

1 [Revised Reduced-Risk Pesticides List]

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3 **Resolution Adopting a Revised Reduced-Risk Pesticides List For 2013.**

4 WHEREAS, Chapter 3, Section 303(e) of the San Francisco Environment
5 Code allows the Commission on the Environment to exempt "reduced-risk"
6 pesticides from the ban imposed by the Ordinance upon a finding that the
7 "reduced-risk" pesticide is commonly used as part of an Integrated Pest
8 Management (IPM) strategy; and,

9 WHEREAS, The Department of the Environment has performed an
10 extensive evaluation of pesticide products that qualify as "reduced-risk"
11 pesticides in consultation with members of the public, scientists, and
12 departments and agencies of the City and County of San Francisco; and,

13 WHEREAS, The Department of the Environment has developed and
14 recommends the attached revised Integrated Pest Management Program
15 Reduced-Risk Pesticides List, hereafter called the Approved List 2013, for
16 adoption by the Commission for the year 2013; and,

17 WHEREAS, The Approved List 2013 will be reviewed and updated on an
18 as-needed basis; now therefore, be it,

19 RESOLVED, That the Commission on the Environment finds that the
20 pesticide products on the Approved List 2013 are "reduced-risk" pesticides
21 commonly used as part of an IPM strategy, and are therefore exempt from the
22 ban imposed by Section 302 of the Environment Code:

1 I hereby certify that this Resolution was adopted by the Commission on
2 the Environment at its meeting on January 22, 2013.

3 Monica Fish

4 Monica Fish, Commission Secretary

5 Vote: 5-0 Approved; 1 Absent; 1 Vacant

6 Ayes: Commissioners Arce, King, Gravanis, Wald, Stephenson

7 Noes: None

8 Absent: Commissioner Mok

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2013 San Francisco Reduced-Risk Pesticide List
(applicable to City-owned properties only)

Product Name	Type	EPA Reg No./ SF code*	Ingredients	Pesticide Hazard Tier	Use Limitation Type	Use Limitations (To use products in a way that's not described below, you must click here to request a Pesticide Exemption)
3336 WP Turf & Ornamental Fungicide (Cleary's)	Fungicide	1001-63	Thiophanate-methyl 50%	Most hazardous (Tier I)	Most Limited: justify use at public hearing	For use on golf courses only. HIGH PRIORITY TO FIND ALTERNATIVE
Actinovate	Fungicide	73314-1	<i>Streptomyces lydicus</i> WYEC 108	Least hazardous (Tier III)	Least Limited	
Advion Ant Bait Arena (Dupont)	Insecticide	352-664	Indoxacarb 0.1%	Most hazardous (Tier I)	Least Limited	
Advion Ant Gel (Dupont)	Insecticide	352-746	Indoxacarb 0.05%	Most hazardous (Tier I)	Least Limited	
Advion Cockroach Bait Arena (Dupont)	Insecticide	352-668	Indoxacarb 0.5%	Most hazardous (Tier I)	Least Limited	
Advion Cockroach Gel Bait (Dupont)	Insecticide	352-652	Indoxacarb 0.6%	Most hazardous (Tier I)	Least Limited	
Agnique MMF-G	Mosquito control - other	53263-30	Poly(oxy-1,2-ethanediy),alpha-isodecyl-omega-hydroxy-phosphate 32%	Most hazardous (Tier I)	Most Limited: justify use at public hearing	Use for late instar mosquito larvae and pupae, in combination with microbial products.
Agri-Fos Systemic Fungicide	Fungicide	71962-1	Potassium phosphite 45.8%	Least hazardous (Tier III)	Least Limited	For use on high-value oaks (<i>Quercus</i> spp.) susceptible to Sudden Oak Death, or in experiments with Sudden Oak Death control. When labelling permits, use on an experimental basis for Anthracnose control on sycamores.
Aquamaster Herbicide	Herbicide	524-343	Glyphosate, isopropylamine salt 53.8%	More hazardous (Tier II)	More Limited	Terrestrial uses: 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. Aquatic uses: 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 prohibition on use within buffer zone (generally 60 feet) around water bodies in red-legged frog habitat.
Azatin XL	Insecticide	70051-27	Azadirachtin 3%	Most hazardous (Tier I)	More Limited	Nurseries and established plants for interiorscapes. Do not apply on flowering plants when bees are active.
Azatrol EC Insecticide	Insecticide	2217-836	Azadirachtin (2328) 1.2%	Most hazardous (Tier I)	More Limited	Nurseries and established plants for interiorscapes. Do not apply on flowering plants when bees are active.

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BestYet Cedarcide	Insecticide	exemptpro d-009	Cedarwood oil, amorphous silica	Least hazardous (Tier III)	Least Limited	No limitations, but FTC is challenging product claims.
Bond Spreader-Sticker	Adjuvant	34704-50033	Synthetic carboxylated latex 50%, primary aliphatic oxyalkylated alcohol 10%	Least hazardous (Tier III)	Least Limited	
BotaniGard ES	Insecticide	65626-8 [INACTIVE], 82074-1 [ACTIVE]	Beauveria bassiana strain GHA 11.3%	Least hazardous (Tier III)	Least Limited	Control of thrips on landscaped plants. Do not apply on flowering plants when bees are active. USE UP EXISTING STOCKS
BVA2 Mosquito Larvicide	Mosquito control - IGRs	70589-1	Highly refined petroleum distillate (mineral oil)	Most hazardous (Tier I)	Least Limited	
CMR Silicone Surfactant	Adjuvant	1050775-50025 [INACTIVE]	Polymethyl-siloxane, nonionic	Least hazardous (Tier III)	More Limited	
Competitor	Adjuvant	2935-50173	Ethyl oleate	Least hazardous (Tier III)	Least Limited	
Conserve SC Turf and Ornamental	Insecticide	62719-291	Spinosad 11.6%	More hazardous (Tier II)	Least Limited	For use as a last resort in greenhouses. If feasible, alternate with other products to avoid the development of resistance. Use on high value ornamentals only.
Contrac All-Weather Blox	Rodenticide	12455-79	Bromadiolone 0.005%	Most hazardous (Tier I)	Most Limited: justify use at public hearing	HIGH PRIORITY FOR REMOVAL. USE UP EXISTING STOCKS. 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.
Critter Ridder	Mammal repellent	50932-10	Oil of black pepper 0.48%	Least hazardous (Tier III)	Least Limited	
Debug Turbo	Nematicide	70310-5	Fats & glyceric oils margosa 65.8%, azadirachtin 0.7%	Least hazardous (Tier III)	Least Limited	

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Detour	Mammal repellent	exemptpro d-015	White pepper 3%, white mineral oil 87%, silica 10%	Least hazardous (Tier III)	Least Limited	
Eco Exempt Jet Wasp and Hornet Killer	Insecticide	exemptpro d-007	2-phenethyl propionate 2%, rosemary oil 3%	Least hazardous (Tier III)	Least Limited	Preferred alternative to Wasp Freeze but may not act quickly enough during late summer, when yellowjackets are most aggressive. Consider digging up nest and baiting with honey in evening to attract raccoons.
EcoPCO DX Dust Insecticide	Insecticide	67425-16	Pyrethrins 0.4%, 2-Phenethyl Propionate 1%	More hazardous (Tier II)	More Limited	Only for use on rat mites, bedbugs and lice when nonchemical techniques prove ineffective.
Enstar II Insect Growth Regulator (Enstar 5E)	Insecticide	2724-476	S-kinoprene 64.1%	Most hazardous (Tier I)	More Limited	For use only in nurseries and on roses.
Essentria IC3	Insecticide	exemptpro d-013	Rosemary oil 10%, geraniol 5%, peppermint oil 2%, wintergreen oil, white mineral oil, vanillin, polyglyceryl oleate	Least hazardous (Tier III)	Least Limited	
Fiesta	Herbicide	67702-26	Iron HEDTA 26.52%	Least hazardous (Tier II)	Least Limited	For use on sports fields and golf courses as appropriate, as an alternative to more hazardous herbicides.
Fosphite Fungicide	Fungicide	68573-2	Potassium phosphite	Least hazardous (Tier III)	More Limited	Only for use on golf courses.
Garlon 4 Ultra	Herbicide	62719-527	Triclopyr, butoxyethyl ester 60.45%	Most hazardous (Tier I)	Most Limited: justify use at public hearing	Use only for targeted treatments of high profile or highly invasive exotics via dabbing or injection. May use for targeted spraying only when dabbing or injection are not feasible. Follow label requirements regarding exposure to mist. HIGH PRIORITY TO FIND ALTERNATIVE
Genrol Point Source Roach Control Device	Insecticide	2724-469	Hydroprene 96%	Least hazardous (Tier III)	Least Limited	
Greenmatch EX	Herbicide	exemptpro d-011	Lemongrass oil 50%, other ingredients (corn oil, glycerol esters, potassium oleate, lecithin)	More hazardous (Tier II)	More Limited	Not for use in enclosed areas. Observe label precautions on PPE.

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Habitat	Herbicide	241-426	Imazapyr, isopropylamine salt, 28%	More hazardous (Tier II)	More Limited	Preferred alternative to triclopyr for use on invasive weeds in natural areas, such as broom, Cotoneaster, or Arundo grass. USE UP EXISTING STOCK - REPLACE WITH POLARIS
Heritage Fungicide	Fungicide	100-1093	Azoxystrobin 50%	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.
Javelin WG Biological Insecticide	Insecticide	70051-66	<i>Bacillus thuringiensis</i> (berliner), subsp. kurstaki, strain sa-11 7.5%	Least hazardous (Tier III)	Least Limited	
JMS Stylet Oil or JMS Organic Stylet Oil	Insecticide	65564-1	Petroleum distillates, refined 97.1%	Most hazardous (Tier I)	Least Limited	USE UP EXISTING STOCK. Consider soy or canola oils instead.
JT Eaton Bait Block Rodenticide with Peanut Butter Flavorizer	Rodenticide	56-42	Diphacinone 0.005%	More hazardous (Tier II)	More Limited	See Site-Specific Limitations. 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.
Kallgreen	Fungicide	70231-1 (INACTIVE) 11581-2 (ACTIVE)	Potassium bicarbonate 82%	Least hazardous (Tier III)	Least Limited	Watch for phytotoxicity.
Marathon 1% Granular Greenhouse & Nursery Insecticide	Insecticide	3125-452-AA (INACTIVE) 432-1329 (ACTIVE)	Imidacloprid 1%	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
Maxforce FC Professional Insect Control Ant Bait Stations	Insecticide	432-1256	Fipronil 0.01%	Most hazardous (Tier I)	Least Limited	
Maxforce FC Professional Insect Control Roach Bait Stations	Insecticide	432-1257	Fipronil 0.05%	More hazardous (Tier II)	Least Limited	
Maxforce FC Professional Insect Control Roach Killer Bait Gel	Insecticide	432-1259	Fipronil 0.01%	More hazardous (Tier II)	More Limited	Apply only in cracks, crevices and areas inaccessible to casual skin contact.
Milestone	Herbicide	62719-519	Aminopyralid, tri-sopropylamine salt (5928) 40.6%	More hazardous (Tier II)	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. Listed as Tier I due to persistence but toxicity & potential exposure are very low.

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Mosquito control - microbial	Mosquito control - microbial	Various	<i>Bacillus thuringiensis</i> (Berliner or israelensis) or <i>Bacillus sphaericus</i>	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.
M-pede Insecticide/Fungicide	Insecticide	62719-515	Potash soap 49%	Least hazardous (Tier III)	More Limited	Nursery, specialty gardens, and Africanized Honey Bees.
Niban Granular Bait (equivalent to Terro Multipurpose Insect Bait)	Insecticide	64405-2-AA	Boric acid 5%	Least hazardous (Tier III)	Least Limited	Outdoor restricted to planted areas, prefer containers; indoor must be in containers or inaccessible to humans. USE UP EXISTING STOCKS
Nufarm Polaris Herbicide	Herbicide	228-534	Imazapyr, isopropylamine salt, 28%	More hazardous (Tier II)	More Limited	Preferred alternative to triclopyr for use on invasive weeds in natural areas, such as broom, Cotoneaster, or Arundo grass. USE UP EXISTING STOCK - REPLACE WITH POLARIS
OhYeah!	Insecticide	exemptpro d-002	Sodium lauryl sulfate	Least hazardous (Tier III)	Least Limited	
Orange Guard	Insecticide	61887-1	D-limonene 5.8%	More hazardous (Tier II)	More Limited	Soap spray is preferred for removing ant trails. Minimize use in enclosed areas due to scent. Wear protective equipment. Potential aquatic hazard - do not apply directly to water.
Organocide	Insecticide	exemptpro d-010	Sesame oil 5%	Least hazardous (Tier III)	Least Limited	
Oust XP Herbicide (DuPont)	Herbicide	352-601	Sulfometuron-methyl 75%	More hazardous (Tier II)	Most Limited: justify use at public hearing	For use only on airport operational areas subject to FAA requirements. HIGH PRIORITY TO FIND ALTERNATIVE
Pentrabark	Adjuvant	83416-50001, 71962-50001 [INACTIVE]	Polyalkyleneoxide modified heptamethyltrisiloxane	Least hazardous (Tier III)	More Limited	For use with Agrifos only
Prescription Treatment Brand 381B Advance Liquid Ant Bait	Insecticide	499-491	Sodium Tetraborate Decahydrate 1.3%	Least hazardous (Tier III)	Least Limited	
Prescription Treatment Brand Perma-Dust	Insecticide	499-384	Boric acid 35%, petroleum distillates-hydro treated light 10%, HFC-134A, 1,1 difluoroethane	More hazardous (Tier II)	More Limited	Use in situations where adhesion of dust is important and non-aerosol boric acid products are ineffective.

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Prescription Treatment Brand Wasp-Freeze Wasp and Hornet Killer Formula 1	Insecticide	499-362	Phenothrin 12%, d-trans allethrin .129%, CO2	Most hazardous (Tier I)	More Limited	Use only when a concern for public safety, and in situations where use of EcoExempt product is inadequate or unsafe.
Roundup Pro Herbicide	Herbicide	524-475	Glyphosate, isopropylamine salt 41%	More hazardous (Tier II)	More Limited	USE UP EXISTING STOCK - FOR REMOVAL IN 2013. 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.
Roundup Promax Herbicide	Herbicide	524-579	Glyphosate, isopropylamine salt 48.7%	More hazardous (Tier II)	More Limited	Use of Aquamaster + Competitor is preferred except in situations where rainfastness is needed. 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.
Sapphire	Herbicide	62719-547	Penoxsulam	More hazardous (Tier II)	More Limited	Only use on City-owned golf courses in preparation for major golf tournaments.
Shake-Away Coyote Urine Repellent Granules	Mammal repellent	exemptpro d-014	Coyote urine 5%, limestone 95%	Least hazardous (Tier III)	Least Limited	
Sluggo Slug and Snail Bait	Molluscicide	67702-3	Phosphoric acid, iron(3+) salt (1:1) 1%	Least hazardous (Tier III)	Least Limited	
Spraytech Oil	Insecticide	65328-50001	Soybean oil	Least hazardous (Tier III)	Least Limited	Consider using this instead of JMS Stylet Oil for aphids and other insects.
Stalker herbicide	Herbicide	241-398	Imazapyr, isopropylamine salt 28%	More hazardous (Tier II)	More Limited	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.
Terro Ant Killer II, Terro Ant Killer II Liquid Ant Baits, Terro-PCO Liquid Ant Bait	Insecticide	149-8	Sodium tetraborate decahydrate 5.4%	Least hazardous (Tier III)	Least Limited	

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Top Gun All Weather Bait Block Rodenticide	Rodenticide	67517-66	Bromethalin 0.01%	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 feasible to minimize rodenticide use.
Trimmit 25C Plant Growth Regulator for Turfgrass	Growth regulator	100-1014	Paclobutrazol 22.3%	More hazardous (Tier II)	More Limited	For use only on golf courses in preparation for tournament play.
Turfion Ester	Herbicide	62719-258	Triclopyr, butoxyethyl ester 61.6%	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 - Lake Merced, Golden Gate Park.
Zoecon Alkosis Briquets	Mosquito control - IGRs	2724-375	S-Methoprene (5026) 8.62%	Least hazardous (Tier III)	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.
Zoecon Alkosis Liquid Larvicide Mosquito Growth Regulator	Mosquito control - IGRs	2724-392	S-Methoprene (5026) 5%	Least hazardous (Tier III)	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.
Zoecon Alkosis Pellets, Zoecon Alkosis Pellets WSP	Mosquito control - IGRs	2724-448	S-Methoprene (5026) 4.25%	Least hazardous (Tier III)	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.
Zoecon Alkosis XR Extended Residual Briquets	Mosquito control - IGRs	2724-421	S-Methoprene (5026) 2.1%	Least hazardous (Tier III)	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.
Zoecon Alkosis XR-G, Zoecon Alkosis Pro-G Insect Growth Regulator	Mosquito control - IGRs	2724-451	S-Methoprene (5026) 1.5%	Least hazardous (Tier III)	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.

