

Summary of pesticide use exemptions granted in 2020

Trial use exemptions: green shading  
 Regular exemptions: orange shading  
 Denied exemptions: pink shading

SF City Dept.	Product Name	Active Ingredients	EPA #	Pest	Address of pesticide use	Justification for Use	Explanation of Efforts to Find Alternatives	Strategy to Prevent Future Exemptions	Status of Exemption	Hazard Tier
Airport	Imazapyr	2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-3-pyridinecarboxylic acid	241-426	Typha spp.	San Francisco International Airport	SFO manages the West-of-Bayshore property under a Recovery Action Plan (RAP) for the federally endangered San Francisco garter snake (SFGS). A primary goal of the RAP is to increase open water breeding habitat for the SFGS's preferred amphibian prey, Sierran treefrogs and the federally threatened California red-legged frog. The property consists of approximately 100 acres of uplands and 80 acres of wetlands. The wetlands consist of seasonal ponds and constructed drainage ditches, two of which are perennially or nearly perennially watered. These constructed canals are heavily managed with systems of pumps and levees and do not experience scouring flows. As a result, aquatic vegetation becomes overgrown and eliminates the majority of open water habitat necessary for frog breeding. In the past, SFO has removed overgrown aquatic vegetation mechanically. Mechanical methods pose a risk to sensitive species through the potential for direct striking of individual animals, but also through increased disturbance during the work season. The addition of an herbicide approved for use in aquatic habitats would reduce the frequency of mechanical removal, allow for more consistent and widespread maintenance of open water	SFO has regularly used mechanical removal of overgrown aquatic vegetation to maintain open water habitat. However, mechanical removal imposes direct and disturbance impacts on sensitive species and their habitats. Mechanical removal must be executed regularly as vegetation quickly grows back. Because of the inefficiency and impacts of mechanical removal, SFO seeks to add chemical control to the program to maintain more consistent and widespread open water habitat with lower impacts. Imazapyr has been shown to be efficacious and safe in aquatic environments and has been used previously on the property to manage invasive cordgrass. Alternative herbicides considered did not meet the efficacy and safety offered by Imazapyr.	SFO seeks to add Imazapyr to the City's approved list for the specific use of the herbicide in a conservation setting to control aquatic vegetation for the purpose of increasing open water breeding habitat for the threatened California red-legged frog and foraging habitat for the endangered San Francisco garter snake.	APPROVED- Regular Exemption	More hazardous (Tier II)
Citywide/ Various departments	Top Gun Rodenticide	Bromethalin	61282-75-3	Rats and mice	Citywide	Rodent activity poses a health risk. During this time of increased public health risk due to the coronavirus and contingency planning for emergency shelters and field hospitals, it is advisable to have a single-feed rodenticide available for use as needed.  While the shelter-in-place order is in effect we plan on increasing trapping efforts inside buildings. If necessary for trap-shy rodents we would like to use a single-feed rodenticide for control. Additionally with some staff at risk from pre-existing conditions we may have a shortfall in labor necessary for checking exterior trapping stations. In these instances we recommend utilizing a single feed bait in these stations that will not need to be checked as frequently.	Trapping, site modification, and sanitation are the primary prevention and control methods used for rodent management in CCSF properties. Some areas with chronic rodent populations due to high populations of people, high litter loads, and inadequate infrastructure require additional measures.  The multi-feed rodenticide diphacinone is used at some locations where it appears to be ineffective; rodents consume the bait but the populations do not decrease. Cholecalciferol baits are not taken by the rodents in many instances, we believe from palatability issues.	We will ask that bromethalin active ingredients be allowed for interior use and exterior rodenticide stations as a last resort AND as a rotation strategy to avoid resistance to diphacinone active ingredient rodenticides.	APPROVED- Regular Exemption	Most hazardous (Tier I)

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Citywide/ Various departments	Aprehend	Beauveria bassiana	89186-1	Bed bugs	Multi-unit housing	<p>Bed bugs are considered a pest of public health importance. Bed bug management takes a coordinated effort with property management, residents, resident support resources (in some cases) and pest management professionals. The costs associated with bed bug management are higher than other pests due to the labor required to inspect and treat personal belongings in a residence and the structural components that they may infest. Current bed bug management protocols require multiple treatments over several weeks.</p> <p>Obstacles to control include overcluttered units, resident unwillingness or inability to cooperate with treatment preparations. This bio-pesticide calls for two treatments at a 30 day interval and claims to last for up to 3 months after treatment. If this product works as claims it may present a drastically improved treatment protocol that is less disruptive to residents and less costly overall.</p>	<p>Our current bed bug management protocol consists of:</p> <ul style="list-style-type: none"> <li>- pre-treatment preparation of units</li> <li>- thermal remediation of unit whereby a generator is parked outside the building and heaters and high-temp fans are used to elevate the residence and all belongings to temperatures lethal to bed bugs</li> <li>- multiple insecticides uses in structural voids, cracks and crevices, and non-touch surfaces</li> <li>- multiple follow-up visits to assure control of infestations and re-treatment as needed</li> </ul>	<p>If during this pilot period we determine that Aprehend is an effective bed bug insecticide, we will ask that the product is added to the SFRRPL.</p>	APPROVED-Trial Use Exemption	Least hazardous (Tier III)
Citywide/ Various departments	Alpine Dust	Dinotefuran	499-527	Yellowjackets	750 Phelps street	<p>A yellowjacket nest in a high traffic construction zone poses a health and safety risk. The nest is at the base of a tree in the root ball.</p>	<p>We typically treat with Oh Yeah! and manual nest destruction. In this case due to the position of the nest it may not be possible to adequately treat the nest.</p>	<p>This insecticide may be a good alternative for Suspend polyzone. If so we will ask for it to be added to the SFRRPL as an alternative chemical treatment for high risk stinging pests.</p>	EMERGENCY Exemption	More hazardous (Tier II)
Citywide/ Various departments	Weed Slayer	Eugenol 6% + microbial	EXEMPT	perennial weeds	Citywide	<p>Weeds that are difficult to control by physical removal and sanitation practices alone exist in both of these areas. We have also attempted the use of burn-down herbicides as alternatives to Roundup Custom. There has only been partial success in these areas but the perennial weeds rebound and persist.</p>	<p>We have physically removed the weeds with machines and by hand. It is particularly difficult to remove weeds from within the newly planted tree wells. Flaming with propane torches is not practical in warm dry weather but is used during the wet season. Burndown herbicides are not effective on deep rooted weeds.</p>	<p>This product is EPA EXEMPT and has a systemic mode of action. Therefore, it could be a safer alternative to glyphosate and should be added to the Reduced Risk Pesticide List.</p>	APPROVED-Trial Use Exemption	Least hazardous (Tier III)
Dept. of the Environment	Contrapest	4-vinylcyclohexane diepoxide (VCD), triptolide	91601-1	rats	Citywide pilot studies - select locations	<p>Safer alternative to rodenticides. Acts as a contraceptive.</p>	<p>This is a pilot effort to determine the efficacy of this safer alternatives.</p>	NA	APPROVED-Trial Use Exemption	Missing data
Fire Department	Suspend Polyzone	Deltamethrin	432-1514	Fleas	798 Wisconsin Street	<p>Fleas are being brought to the site by local wildlife. Wildlife is traveling between fencelines bordering multiple properties. Fleas are dropping from wildlife and making their way into the station on staff that must pass through the area.</p>	<p>Repellents have been used to keep wildlife off the fence line. Botanical insecticides have been applied to the area to knock down flea populations. Wildlife traps have been set in the neighboring properties with the coordination of the neighbors. With the declining temperatures, we believe that this exemption may not be necessary however raccoons may be harboring in heated voids that sustain the flea population longer.</p>	<p>This insecticide with an IGR may be needed as a last resort in instances where wildlife cannot be removed.</p>	DENIED-Regular Exemption	Most hazardous (Tier I)

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Laguna Honda Hospital	Alpine PT	Dinotefuran	499-568	Fruit Fly	375 Laguna Honda Blvd	Fruit fly breeding in floor drains create a health hazard for patients.	We have utilized every biological drain cleaning material available. No cleaning material has been found that adequately removes the build-up that fruit flies breed on. Mechanical cleaning is too costly and labor intensive to keep up with the need.	If this product works we will ask for it to be added to the reduced risk pesticide list as it is a bait and can be applied into removable stations.	APPROVED- Regular Exemption	More hazardous (Tier II)
Municipal Transportation Agency	Avian Control Bird Repellent	Methyl Anthranilate	88889-1	Pigeons	2500 Mariposa, 1849 Harrison street	The maintenance facility has doors that are continually open for bus ingress/egress. The site has a large resident population of pigeons that nest in overhead areas. The nesting and loafing pigeons leave guano on work areas that is a workplace distraction and hazard. Additionally dander and dust particles from pigeon nesting is an hazard to worker health.	SFMTA has carried out substantial pigeon exclusion measures including netting, spikes, coils, etc. When these physical measures are deployed the birds move to nearby areas or over time peck their ways through the nets, damage the spike and nest on them, or otherwise defeat the systems. The pigeon pressure is so high that some additional form of repellency and relocation of these birds is needed.	If this pilot is successful at this location we will ask that this food grade material be added to the SF Reduced Risk Pesticide List as part of a comprehensive IPM program for bird management.	APPROVED- Trial Use Exemption	Least hazardous (Tier III)
Public Utilities Commission (Water)	POSTING EXEMPTION	NA	NA	Acacia and other undesirable vegetation	Multiple Peninsula Bioregional Habitat Restoration sites around Upper and Lower Crystal Springs and San Andreas Reservoirs	Closed area	NA	NA	APPROVED - Exemption to posting requirements	NA
Public Utilities Commission (Water)	Altriset + Boracare + Orange oil	chlorantranilipole, disodium octoborate, d-limonene	100-1503	Subterranean, drywood termites	1000 El Camino Real	Structural problems from termites in out buildings jeopardizing structure of limnology building.	Would need to tear building apart to replace infested wood. Consulted Dept. of the Environment on safest alternatives. Avoiding fumigation and more hazardous pesticides. Orange oil (listed active ingredient) will also be applied as part of the treatment program.	This is a one-time request with followup inspections to make sure problem has been solved with least toxic approaches.	APPROVED- Regular Exemption	More hazardous (Tier II)
Public Utilities Commission (Water)	Vastlan	Triclopyr	62719-687	Woody brush and oaks	Jefferson Sub on Canada following t-line to the southwest	Vegetation Management along the t-line goals are to establish low growing plant communities and manage wildfire fuel buildup. The selective use of herbicide can control sprouting species and allow grass and forbs to become the dominate veg type. Target species are Coast Live Oak, Coffee Berry, Coyote Brush, and other woody plants. Without the use of herbicides repeated manual cutting of brush will be required to maintain adequate clearance along the line. These repeated treatments result in large amounts of fuel increasing potential intensity of wildfires.	Vastlan is on the reduced risk pesticide list for invasive plants. This herbicide has a caution label as opposed to other triclopyr products improving applicator safety. Imaxamox products have lower risk but are not effective on woody brush. Imazapyr products are very effective on woody brush but have a residual effect and are not selective with grasses. The best alternative to obtain optimum selectivity and efficacy is Vastlan.	The use of herbicide is to convert the plant community to acceptable vegetation. After initial cutting spouting will be aggressive. Treatment will retard the growth and additional treatments will be required periodically. Each treatment will require less chemical and longer intervals as control is achieved. After several treatments additional herbicide treatments will not be necessary.	APPROVED- Regular Exemption	More hazardous (Tier II)

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Real Estate Division	Termidor Foam Termiticide	Fipronil	499-563	Drywood termites	4705 3rd street	Termite pellets were found during previous remodeling work. The building was inspected and Drywood termites were confirmed in the attic. Without treatment this historic building is at risk for high cost damage from continued termite activity.	The primary recommendation for Drywood termites in California is fumigation. Where fumigation is not feasible replacing the infested wood and treating the surrounding area is the secondary recommendation. Since extensive construction already occurred in the area of infestation the the recommendation for clean-up of termite frass and spot treatment with this pesticide was made. A follow-up to re-inspect and monitor termite activity has been approved.  Thermal treatment was not recommended by the subcontractor for risk to the historic building and its components.	We will be getting a quote for fumigation to preserve this building with the most assurance possible. Options for spot treatments are limited however thermal treatment may prove to be an effective alternative.  We will explore thermal treatment options on other buildings to evaluate the risk of this form of treatment. Additionally if this spot treatment is determined to be effective we may ask for this insecticide to be added to the SFRRPL for termite treatments.	APPROVED- Regular Exemption	More hazardous (Tier II)
Recreation & Park Dept.	Avian Control	Methyl Anthranilate	88889-1	Ravens	Golden Gate Park Bowling Greens	Ravens have caused extensive damage to the bowling greens turf. They are pulling out plugs and damaging the playing surface. The onsite staff repair the areas daily. Unfortunately, the issue is becoming more widespread with each passing day. Avian Control is a bird repellent product intended to discourage birds from foraging. This material would be used in conjunction with other tactics currently being utilized. Daytime hazing, food source control, and physically covering areas are some of the techniques already being deployed.	Staff have scared the ravens away from the areas while on site. A motion sensor sprinkler has been utilized during hours of operation. The greens were treated for crane fly and white grubs, but control has been only partially successful. Monitoring for other food sources will continue. Extensively damaged areas are temporarily covered with netting.	Hazing the birds regularly and eliminating possible food sources as they are discovered will be ongoing until activity has ceased. It would be requested that this product be added to the SF Reduced-Risk Pesticide List if it is shown to be effective.	APPROVED- Trial Use Exemption	Least hazardous (Tier III)
Recreation & Park Dept.	Quicksilver	carfentrazone-ethyl	279-3265	Silvery Thread Moss	899 Lake Merced Blvd.	The existing moss population on the putting green surfaces has resulted in undesirable playing conditions. It has also impeded on the growth of the desirable Bent grass. Hand removal is not a practical or an effective solution. The moss has persisted even though the growing conditions have been altered to discourage its growth. Fertility modification, moisture control, shade reduction, thatch removal are preventative measures are already being implemented.	High rates of ferrous sulfate applications slowed the encroachment but has not removed dense areas of moss. Plugging (hand removal) is only effective in very localized spots. Preventative cultural practices will be continued while moss pressures persist.	The irrigation has been focused on deep watering to keep the putting greens surface moisture level low. The morning dew has been removed on a daily basis. Surrounding trees have been pruned to maximize sun exposure onto the turf grass. Soil fertility has been optimized and include higher rates of iron to encourage healthy turf grass and slow the spread of the moss. Applications of sand topdressing are conducted on a regular basis. Mowing heights will be raised during the winter months.	APPROVED- Regular Exemption	Most hazardous (Tier I)

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Recreation & Park Dept.	Indemnify	Fluopyram	432-1532	Anguina pacifica	300 34th Ave.	The putting greens at Lincoln Golf Course are infested with Anguina pacifica. This parasitic nematode causes damage to Poa annua turf grass. The damage heavily degrades turf quality and therefore negatively effects play-ability. Broad-leaf weeds and moss are filling in the dead spots which is compounding the issue. Until recently there have not been cultural practices or products commercially available that are effective at controlling this pest. However, this product has proven to work on the small test plot at Harding Park Golf Course.	We have attempted cultural strategies such as maintaining optimal fertility and moisture, modifying topdressing frequency, over-seeding, monitoring closely and plugging symptomatic turf.	The use of this product should effectively control the nematodes with 1-2 applications. The control is expected to last at least a year. It remains to be known how long damage will remain below a tolerance level beyond one year.	APPROVED-Trial Use Exemption	More hazardous (Tier II)