbial products are preferred. Not for use in estuarine environments except under control of San Mateo Mosquito Abatement District.	2724-451	S-Methoprene (5026) 1.5%
Insecticide	Zoecon Gentrol IGR Concentrate		Least hazardous (Tier III)	Least Limited		2724-351	hydroprene 9%

Sub-category	Product Name	Difference from 2010 List	Pesticide Hazard Tier	Pesticide Use Limitation Type	Pesticide Use Limitations	EPA Reg. No.	Ingredients
Herbicide	EcoExempt HC	REMOVED 2010: Too expensive. Strong clove smell. No SF City Dept. used it.	Least hazardous (Tier III)	More Limited	Do not use in enclosed areas.	Exempt from EPA Reg.	eugenol (clove oil) 21.4%; 2-phenethyl propionate 21.4%
Herbicide	EZject Selective Injection Herbicide	REMOVED 2010: SF City Depts. have not used it for awhile. Applicator difficult to use.	More hazardous (Tier II)	More Limited	Tree stump injection especially where resprouting is likely, prefer mechanical methods when possible such as stump grinding	524-435-AA 524(INACTIV E) 83220-1 (ACTIV E)	glyphosate, isopropylamine salt 83.5%
Insecticide	Roach Terminal	REMOVED 2010: No longer produced, never used	Least hazardous (Tier III)	Least Limited	Consider using this first before trying other roach products.	1001-73 (INACTIV E)	oxypurinol 1%, xanthine 1%
Mosquito control - other	Golden Bear Mosquito Larvicide GB-1111 (was called) MOSQUITO LARVICIDE GB-1111 (now called)	REMOVED 2010. No longer used.	Most hazardous (Tier I)	More Limited	Apply as a mosquito larvicide only in conjunction with appropriate prevention measures (such as increasing water flow), or when prevention measures are impractical. Use within requirements on vector control activities set by the CA Dept. of Health Services.	8329-72	Aliphatic Petroleum Hydrocarbon 98.7%
Rodenticide	JT Eaton Answer for the Control of Pocket Gophers	REMOVED 2010: Gopher baits shown to be ineffective at controlling populations, some risk of secondary toxicity.	More hazardous (Tier II)	More Limited	Use existing stock only. Damage to: dams, levees, athletic fields, active recreation areas, structures, high cultural value or landmark areas. Public Health concerns. HIGH PRIORITY TO FIND ALTERNATIVE.	56-57	diphacinone 0.005%

Rodenticides: Site-Specific Limitations

Due to the concern over primary and secondary poisoning, the type of rodenticide and the manner in which it is applied will be determined by the general site characteristics.

Only use rodenticides in the SF Reduced-Risk Pesticide List, not explosive devices.

To use other rodenticides, [apply for an exemption](#).

DEFINITIONS:

- Landscaped area:** area under cultivation
- Natural area:** parklands (including any lightly managed grasslands, scrub or woodlands) with significant wildlife concern
- Primary poisoning:** Non-target animal eats poison directly
- Secondary poisoning:** Non-target animal eats poisoned target animal as prey
- Single-feed baits:** Baits with bromodialone & bromethalin active ingredients.

General Site Description	Allowed Use of Rodenticides in SF Pesticide List
Inside of sewers or sewage treatment facilities:	Baits must be secured either inside the sewer or inside a bait box. Single feeding baits acceptable. Monitoring with non-toxic baits encouraged.
Commercial enterprises (such as restaurants) on leased City lands	Trapping only; single-feed rodenticides allowed as a last resort only for public health & safety considerations.
Interior of structures with occupants (i.e. office space, recreation sites)	Trapping only.
Interior of non-enclosed structures (i.e. storage, stables, airport service areas) – not adjacent to natural areas.	Trapping preferred. Secure and anchored bait stations can be placed inside on a preventative basis. <i>No single-feed baits.</i>
Exterior of structures in urbanized areas (i.e. perimeter of offices)	Trapping preferred. Secure and anchored bait stations can be placed inside on a preventative basis. No single-feed baits.
Exterior of structures in natural areas	Multiple feeding baits may be used only as last resort in case of human health concern or structural integrity. Baits must be secured within bait boxes or buried in burrows. <i>No pellets or single-feed rodenticides.</i>
Landscape not adjacent to a natural area	Bait placed deep inside burrows, minimize use of pellets, mouse sized pellets only, must be buried deep in the burrow. No single-feed baits.
Natural area or landscape adjacent to a natural area	Multiple feeding baits may be used only as last resort in case of human health concern or structural integrity. Baiting should be limited to sensitive sites such as campfire areas, or on preventing infestation of structures. Baits must be secured inside bait boxes or burrows. No use of pellets or single feeding rodenticides.