The Pesticide Review

Santa Clara County Division of Agriculture

November 2018

Hazardous Waste in the County of Santa Clara

Household Hazardous Waste Program
FOR SANTA CLARA COUNTY
SERVING RESIDENTS AND SMALL BUSINESSES

Does your business have unwanted / unused pesticides and want to know where you can dispose of them properly?

Businesses that generate small quantities of hazardous waste may qualify to use the County's Conditionally Exempt Small Quantity Generator (CESQG) program. For more information click on this link:
www.sccgov.org/sites/rwr/hhw/Pages/hhw.aspx
To schedule an appointment for hazardous waste drop off please call: **(800) 207-8222**.

If you are a resident of Santa Clara County and have household hazardous waste you can call to make an appointment to drop it off at one of the collection facilities. To participate, call: **(408) 299-7300**

Cupertino and Palo Alto residents must contact their respective cities for their household hazardous waste programs.
Cupertino (800) 449-7587
Palo Alto (650) 496-5910

Inside this issue:

Unlicensed Companies

Unlicensed activity in Santa Clara County

We have had yet another unlicensed person brought to our attention thanks to an alert real estate agent and pest control company. If you should come across something in your line of work where you suspect a person or company is not licensed with DPR or the SPCB, give us a call! The County Agriculture Department is the agency that will investigate these allegations.

What do we need from you? We need a description of the activity, and if possible: a vehicle license plate number, make / model and color, description of the person, address where they were seen performing the activity, and the time and date.

What do we do from there? It depends on the type of pest control and whether the person was knowledgeable (in cases of landscapers). Pest control for hire without the proper licenses, will usually land you in our administrative process and we will fine the company / person and require they get properly licensed. There are those however, where they have either had a license in the past or have a non-qualifying license for the type of work and know what is required but they choose to circumvent the system. When it is blatant, we skip the administrative process and jump to the next level which is the District Attorney's office.

We had a complaint recently that rose to that level and we enlisted the help of a special D.A. investigator. He submitted his findings to the DA and she submitted an arrest warrant to the courts for the person in question to be picked up for fraudulently presenting himself as a pest control business.

The DA understands the extra work and costs it takes to do things right and they hit those that don't play by the rules with a very expensive day in court.

2018 Documented Secondary Poisonings

Great Horned Owl, Barn Owl & several eastern tree squirrels

This picture of this Great Horned Owl was snapped by the homeowner that found the dying owl on her doorstep in Morgan Hill. The owl died shortly after being found and was turned over to the Dept of Fish and Wildlife. In this case, our office saw the posting about this owl on social media before we received the morbidity report from Fish and Wildlife. We were able to confirm that the owl had 0.550 ppm brodifacoum and traces of bromadiolone, difethialone, and diphacinone in his system. The owl consequently bled to death.

Earlier this year we received a report from Fish and Wildlife about a barn owl that was found on the ground in Stanford. The owl was treated at a wildlife treatment center and was given Vitamin K, antibiotics, and anti-inflammatories. It appeared to be improving for several days but then suddenly she began declining rapidly and had to be euthanized. Upon her necropsy, they found 0.11ppm brodifacoum and a trace amount of bromadiolone.

Please be sure to continue using these baits according to their label instructions, monitor your bait stations, and encourage your clients to contact you to pick up dead rodents to prevent these unnecessary deaths. Even though these raptors have large hunting grounds, they're most likely being poisoned in populated areas. And, pest control operators aren't the only ones applying these materials as our last example demonstrates:

A few months ago, a homeowner called our office out of concern of 8 tree squirrels that had died in her backyard. She found some green bait blocks near the bodies which lead her to believe they were poisoned. This homeowner put on her detective hat and combed her neighborhood looking for the origin of the bait blocks. When we spoke to the neighbor who had purchased "Tomcat Bait Chunx" for rats in his yard we discovered that the bait was so attractive, animals chewed through the plastic bucket to get to it. We found evidence of chewed plastic where the container once sat in the gated garden in the homeowner's backyard. Once this homeowner realized the squirrels had gotten into the bait, they properly disposed of the material through Hazardous Waste. In this case, we had a homeowner who didn't follow label directions, specifically, they didn't store the material in an area inaccessible to wildlife. Because the unintentional deaths involved invasive eastern tree squirrels, we educated the homeowner about pesticide label requirements and we did not forward the case to Fish and Wildlife.

Pyrethroids

Educate your applicators!

We came across another applicator recently spraying a pyrethroid with a fan pattern nozzle around the perimeter of a home. When the Biologist asked why he wasn't using a pin-stream as required, he stated he didn't know the pesticide he was using was a pyrethroid. He further asked, how can you tell?

We've written a number of articles in the past covering the requirements of the §6970 regulation, so we won't dive into it again here. But it's something all employers should be familiar with and teach their applicators. We realize new applicators have a LOT to learn and retaining all the information you give them takes a while. If you haven't done so already, having your crew watch the videos posted on the pyrethroid working group site can give some great visuals of what the application should look like:

http://pwg2pmp.com/

Another thing we tell applicators is if the pesticide ends with "rin", chances are it's a pyrethroid. They don't all end with "rin" as our cheat sheet shows down below, but many of them do.

"Double check before you spray! - Follow the regulation to protect The Bay!"

Aquatic organisms are incredibly sensitive to these chemicals. Be sure you are not to blame for it being found in our local streams! DPR is monitoring!

PYRETHRIN CHEAT SHEET

Avoid spraying hard surfaces, 1" pin stream, broadcast sprays must stay 2 feet away from hard surfaces, spot sprays no larger than 2 square feet, do not allow to enter drains, etc.

- bifenthrin
- bioallethrin
- S-bioallethrin
- cyfluthrin
- beta-cyfluthrin
- gamma-cyhalothrin
- lambda-cyhalothrin
- cypermethrin
- deltamethrin
- esfenvalerate
- fenpropathrin
- tau-fluvalinate
- permethrin
- phenothrin
- prallethrin
- resmethrin
- tetramethrin

2018 Pesticide Horror Stories

DPR compiled pesticide illnesses

DPR all too regularly receives reports of illnesses or even deaths. These reports are compiled by county agricultural commissioners (CACs) who work with the department on pesticide enforcement.

In California, most pesticide related illnesses and injuries occur in homes or at non-farm workplaces, like restaurants. The main reasons: Storing pesticides in food or beverage containers, and failure to read the instructions on the products.

Below is a sample of some incidents from DPR' s Pesticide Episode Investigation Reports.

Dangerous Drink

Storing pesticides near or in food containers is always a bad idea. This was a bitter lesson learned by a woman in Southern California this year who reached for a glass of lemonade in the morning and got something else instead.

The woman told an investigator that while staying at a friend's house, she pulled a one-gallon jug of what she believed to be lemonade from the refrigerator that actually contained pool chlorine! The container, she explained, was mistakenly placed in the fridge by her friend's husband, who apparently also believed it to be lemonade. After taking a swig, she spit the chlorine out, but it was too late. Her tongue began to burn, and her throat and mouth were irritated. Taken to a regional medical center, a doctor determined she suffered burns to her throat. She was hospitalized for three days. The victim declined to provide the investigator with the name, contact information or address of the friend she stayed with. "She stated that it would never happen again and would advise her friends against placing chemicals in proximity to food or beverage items."

A lousy situation

The most chilling stories DPR sees are those involving children. Like this one. Early this year, a toddler was admitted to the hospital after ingesting a chemical described as "lice powder." The victim's mother told the local county agricultural commissioner's staff that she found her son leaving her roommate's bedroom, covered in a white powder. The victim's family rented a room in the friend's house.

"The friend told the victim's mother that she had a Ziploc bag containing lice powder, on top of her medicine cabinet, but out of reach of children," the report says. It notes that the unlabeled product was purchased in Guatemala and is illegal to use in California. The toddler was washed and changed into new clothes. However, shortly after eating, he laid down and began to exhibit symptoms of illness. As his parents drove him to the hospital, he was shuddering, vomiting, and having difficulty breathing. Luckily, the boy recovered and was released the next day.

Bleach and ammonia: A dangerous cocktail

One afternoon, a teen mopping floors in the bar area of a restaurant was sickened by toxic fumes after mixing bleach with ammonia. According to an investigation, the youth, 17, suffered a reaction to the resulting noxious gas (called chloramine). Symptoms included shortness of breath and chest pain. He told the investigator he was instructed to use the bleach-ammonia mixture to clean the bar area. He notified his manager after he became ill and was picked up by his father. His dad took him to the emergency room, where he remained for 24 hours. An inspector later spoke to the manager and explained that the product label clearly states that bleach and ammonia products should not be mixed, and that mixing these products had caused an employee to become ill. The bleach product label also requires users to wear rubber gloves and eyewear, which were not provided by the employer for employees to use. The incident was referred to Cal/OSHA, at the state Department of Industrial Relations

Rats!

Here's a freaky story about a rat – but the rodent wasn't the scariest part. It was about 9 p.m. – just before Halloween last year -- when a 59-year-old woman spotted a rat in her home. She grabbed a can of flea-and-bed bug fogger with the intention of killing the rodent. However, as she pulled her arm back, she accidentally triggered some spray from the can, which she accidentally inhaled. She went to a local medical center, where staff noted she experienced coughing, vomiting and dry heaving. The woman told the local county agricultural commissioner's office investigator, during a subsequent interview, that her embarrassment exceeded her health concerns.

Pesticides Blast Injures Neighbor!

One February morning, a man was injured when a spray bottle being used by his neighbor's gardener suddenly exploded – sending plastic fragments flying

Continued on page 4

Pesticide Stories Continued from page 3

into his hand. The gardener, it turned out, was instructed by his customer to use pool chlorine to kill weeds in her yard. He mixed the powder with water in a 5-gallon pump sprayer….and then added a spoonful of herbicide.

The chlorine label noted it should not be mixed with acidic products, such as the herbicide he'd mixed in. An investigator surmised gas had built up in the plastic bottle, causing it to explode.

The neighbor was hit by plastic debris and suffered a broken finger. He was also splashed with the chemical concoction. The man was driven to an urgent care facility for examination and treatment.

In a later interview, the homeowner admitted she'd bought the chlorine for use on her weeds. The investigator determined there had been a violation of the Food and Agricultural Code. Moral of this story… love thy neighbor! Pool chlorine is for pools. Use pesticides consistent with the label: the way they are intended. Do not make your own home brew.

These pesticide horror stories may be shocking…but the main takeaway is always follow product labels, including warnings about mixing, storing and use.

2019 Registration Season

Bay Area County Registration Fees

It's time to renew your County registration for 2019. We recently polled other counties in the Coast Group about their fees this coming year. Structural Branch 1 = $25. Structural Branch 2 & 3 = $10. The breakdown for Agricultural Pest Control Business fees are as follows:

County	Ag Pest Control Business	Maint. Gardener
Alameda	$70	$25
Contra Costa	$50	$25
Marin	$90	$25
Monterey	$50	$10
Napa	$72	$25
San Francisco	$50	$25
San Benito	$50	$25
San Mateo	$60	$25
Santa Clara	**$50**	**$25**
Santa Cruz	$75	$25
Solano	$67	$25
Sonoma	$86	$25

From the Question File:

Questions from Industry

Question: Can I use Gojo fast wipes in place of a bar of soap?

Answer: Nope! They cannot replace soap for decontamination. In fact, the package of Gojo wipes states: "not intended as a substitute for handwashing to remove pesticides". It's okay for employees to use these wipes for other things, but you must provide soap and water if they are mixing or loading category I or II materials.

Question: If a company sprays a yard for ants, is that structural or agricultural pest control? What about spiders?

Answer: It's all about the target pest and how far away from a structure you are going! If a company is treating an ant nest in the yard because the ants are invading the home, that's structural. If the company is treating an ant nest in the yard because they are milking aphids and consequently protecting "their herd" of plant sucking bugs, then that's agricultural. Spiders are an ally to gardeners so they are not agricultural pest control. Spiders are a pest to man so are structural pest control.

Question: Can I use a QR code to relay what was sprayed for general pests on my door hangers?

Answer: No! 1970.4(c) states that disclosure notices must have the name, address, and phone number of the pest control company and the name of the pesticide applied.

Read the Label… Carefully!

The label is the law

We find that even experienced pest control licensees can sometimes miss directions that are 'buried' within the text of a label. Such is the case regarding the label for Phantom liquid termiticide/insecticide (EPA Reg# 241-392). 'Buried' on page 14 and again on page 16 is the short statement: "*DO NOT reapply more often than every four weeks.*" Failure to see this statement has resulted in violation notices to Companies / Field Reps. Some pest control businesses are taken by surprise, having felt they **had** carefully read the label. Be sure to look for these important details! And, if you do use the same pesticide at a residence, but you are applying the material to different areas, make sure your pesticide use records are detailed enough to document that very important distinction!

Wet Weather Means an Increase in Stormwater Pollution

Local stormwater agencies remind pest control professionals to help reduce pollution during the rainy season. Article submitted by SCVURPP:

The rainy season brings more than gray skies to Santa Clara Valley. It also brings an increase in water pollution. "Stormwater runoff washes pollutants off yards and streets into storm drains," explains Jill Bicknell, Assistant Program Manager for the Santa Clara Valley Urban Runoff Pollution Prevention Program. "Once these items enter the storm drain system, they flow directly into local creeks and the San Francisco Bay without any treatment."

The Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) is an association of fifteen government agencies in the Santa Clara Valley that work together to prevent stormwater runoff pollution in local creeks and the San Francisco Bay, in accordance with State and Federal laws. Pesticide applications are a major source of water pollution in Santa Clara Valley creeks and the San Francisco Bay. Recent water quality monitoring data indicate that pyrethroids and fipronil continue to be found in local creeks, and are toxic to aquatic life.

SCVURPPP agencies implement many programs to reduce pesticide use on municipal properties, such as adopting policies requiring the implementation of Integrated Pest Management (IPM) on municipal properties, requiring municipal staff and contractors to manage pests using IPM techniques, and encouraging the reduction of pesticides with active ingredients that are of water quality concern (*see list at end of this article).

Pest control professionals can also help prevent pesticides from polluting our local creeks and the San Francisco Bay by following these suggestions:

- Offer IPM services to your clients to meet the growing demand for eco-friendly pest control.
- Obtain an IPM-certification to further increase your business prospects. Choose from three certification programs: EcoWise, Green Pro, and Green Shield.
- Read pesticide labels and follow all directions.
- Never apply pesticides outdoors when rain is in the forecast.
- Talk to your clients about housekeeping and exclusion practices that can prevent pest problems, such as taking out garbage regularly, fixing leaking faucets and pipes, and sealing cracks and holes.
- Safely dispose of unused product.
- Get FREE educational materials on IPM to educate yourself, your staff, and your clients. These materials are available on SCVURPPP's public education website at www.MyWatershedWatch.org. Hard copies are available upon request.

"It is important that pest control professionals read pesticide labels and follow all directions," adds Ms. Bicknell. "Pesticide labels include application guidance that is important for water quality protection."

For example, new California-specific restrictions were recently added to labels of three fipronil containing pesticides: Termidor SC Termiticide/Insecticide, Taurus SC Termiticide/Insecticide, and Navigator SC. Termiticide/Insecticide. The new restrictions place prohibitions on where and what time of the year these pesticides can be applied. To protect water quality, application of these pesticides is no longer allowed during the rainy season, from November 1 to February 28. For a summary of these restrictions, see https://ucanr.edu/blogs/blogcore/postdetail.cfm?postnum=27509

*Pesticides of concern, as listed by the San Francisco Bay Regional Water Quality Control Board:

- Organophosphates
- Pyrethroids
- Carbamates
- Fipronil
- Indoxicarb
- Diamides, and
- Diuron

Santa Clara County Dog Team

Hendrix and the Biologist team helping to stop invasives at parcel facilities

California is the fifth largest supplier of food to the world! We grow over 400 different commodities in this State and in 2017, California's farms and ranches were a $50 billion-dollar industry.

California growers battle many factors to bring their crops from seed to harvest: weather, increasing water costs, labor, trade issues, and not to mention pest pressure. Pests are not only native pests; many are nonnative invasive species introduced to the State

Continued on page 6

accidentally. They come hitchhiking in shipments from out of the state or the country, through the mail in uncertified agricultural products, in the luggage of travelers, or hidden in vehicles, ships, airplanes, etc. When those nonnative pests make it to our temperate environment, they can reproduce rapidly because they don't have the natural enemies found in their place of origin. The control or eradication of these invasive pests can cost tens of thousands to millions of dollars. Sometimes the cost of eradication is too much and the State can't justify the costs to eradicate it, such as the olive fruit fly, Drosophila suzukii, etc.

In its efforts to stop the introduction of those unwanted pests, the California Department of Food and Agriculture (CDFA) developed the California Agriculture Detector Dog Team Program. Each team (a dog and handler), visit parcel facilities and look for uncertified packages containing agricultural products. The dog sniffs and alerts (scratches) on the packages and then the contents are carefully inspected by another Biologist to verify that they comply with all quarantine regulations and are free of pests. As of today, there are thirteen dog teams employed by different counties in California. During fiscal year 2018, a total of 659 significant pests were intercepted by the Dog Teams and 2,588 packages were rejected for violating state and federal plant quarantine laws and regulations.

Santa Clara County's team consists of our dog handler Marithza, and a black lab named Hendrix. The team is supported by different quarantine biologists that inspect packages Hendrix alerts on.

Our dog team can't do all the work alone. You too can be part of the team and help us with our mission to protect California's environment and our local agriculture. Keep your eyes open and report unusual pests and diseases to our office. Do not bring fruits, vegetables, or agriculture items from your trips out of the country, other states, or quarantined areas within California.

If you have any questions regarding domestic incoming shipments, contact your local ag commissioner's office.

If you would like to ship something to another state, you can visit that state's agriculture website or you can look up their entry requirements at the National Plant Board's website: www.nationalplantboard.org/laws-and-regulations

Markings: Any shipment of agricultural products that enters or passes through California must be conspicuously labeled with the name and address of the shipper and receiver, the name of the country, state, or territory where the agricultural item was grown, and a statement of its contents.
For more information, feel free to visit our website and check out Hendrix's webpage: sccagriculure.org

A New Insect in Santa Clara County Has Some Homeowners Seeing Red

The Turkestan cockroach also known as the rusty red cockroach or red runner cockroach was first noticed in the US in 1978 around the former Sharpe Army Depot in California. It then started making appearances at Fort Bliss in Texas and several other military bases.

The Turkestan cockroach is primarily an outdoor insect and is not known as an indoor pest. And like all opportunists, it will inhabit areas around dwellings where shelter can be found. It has rapidly been replacing the common oriental cockroach (*Blatta orientalis*) in urban areas of the southwestern US. It outcompetes the oriental cockroach by laying more eggs and maturing more quickly.

Adults measure around 3 cm (1.2 in) in length. Adult males are a brownish orange or red, are slender, and have long, yellowish wings which allow it to fly. Adult females are dark brown to black, with cream-colored markings on the shield and a cream-colored stripe edging its wings; they are broader than males and have short vestigial wings. The males are more commonly encountered than females due to their ability to fly and their attraction to lights. - Great….Flying roaches, ugh! Nymphs are brown in front, black on the rear, and are wingless.

For all their creepiness, the majority of cockroaches do little harm. There are approximately 4,500 species worldwide and about 70 in the US. Only a few bad apples, about two percent, are pests. The rest can be considered beneficial outdoors. Which is funny to think about a cockroach as a beneficial, but they provide an important service. They are scavengers that recycle dead animals and vegetable material and aerate the soil.

These Turkestan roaches were trapped in Campbell.

Male, female, nymph, & female with eggs