

# Integrated Pest Management Plan

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### 1.0 Integrated Pest Management Plan (IPMP)

The Integrated Pest Management Plan (IPMP) is intended to provide a basis for a pest management program that will protect public health, as well as water quality, and non-target plants and animals. The goal of the CITY’s IPMP is to utilize the most environmentally sound approaches to pest management, and to reduce the volume and toxicity of chemical pest control treatments.

The Phase II Municipal Separate Storm Sewer System (MS4) National Pollutant Discharge Elimination System (NPDES) Permit (hereafter MS4), requires the CITY to

implement a landscape design and maintenance program to reduce the amount of water and pesticides used during CITY operations and activities. In accordance with the MS4, the CITY must evaluate pesticide use and application activities performed and then implement practices that reduce the discharge of pesticides. By implementing the IPMP the CITY will comply with the pesticide-related landscape management measures.

This policy shall be adopted/amended by Resolution, posted in its current form on the CITY's website, and the Ordinances regulating this plan are contained in the following Fort Bragg Municipal Code Sections:

- Chapter 6.10 Weed Abatement Procedures
- Chapter 6.11 Integrated Pest Management
- Coastal Land Use And Development Code Chapter 17.34 Landscaping Standards
- Inland Land Use And Development Code Chapter 18.34 Landscaping Standards

#### A. Policy

All pest management on CITY property will adhere to industry best practices, reduce or eliminate pesticide applications to the maximum extent feasible, and include all reasonable measures to protect human and environmental health. All persons acting on the CITY's behalf, shall be familiar with the content and principles of this policy, receive training, and provide accurate records in accordance with this Integrated Pest Management Plan.

1. Departments performing pest management will comply with the CITY's IPMP. This policy will apply to all property, rights of way, or easements owned, by the CITY.
2. The CITY encourages residents to utilize this policy in application of pesticides, it does not however regulate pesticide use on private properties. Informational resources can be found in the Appendix of this IPMP.
3. Departments will require contractors providing pest management services to the CITY to comply with the CITY's IPMP. All pesticide application on CITY property performed by contractors shall be done in accordance with this policy. Contractor requirements are further described Section 3.0 Contracts of this IPMP.
4. No pesticides or fertilizers shall be applied during irrigation or within 48 hours of predicted rainfall with greater than 50% probability as predicted by National Oceanic and Atmospheric Administration (NOAA).
5. The CITY will annually maintain a list of reduced-risk pesticides, using the pesticide risk assessment guidelines employed by the City and County of San Francisco.
6. An exemption must be applied for and granted prior to use of any pesticide not listed on the Reduced-Risk Pesticide List, the exemption process requires well documented justification for the variance from pesticide use restrictions and limitations.
7. The CITY's IPMP will include the following components:

- a) Reduce to the maximum extent practicable the use of pesticides.
- b) Consider taking a "no-action" approach in addressing certain pest control issues.
- c) Transition parks and greenbelts to "green" least-toxic pest management.
- d) Review and consider available non-chemical options before using a chemical pesticide.
- e) Identify pests and least toxic methods to control pests.
- f) Identify, evaluate, and minimize or eliminate conditions that encourage pest problems.
- g) Comply with all applicable state and federal regulations, including pesticide use and reporting.
- h) Provide public access to all IPMP information and records.
- i) Conduct decision-making based on the best available science and data.
- j) Provide residents and pest control operator's information on less toxic methods of pest control.

## B. IPMP Goals

IPMP goals regarding pesticide selection and use include:

1. Use pesticides only when necessary and select a pesticide that is both effective and least toxic.
2. Designate 25 ft. buffers around playgrounds and picnic table areas on CITY property as pesticide-free zones.
3. No use on plants with edible berries when ripe fruits are present.
4. Educate and train CITY staff in the IPMP practices.
5. Incorporate outreach to schools, Bee City, and local garden clubs and organizations, to encourage participation and contribution to updates of this plan.
6. The City's land use code sections 17.34 and 18.34 describe the CITY's landscape maintenance and design program. It is the goal of the City to also incorporate the following techniques when feasible and appropriate:
  - a) Identify pollution prevention and source control opportunities;
  - b) Collect and properly dispose of unused pesticides, herbicides, and fertilizers;
  - c) Promote soil microbial health through the use of compost, compost tea, or inoculation;
  - d) Use native and/or climate appropriate plants to reduce the amount of water, pesticides and fertilizers used;
  - e) Limit or replace pesticide use with alternatives such as conducting manual weed and insect removal;
  - f) Minimize irrigation run-off by using best management;
  - g) Manage mowing of grass to allow for greater pollutant removal, but not jeopardizing public safety.

### 2.0 Pest Control As-needed

CITY departments and offices requiring pest control on an as-needed basis are to adhere the Best Management Practices (BMP) described in this IPMP.

## A. Guidelines for Pest Treatment

If it is determined that treatment is needed, the following criteria are to be used in determining the appropriate treatment strategy:

1. Least-disruptive of natural controls;
2. Least-hazardous to human health;
3. Least-toxic to non-target organisms;
4. Protective of wildlife and the native habitat;
5. Least-damaging to the general environment;
6. Cultural, biological, and mechanical solutions have been considered and evaluated;
7. Prior treatments used on site to control the pest and an evaluation of the success of that approach;
8. Most likely to produce a permanent reduction in the environment's ability to support target pests;
9. Cost effectiveness in the short and long term.

## B. Guidelines for Pesticide Selection

### 1. Development of Reduced-Risk List of Pesticides allowed for Use on CITY Property

It is a goal of CITY to minimize the use of pesticides by giving preference to eco-exempt products and those approved by the Organic Materials Research Institute (OMRI) or by the National Organic Program for use in organic systems as available and effective.

Pesticides should be the last resort, when all other tactics have failed (i.e., sanitation improvements, pest prevention, non-chemical management measures). The use of pesticides shall be limited to the products listed on the current Reduced-Risk pesticide list (Table 1) found at the end of the document.

### 2. Chemical Prohibitions for the Pesticide List

No pesticides shall be used on CITY property unless listed on the Reduced-Risk Pesticide List unless a Use Exemption is granted by the Public Works Director. The following list of pesticides shown on Table 2 (below) are explicitly banned from use on CITY property.

Table 2 lists out banned chemicals by their Classification of pesticides based on their chemical nature. This table was last update 9/12/2019 and the date of updated should be noted at each subsequent change to this information.

Both Table 1 and Table 2 once approved shall be posted in a conspicuous place on the CITY's website where it is easily accessible by to the public.

**Table 2: Chemicals Banned for Use on CITY Property**

No	Chemical Group	Chemical Names
1	<b>Organochlorines</b>	DDT,DDD, Dicofol, Eldrin, Dieldrin, Chlorobenzilate, Lindane, BHC, Methoxychloro Aldrin, Chlordane, Heptaclor, Endosufan, Isodrin, Isobenzan, Toxaphene, Chloro propylate
2	<b>Organophosphates</b>	Dimefox, Mipafox, Methyl Parathion, Ronnel, enitrothion, Bidrin, Phorate, Fenthion, caumphos, Abate, Dichlorovas, Diptrex, Phosphomidon, Demetox, Oxydemeton-methyl, Malathion, Dimethoate, Trichlorofan
3	<b>Carbamates</b>	<i>Methyl</i> Carbaryl, Carbanolate, Prupoxur, Dimethan, Dimetilan, Isolan, Carbofuran, Pyrolan, Aminocarb, Aldicarb <i>Thio</i> Vernolate, Pebulate, Diallate, Monilate, Butylate, Cycloate, Trillate, Thiourea <i>Dithio</i> Methan, Thiram, Ferban, Amoban, Naban, Zineb, Maneb, Ziram Polyran, Dithane M- 45
4	<b>Neonicotinoid</b>	Acetamiprid, Clothianidin, Dinotefuran, Imidacloprid, Nitenpyram, Thiocloprid, Thiamethoxam
5	<b>Glycine</b>	Glyphosate

### 3. Limited Use Exemptions

A CITY department may apply an emergency exemption to the pesticide prohibition in the event that an emergency pest outbreak poses an immediate threat to public health, will result in detriment to the environmental or an environmentally sensitive habitat area (ESHA), or significant economic damage will result from failure to use a pesticide prohibited pursuant to [Proposed] Section 6.11.020.

CITY departments responsible for performing pest management shall submit a request for an exemption (application in appendix) to the Public Works Director (Director) or Designee to use a pesticide that is prohibited per this IPMP. The Director may approve a limited use exemption request if the exemption requester demonstrates that:

- a) A compelling need to use the pesticide, such as public health or safety, substantial economic, or environmental detriment;
- b) A complete investigation of all available options found the use of pesticides to be less damaging than the threat posed by the pest;
- c) The plan demonstrates a reduced need for future pesticide use; and
- d) It is the requester's intent to use the material for a limited period of time.

If an exemption is granted, the Department responsible for performing pest management shall notify the Public in the manner prescribed in the Notification Section of this Plan.

Example exemptions: Fire threats, spread of communicable diseases by pests including rats and mosquitos, and detriment to ESHA.

### **3.0 CONTRACTS, NOTIFICATION, AND RECORDKEEPING**

#### **A. Contracts**

All contractors who manage pests on CITY owned, property, rights of way, or easements shall be required to adhere to the guidelines established in the CITY's IPMP. On City rights of way and easements, underlying property owners are excluded from this requirement.

Contractors are required to maintain records of pest control activities, and submit a summary of activities to the department upon completion of the job. Contractors providing regular and ongoing service shall submit summaries to the department on an annual basis. Contractors are required to comply with the notification requirements as listed in this IPMP.

#### **B. Notifications**

When a limited use exemption is granted for the application of a pesticide not listed in the Reduced-Risk Pesticide List in right-of-way locations accessible by the public, the CITY shall provide the public with notifications using the City's web-based notification list service.

1. Individuals wishing to receive notice of pesticide application may sign up for these notifications using the Notify-Me Portal and registering for the Pesticide Exemption Notification. <https://city.fortbragg.com/list.aspx>
2. Notices will be distributed electronically 24 hours in advance of a pesticide application (when possible) or as soon thereafter as economically feasible.
3. The Notice will contain the location of the application, the name and active ingredient(s) of the pesticide product, the target pest, signal word indicating the toxicity category of the pesticide product, and the name and contact number for the CITY department responsible for the application.

#### **C. Recordkeeping**

The CITY's IPMP is based on best management practices, careful and efficient inspection and monitoring of pest problems, as well as the maintenance of records will be completed by designated CITY personnel who are knowledgeable in IPMP methods.

All records and information concerning the CITY IPMP will be made available to employees and the public upon request in accordance with all applicable state and CITY laws governing public access to information.

The Public Works Department is responsible for IPMP implementation and shall maintain records of pest related treatments. These records shall be maintained per the CITY and state records retention policies and/or law.

Contractors shall: Maintain application records and treatment information as outlined in Section 3.0 A and are to provide this information to the Project Manager upon completion of treatment so the department can fulfill reporting obligations.

The Engineering Department: Maintain all necessary records in order to prepare an annual report that includes a review and summary of the CITY's pesticide use, cultural practices and non-chemical pest control activities, exemptions granted, training offered, any proposed modifications to the CITY's pesticide list, and any suggestions for amendments or resources needed for effective implementation of the IPMP.

#### **4.0 DEFINITIONS**

"Best Management Practices" or "BMP" means actions based on current science and technology that have been proven to be effective in the control and management of the site or pests to prevent or reduce the incidence of pest problems, with careful consideration given to protect public health and safety, wildlife and the environment.

"CITY Property" means property rights of way, or easements owned, by the CITY.

"Integrated Pest Management Plan" or "IPMP" means a decision-making and record-keeping process for managing pests that uses monitoring to determine pest injury levels and combines biological, cultural, mechanical, physical, and chemical tools and other management practices to control pests in a safe, cost effective, and environmentally sound manner that contributes to the protection of public health and sustainability. This method uses extensive knowledge about pests, such as infestations, thresholds, life histories, environmental requirements, and natural enemies to complement and facilitate biological and other natural control of pests. The method involves the use of non-chemical pest control methods and the careful use of least-toxic chemical methods when non-chemical methods have been exhausted or are not feasible.

"Invasive species" are non-native organisms whose introduction causes or is likely to cause economic or environmental harm or harm to human, animal, or plant health (Executive Order No. 13751, 2016).

"Native nuisance species" are native species that cause harm to ecosystems or human health.

"Non-native species" are defined as species found outside of their natural range. It is important to emphasize that not all non-native species are invasive. Likewise, there may be native species that cause harm to ecosystems or human health (often referred to as native nuisance species).

"Pest" means any pest as defined in Section 12754.5 of Chapter 2 of Division 7 of the California Food and Agricultural Code. Pest includes any of the following that is or is

liable to become, dangerous or detrimental to the public health or the agricultural or nonagricultural environment of the state:

- (1) Any insect, predatory animal, rodent, nematode or weed;
- (2) Any form of terrestrial, aquatic, or aerial plant or animal, virus, fungus, bacteria or other microorganism (except viruses, fungi, bacteria or other microorganisms on or in living man or other living animals);
- (3) Anything that the Secretary of the California Department of Food and Agriculture or the Director of Pesticide Regulation for the California Department of Food and Agriculture by regulation declares to be a pest.

“Pest control” means the use or application of any pesticide. It also means the use of any substance, method, or device to do any of the following:

- (a) Control pests.
- (b) Prevent, destroy, repel, mitigate, or correct any pest infestation or disorder of plants.
- (c) Inhibit, regulate, stimulate, or otherwise alter plant growth by direct application to plants.

*(Enacted by Stats. 1967, Ch. 15.)*

“Pesticide” means any substance, or mixture of substances, that is intended to be used for controlling, destroying, repelling, or mitigating any pest or organism, excluding antimicrobial pesticide(s) as defined by the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. Sec. 136(mm)).

"Phase II Permit" means the State Water Resources Control Board's Phase II Municipal Separate Storm Sewer System (MS4) National Pollutant Discharge Elimination System (NPDES) General Permit, Order No. 2013-0001, adopted February 5, 2013.

“Right-of-Way”

## **5.0 APPENDIX**

### **A. Resources**

- California Invasive Plant Council (Cal-IPC) Inventory which categorizes Plants that threaten California’s natural areas and includes; species ecological impact, ecosystems or communities invaded, invasive potential, documentation level, and distribution. <https://www.cal-ipc.org/plants/inventory/>
- Fact Sheets for home owners on managing common pest problems, see <http://ourwaterourworld.org/fact-sheets>
- National Institute of Health (NIH) Pesticide groups and Chemical List <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5464684/>
- Pest Prevention by Design Guidelines by San Francisco Department of the Environment. <https://sfenvironment.org/download/pest-prevention-by-design-guidelines>



- San Francisco Reduced-Risk Pesticide List for City-Owned Properties Approved Sept. 25, 2018:  
[https://sfenvironment.org/sites/default/files/fliers/files/sfe\\_th\\_reduced\\_risk\\_pesticide\\_list\\_092518.pdf](https://sfenvironment.org/sites/default/files/fliers/files/sfe_th_reduced_risk_pesticide_list_092518.pdf)
- University of California Agriculture and Natural Resources Statewide Integrated Pest Management Program: <http://ipm.ucanr.edu/PMG/PESTNOTES/index.html>
- USDA's California invasive & noxious plant list:  
<https://plants.usda.gov/java/noxious?rptType=State&statefips=06>

## B. Forms

Table 1 - City of Fort Bragg Reduced-Risk Pesticide List

Exemption Form

Training Log

Pesticide Application Log

**Table 1: City of Fort Bragg Reduced-Risk Pesticide List**

Product Name	Type	EPA #/ SF code*	Ingredients	Pesticide Hazard Tier**	Use Limitation Type***	Use Limitations Other uses require an exemption (click here)
<b>GENERAL USE PRODUCTS</b>						
Actinovate	Fungicide	73314-1	<i>Streptomyces lydicus</i> WYEC 108	Least hazardous (Tier III)	<b>Least Limited</b>	
Advion Ant Bait Arena (Dupont)	Insecticide	352-664	Indoxacarb 0.1%	Least hazardous (Tier III)	<b>Least Limited</b>	
Advion Ant Gel (Dupont)	Insecticide	352-746, 100- 1498	Indoxacarb 0.05%	Least hazardous (Tier III)	<b>Least Limited</b>	
Advion Cockroach Bait Arena (Dupont)	Insecticide	352-668	Indoxacarb 0.5%	Least hazardous (Tier III)	<b>Least Limited</b>	
Advion Cockroach Gel Bait (Dupont)	Insecticide	352-652	Indoxacarb 0.6%	Least hazardous (Tier III)	<b>Least Limited</b>	
Agri-Fos Systemic Fungicide	Fungicide	71962-1	Potassium phosphite 45.8%	Least hazardous (Tier III)	<b>Least Limited</b>	For use on high-value Coast Live Oaks ( <i>Quercus agrifolia</i> ) susceptible to <i>Phytophthora</i> , or in experiments with <i>Phytophthora</i> control.
Alligare Rotary 2 SL	Herbicide	81927-6	Imazapyr, isopropylamine salt 28%	More hazardous (Tier II)	<b>More Limited</b>	<b>Subject to "Restrictions on herbicides."</b> Alternative to Tier I herbicides. Use caution with adjoining desirable vegetation.
Ant baits - borate based - self contained, gel, liquid	Insecticide	Various	Boric acid, sodium tetraborate decahydrate, or other borate salts	Most hazardous (Tier I)	<b>Least Limited</b>	
Avenger Weed Killer Concentrate	Herbicide	82052-1	d-Limonene 60%	Least hazardous (Tier III)	<b>More Limited</b>	<b>Subject to "Restrictions on herbicides."</b> Burndown herbicide. Not for use near water.
Axe	Herbicide	70299-23	Nonanoic acid, 61%	More hazardous (Tier II)	<b>More Limited</b>	<b>Subject to "Restrictions on herbicides."</b> Burndown herbicide.

**Table 1: City of Fort Bragg Reduced-Risk Pesticide List**

<b>Product Name</b>	<b>Type</b>	<b>EPA #/ SF code*</b>	<b>Ingredients</b>	<b>Pesticide Hazard Tier**</b>	<b>Use Limitation Type***</b>	<b>Use Limitations</b> Other uses require an exemption (click here)
<b>Azatin XL</b>	Insecticide	70051-27	Azadirachtin 3%	Most hazardous (Tier I)	<b>More Limited</b>	For greenhouses and established plants for interiorscapes. Do not apply on flowering plants when bees are active. USE UP EXISTING STOCKS - Azatrol is safer alternative.
<b>Azatrol EC Insecticide</b>	Insecticide	2217-836	Azadirachtin (2328) 1.2%	More hazardous (Tier II)	<b>More Limited</b>	For greenhouses and established plants for interiorscapes. Do not apply on flowering plants when bees are active.
<b><i>Bacillus thuringiensis</i> insecticides (excluding mosquito control)</b>	Insecticide	Various	<i>Bacillus thuringiensis</i> (various subsp.)	Least hazardous (Tier III)	<b>Least Limited</b>	
<b>BestYet Cedarcide</b>	Insecticide	exemptprod-009	Cedarwood oil, amorphous silica	Least hazardous (Tier III)	<b>Least Limited</b>	
<b>BioLink Buffer &amp; Penetrant</b>	Adjuvant	exemptprod-010	Citric acid 20%, garlic extract 7%	More hazardous (Tier II)	<b>Least Limited</b>	
<b>Cimexa Insecticide Dust</b>	Insecticide	73079-12	Amorphous silica gel 100%	Least hazardous (Tier III)	<b>Least Limited</b>	Only for use on rat mites, bedbugs, lice, and yellowjackets in walls when nonchemical techniques prove ineffective.
<b>Clearcast Herbicide</b>	Herbicide	241- 437	Imazamox, ammonium salt	More hazardous (Tier II)	<b>More Limited</b>	<b>Subject to "Restrictions on herbicides."</b> For invasive aquatic weeds and pilot testing on terrestrial weeds as alternative to Tier I products.
<b>CMR Silicone Surfactant</b>	Adjuvant	1050775-50025 [INACTIVE]	Polymethyl-siloxane, nonionic	Least hazardous (Tier III)	<b>More Limited</b>	
<b>Competitor</b>	Adjuvant	2935-50173	Ethyl oleate	Least hazardous (Tier III)	<b>Least Limited</b>	
<b>Conserve SC Turf and Ornamental</b>	Insecticide	62719-291	Spinosad 11.6%	More hazardous (Tier II)	<b>Least Limited</b>	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.
<b>Debug Turbo</b>	Nematicide	70310-5	Fats & glyceridic oils margosa 65.8%, azadirachtin 0.7%	More hazardous (Tier II)	<b>Least Limited</b>	

**Table 1: City of Fort Bragg Reduced-Risk Pesticide List**

<b>Product Name</b>	<b>Type</b>	<b>EPA #/ SF code*</b>	<b>Ingredients</b>	<b>Pesticide Hazard Tier**</b>	<b>Use Limitation Type***</b>	<b>Use Limitations</b> Other uses require an exemption (click here)
<b>Detour</b>	Mammal repellent	exemptprod-015	White pepper 3%, white mineral oil 87%, silica 10%	Least hazardous (Tier III)	<b>Least Limited</b>	
<b>Eco Exempt/Essentria Jet Wasp and Hornet Killer</b>	Insecticide	exemptprod-007	2-phenethyl proprionate 2%, rosemary oil 3%	More hazardous (Tier II)	<b>Least Limited</b>	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.
<b>Enforcer PreCor Concentrate for Fleas</b>	Insecticide	2724-352	S-Methoprene, 1.2%; mineral oil, refined, 98.8%	Least hazardous (Tier III)	<b>Least Limited</b>	
<b>Enforcer PreCor Concentrate for Fleas</b>	Insecticide	2724-352	S-Methoprene, 1.2%; mineral oil, refined, 98.8%	Least hazardous (Tier III)	<b>Least Limited</b>	
<b>Enstar II Insect Growth Regulator (Enstar 5E)</b>	Insecticide	2724-476	S-kinoprene 64.1%	More hazardous (Tier II)	<b>More Limited</b>	USE UP EXISTING STOCKS. For use only in nurseries and on roses.
<b>Essentria IC3</b>	Insecticide	exemptprod-013	Rosemary oil 10%, geraniol 5%, peppermint oil 2%, wintergreen oil, white mineral oil, vanillin, polyglyceryl oleate	Least hazardous (Tier III)	<b>Least Limited</b>	
<b>Fiesta Turf Weed Killer</b>	Herbicide	67702-26	Iron HEDTA 26.52%	Most hazardous (Tier I)	<b>More Limited</b>	<b>Subject to "Restrictions on herbicides."</b> USE UP EXISTING STOCKS.
<b>Garlon 4 Ultra</b>	Herbicide	62719-527	Triclopyr, butoxyethyl ester 60.45%	Most hazardous (Tier I)	<b>Most Limited</b>	<b>Subject to "Restrictions on herbicides"</b> 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. HIGH PRIORITY TO FIND ALTERNATIVE
<b>Habitat</b>	Herbicide	241-426	Imazapyr, isopropylamine salt, 28%	More hazardous (Tier II)	<b>More Limited</b>	<b>Subject to "Restrictions on herbicides."</b> Alternative to Tier I herbicides. Use caution with adjoining desirable vegetation.

**Table 1: City of Fort Bragg Reduced-Risk Pesticide List**

<b>Product Name</b>	<b>Type</b>	<b>EPA #/ SF code*</b>	<b>Ingredients</b>	<b>Pesticide Hazard Tier**</b>	<b>Use Limitation Type***</b>	<b>Use Limitations</b> Other uses require an exemption (click here)
<b>Havahart Critter Ridder</b>	Mammal repellent	50932-10	Oil of black pepper 0.48%	Least hazardous (Tier III)	<b>Least Limited</b>	
<b>Hydroprene-only products</b>	Various	Various	Hydroprene	Least hazardous (Tier III)	<b>Least Limited</b>	
<b>Lifeline Herbicide</b>	Herbicide	70506-310	Glufosinate, ammonium, 24.5%	More hazardous (Tier II)	<b>More Limited</b>	<b>Subject to "Restrictions on herbicides."</b>
<b>Maxforce FC Magnum Roach Killer Bait Gel</b>	Insecticide	432- 1460	Fipronil 0.05%	More hazardous (Tier II)	<b>More Limited</b>	Not for use in outdoor areas with potential rain exposure. USE UP EXISTING STOCKS
<b>Maxforce FC Professional Insect Control Roach Bait Stations</b>	Insecticide	432-1257	Fipronil 0.05%	More hazardous (Tier II)	<b>More Limited</b>	Not for use in outdoor areas with potential rain exposure
<b>Maxforce FC Professional Insect Control Roach Killer Bait Gel</b>	Insecticide	432-1259	Fipronil 0.01%	More hazardous (Tier II)	<b>More Limited</b>	Not for use in outdoor areas with potential rain exposure
<b>Met52 EC Bioinsecticide</b>	Insecticide	70127-10	Metarhizium anisopliae strain F52, 11%	Least hazardous (Tier III)	<b>Least Limited</b>	
<b>Milestone</b>	Herbicide	62719-519	Aminopyralid, triisopropanolamine salt (5928) 40.6%	More hazardous (Tier II)	<b>More Limited</b>	<b>Subject to "Restrictions on herbicides."</b> For invasive species in natural areas or parklands where other alternatives are ineffective, especially for invasive legumes and composites such as yellow star thistle and purple star thistle.
<b>Milestone VM Plus, Capstone</b>	Herbicide	62719-572	Aminopyralid, triisopropanolamine salt, 2%; Triclopyr, triethylamine salt, 16%	More hazardous (Tier II)	<b>More Limited</b>	<b>Subject to "Restrictions on herbicides."</b> Use only for cut stump or injection

**Table 1: City of Fort Bragg Reduced-Risk Pesticide List**

<b>Product Name</b>	<b>Type</b>	<b>EPA #/ SF code*</b>	<b>Ingredients</b>	<b>Pesticide Hazard Tier**</b>	<b>Use Limitation Type***</b>	<b>Use Limitations</b> Other uses require an exemption (click here)
<b>M-pede Insecticide/Fungicide</b>	Insecticide	62719-515	Potash soap 49%	More hazardous (Tier II)	<b>More Limited</b>	Nursery, specialty gardens, and Africanized Honey Bees.
<b>Nufarm Polaris Herbicide</b>	Herbicide	228-534	Imazapyr, isopropylamine salt, 28%	More hazardous (Tier II)	<b>More Limited</b>	<b>Subject to "Restrictions on herbicides."</b> Alternative to Tier I herbicides. Use caution with adjoining desirable vegetation.
<b>OhYeah!</b>	Insecticide	exemptprod-002	Sodium lauryl sulfate	Least hazardous (Tier III)	<b>Least Limited</b>	
<b>Orange Guard</b>	Insecticide	61887-1	D-limonene 5.8%	More hazardous (Tier II)	<b>More Limited</b>	Soap spray is preferred for removing ant trails. Minimize use in enclosed areas due to scent. Potential aquatic hazard - do not apply directly to water.
<b>Organocide</b>	Insecticide	exemptprod-010	Sesame oil 5%	Least hazardous (Tier III)	<b>Least Limited</b>	
<b>Oust XP Herbicide (DuPont)</b>	Herbicide	352-601	Sulfometuron-methyl 75%	More hazardous (Tier II)	<b>Most Limited</b>	<b>Subject to "Restrictions on herbicides."</b> For use only on airport operational areas subject to FAA requirements.
<b>Pentrabark</b>	Adjuvant	83416-50001	Polyalkyleneoxide modified heptamethyltrisiloxane	Least hazardous (Tier III)	<b>Least Limited</b>	
<b>Prescription Treatment Brand Perma-Dust</b>	Insecticide	499-384	Boric acid 35%, petroleum distillates-hydotreated light 10%, HFC-134A, 1,1 difluoroethane	Most hazardous (Tier I)	<b>More Limited</b>	Use in situations where adhesion of dust is important and non-aerosol boric acid products are ineffective.
<b>Prescription Treatment Brand Wasp-Freeze Wasp and Hornet Killer</b>	Insecticide	499-362	Phenothrin .12%, d-trans allethrin .129%, CO2	Most hazardous (Tier I)	<b>Most Limited</b>	Use only when a concern for public safety, and in situations where use of EcoExempt product is inadequate or unsafe.

**Table 1: City of Fort Bragg Reduced-Risk Pesticide List**

<b>Product Name</b>	<b>Type</b>	<b>EPA #/ SF code*</b>	<b>Ingredients</b>	<b>Pesticide Hazard Tier**</b>	<b>Use Limitation Type***</b>	<b>Use Limitations</b> Other uses require an exemption (click here)
<b>Safer Soap O-Insecticidal Soap Concentrate</b>	Insecticide	42697-60	Potassium laurate, 49.52%	More hazardous (Tier II)	<b>Least Limited</b>	
<b>Shake-Away Coyote Urine Repellent Granules</b>	Mammal repellent	exemptprod-014	Coyote urine 5%, limestone 95%	Least hazardous (Tier III)	<b>Least Limited</b>	
<b>Sluggo Slug and Snail Bait</b>	Molluscicide	67702-3	Phosphoric acid, iron(3+) salt (1:1) 1%	Least hazardous (Tier III)	<b>Least Limited</b>	
<b>Spraytech Oil</b>	Insecticide	65328-50001	Soybean oil	More hazardous (Tier II)	<b>Least Limited</b>	
<b>Stalker Herbicide</b>	Herbicide	241-398	Imazapyr, isopropylamine salt 28%	More hazardous (Tier II)	<b>More Limited</b>	<b>Subject to "Restrictions on herbicides."</b> Alternative to Tier I herbicides. Use caution with adjoining desirable vegetation. USE UP EXISTING STOCK
<b>Suppress Herbicide EC</b>	Herbicide	51517-9	Caprylic acid, 47%; capric acid, 32%	More hazardous (Tier II)	<b>Least Limited</b>	<b>Subject to "Restrictions on herbicides."</b> Alternative to Tier I herbicides. Burndown product.
<b>GOLF PRODUCTS</b>						
<b>Civitas One</b>	Fungicide	69526-17	Mineral oil, refined, 89%	Least hazardous (Tier III)	<b>Least Limited</b>	
<b>Fosphite Fungicide</b>	Fungicide	68573-2	Potassium phosphate	Least hazardous (Tier III)	<b>More Limited</b>	Only for use on golf courses.
<b>Heritage Fungicide</b>	Fungicide	100-1093	Azoxystrobin 50%	Most hazardous (Tier I)	<b>Most Limited</b>	For use on Harding Park/Fleming golf courses only in preparation for tournament play

**Table 1: City of Fort Bragg Reduced-Risk Pesticide List**

<b>Product Name</b>	<b>Type</b>	<b>EPA #/ SF code*</b>	<b>Ingredients</b>	<b>Pesticide Hazard Tier**</b>	<b>Use Limitation Type***</b>	<b>Use Limitations</b> Other uses require an exemption (click here)
<b>Lontrel Turf and Ornamental Herbicide</b>	Herbicide	62719-305	Clopyralid, 40.9%	More hazardous (Tier II)	<b>More Limited</b>	<b>Subject to "Restrictions on herbicides."</b> For use on Harding Park/Fleming golf courses only in preparation for tournament play. May be used 1x/year in other golf courses on greens only.
<b>Primo Maxx</b>	Growth regulator	100-937	Trinexapac-ethyl 11.3%, tetrahydrofurfuryl alcohol (THFA)	More hazardous (Tier II)	<b>More Limited</b>	Only use on Harding/Fleming golf courses in preparation for major golf tournaments.
<b>Quinclorac 1.5L</b>	Herbicide	53883-336	Quinclorac, dimethylamine salt, 18.92%	More hazardous (Tier II)	<b>More Limited</b>	<b>Subject to "Restrictions on herbicides."</b> For use on Harding Park/Fleming golf courses only in preparation for tournament play.
<b>Rhapsody ASO</b>	Fungicide	264-1155	QST 713 strain of dried Bacillus subtilis, 1.34%	Least hazardous (Tier III)	<b>Least Limited</b>	
<b>Sapphire</b>	Herbicide	62719-547	Penoxsulam	More hazardous (Tier II)	<b>More Limited</b>	<b>Subject to "Restrictions on herbicides."</b> Only use on City-owned golf courses in preparation for major golf tournaments, or for pilot testing elsewhere as a glyphosate alternative.
<b>Tourney</b>	Fungicide	59639-144	Metconazole, 50%; Silica-crystalline quartz	Most hazardous (Tier I)	<b>More Limited</b>	For management of pink snow mold (Microdochium nivale) on Harding Park/Fleming golf courses only in preparation for tournament play.
<b>Trimmit 2SC Plant Growth Regulator for Turfgrass</b>	Growth regulator	100-1014	Paclobutrazol 22.3%	More hazardous (Tier II)	<b>More Limited</b>	For use only on golf courses in preparation for tournament play.
<b>Trinity TM</b>	Fungicide	7969-257	Triticonazole, 19.2%	Most hazardous (Tier I)	<b>More Limited</b>	For use on Harding Park/Fleming golf courses only in preparation for tournament play. May be used 1x/year in other golf courses on greens only.
<b>Turflon Ester</b>	Herbicide	62719-258	Triclopyr, butoxyethyl ester 61.6%	Most hazardous (Tier I)	<b>Most Limited</b>	<b>Subject to "Restrictions on herbicides."</b> Subject to "Restrictions on herbicides". Targeted treatment of golf course turf. HIGH PRIORITY TO FIND ALTERNATIVE.



**Table 1: City of Fort Bragg Reduced-Risk Pesticide List**

Product Name	Type	EPA #/ SF code*	Ingredients	Pesticide Hazard Tier**	Use Limitation Type***	Use Limitations Other uses require an exemption (click here)
<b>VECTOR CONTROL PRODUCTS</b>						
<b>Agnique MMF-G</b>	Mosquito control - other	7969-333	Poly(oxy-1,2-ethanediyl),alpha-isodecyl-omega-hydroxy-phosphate 32%	More hazardous (Tier II)	<b>More Limited</b>	Use for late instar mosquito larvae and pupae, in combination with microbial products. USE UP REMAINING STOCK
<b>BVA2 Mosquito Larvicide</b>	Mosquito control - other	70589-1	Highly refined petroleum distillate (mineral oil)	More hazardous (Tier II)	<b>More Limited</b>	Use as a pupacide for public health mosquito treatments.
<b>Contrac All-Weather Blox</b>	Rodenticide	12455-79	Bromadiolone 0.005%	Most hazardous (Tier I)	<b>Most Limited</b>	HIGH PRIORITY FOR REMOVAL. USE UP EXISTING STOCKS. For use only in 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 <b>only where a significant public health hazard is recognized by the SF Dept. of Public Health.</b> In all cases, monitoring shall be used whenever feasible to minimize rodenticide use.
<b>Giant Destroyer</b>	Rodenticide	10551-1	Carbon, 9%; Sodium nitrate, 50%; Sulfur, 38%	Most hazardous (Tier I)	<b>Most Limited</b>	Alternative to baits for rodents in burrows. Observe label limitations on endangered species and potential for human smoke exposure.
<b>Mosquito control - microbial</b>	Mosquito control - microbial	Various	<i>Bacillus thuringiensis</i> (Berliner or Israelensis) or <i>Bacillus sphaericus</i>	Least hazardous (Tier III)	<b>Least Limited</b>	Any microbial mosquito larvicide with active ingredients <i>Bacillus thuringiensis</i> (Berliner or Israelensis) or <i>Bacillus sphaericus</i> is categorized as Least limited.

**Table 1: City of Fort Bragg Reduced-Risk Pesticide List**

Product Name	Type	EPA #/ SF code*	Ingredients	Pesticide Hazard Tier**	Use Limitation Type***	Use Limitations Other uses require an exemption (click here)
<b>Mosquito control products - IGRs</b>	Mosquito control - IGRs	Various	S-Methoprene (5026)	Least hazardous (Tier III)	<b>More Limited</b>	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.
<b>Rat Ice</b>	Rodenticide	12455- 148	Carbon dioxide	More hazardous (Tier II)	<b>More Limited</b>	
<b>Rodent control - diphacinone block baits</b>	Rodenticide	Various	Diphacinone	More hazardous (Tier II)	<b>More Limited</b>	<b>See Site-Specific Limitations.</b> 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.
<b>Top Gun All Weather Bait Block Rodenticide</b>	Rodenticide	67517-66	Bromethalin 0.01%	Most hazardous (Tier I)	<b>Most Limited</b>	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 <b>only where a significant public health hazard is recognized by the San Francisco Dept. of Public Health.</b> In all cases, monitoring shall be used whenever feasible to minimize rodenticide use.

\*For products exempt from US EPA registration (usually 'Generally Regarded as Safe'), SF creates its own product code

\*\*A product's tier ranking reflects *hazard* (the possibility of harm) but not *risk* (probability of harm). It does not include consideration of likely exposure. It is determined using the SF Pesticide Hazard Screening Protocol,

<http://sfenvironment.org/download/guide-to-the-reduced-risk-pesticide-list-revised-2013>

\*\*\*Use limitation type is an informal rating of *risk* (probability of harm), determined by considering a product's hazard tier rating, formulation, likely exposure, and typical uses. Applications of "most limited" pesticides must be justified at an annual public hearing.



# PESTICIDE EXEMPTION REQUEST APPLICATION

## APPLICANT

Name \*  First  Last

PHONE \*

EMAIL \*

CITY DEPARTMENT \*

## PESTICIDE

Start Date of PROPOSED Pesticide Use \*  MM /  DD /  YYYY 

End Date of PROPOSED Pesticide Use \*  MM /  DD /  YYYY 

Product Name \*

Active Ingredients

EPA Registration # \*

Pesticide Type

## ATTACH TO YOUR REQUEST

- The product label
- The product MSDS

## LOCATION

Address of pesticide use

Street Address

City  State  Zip Code

Detailed Location for Pesticide Use

## JUSTIFICATION

Pest

Justification for Use \*

Maximum of 250 words.

Explanation of Efforts to Find Alternatives \*

Maximum of 250 words.

Strategy to Prevent Future Exemptions \*

Maximum of 100 words.

Approved: \_\_\_\_\_ (Public Works Director) \_\_\_\_\_ (Date)

## Pesticide Application Training Log

Name	Department	Phone/ext.	Training Description/Title	Date

# PESTICIDE APPLICATION LOG

Approval Number *For Internal Use	OPERATOR (FIRM NAME)		ADDRESS		CITY		ZIP CODE	PHONE NUMBER
	OPERATOR ID/LICENSE NUMBER	LOCATION OF APPLICATION	PROPERTY OWNER			MONTH/YEAR OF USE	TOTAL NUMBER OF APPLICATIONS	* CITY APPROVER
							*DATE	
	MANUFACTURER AND NAME OF PRODUCT APPLIED	EPA/CALIFORNIA REGISTRATION NUMBER FROM LABEL INCLUDE ALPHA CODE	TOTAL PRODUCT USED (Check One Unit of Measure)		NUMBER OF APPLICATIONS	COMMODITY OR SITE TREATED	ACRES/UNITS TREATED	
				LB <input type="radio"/> OZ <input type="radio"/> PT <input type="radio"/> QT <input type="radio"/> GA <input type="radio"/>				

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