

The Pesticide Review



Santa Clara County Division of Agriculture
sccagriculture.org

November 2016

NEW Agricultural Company Registration Form

Mail-in or walk-in options for Ag PCBs

Agricultural pest control companies may have noticed something different in our mailers this year. Santa Clara County created a registration form for agricultural companies so they can choose to mail-in the required pieces of information to register for the year. If you'd prefer to walk-in your registration and pay in person, you are still welcome to do so!

If you mail in your registration, it will take a few days to process your registration paperwork. Your receipt from our office will be your proof that you registered so if you plan to work on January 1st, get your paperwork to us in early December! If you don't receive a receipt from us within 2 weeks of your mailing, call your District Biologist.

We begin accepting registrations on December 5, 2016. (So, please mail in your registrations after December 1st.) Our accountants don't like it when we hang on to checks longer than a week, so please don't mail your registrations in too far in advance.

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Pest Diagnostic Lab Service

The State Lab will now charge a fee for pest ID

The California Department of Food and Agriculture has a state of the art plant and pest laboratory in Sacramento. Up until now, the State offered a free identification service for insects, plants, and plant pathogens. Starting on November 14, 2016 that changed.

The laboratory is very expensive to run and due to budget shortfalls, they have had to resort to charging for their pest identification services. This new fee will effect growers, arborists, pest control companies, maintenance gardeners, and samples sent in connection with phytosanitary certifications. The lab will send a bill through the mail after they receive the sample. To see the fee schedule visit this website:

www.cdffa.ca.gov/plant/ppd/feeschedule.html

By far, the lab we use the most is the entomology lab. When you click on "entomology" in the link above, it states their fees are based on a \$17.50 / quarter hour charge. Not knowing how long it takes the lab to make a determination, we e-mailed the lab the question: "How long does a typical determination take?" This was their answer:

The amount of time spent on an identification will vary from submission to submission. Some will fall within that 15 minute window, but there is no way to predict what the majority of submissions will be. Some samples may take longer to identify due to factors in that particular taxon, the condition of the specimens submitted, the sex or life stage of the specimens, etc.

So, in order to minimize the costs, be sure to provide as many specimens as possible (without overcrowding the vial!) and be sure to package the specimen according to the lab's instructions to minimize damage or degradation.

In order to submit samples to the lab, our office processes them through the State database and generates a Pest Damage Report (PDR). If you have a specimen you cannot identify, please feel free to continue to bring your specimens to us so we can send them to the laboratory, just be advised you'll now receive a bill for the identification service.

From the Case Files:

Actual cases from Santa Clara County

When someone is injured with a pesticide and goes to a doctor, the doctor is required by law to report it to the State Poison Control or Public Health Office. These reports are forwarded to DPR and then assigned to the local Agricultural Commissioner's Office for follow-up. We received one of these reports about an applicator that was sprayed with Temprid SC. We interviewed the applicator and he said that when he went to open his B&G, he forgot it was pressurized and it gave him a shower. – Contaminating his eyes. Thankfully, the applicator knew where a hose bib was located at the client's house and he washed out his eyes for about 15 minutes. Once he cleaned up the best he could, he tried to drive himself to the clinic. - But, his eyes kept watering and he had to pull over. That's when he called his supervisor. The company took the correct action of sending someone to pick him up and take him to the clinic. [This isn't the first time we've heard of applicators trying to drive themselves to the clinic after spraying something into their eyes!] Please drive the point home with your staff that everyone needs to call the office right away and emphasize they are not to drive when they've gotten something in their eyes! It's not only a hazard to your applicators but it's a hazard to everyone else driving or riding on the road around them, not to mention your liability.

Back to this same applicator and story... This particular applicator was taken to the clinic and had his eyes flushed and he felt better. Unfortunately, he didn't think about the hat he wore that day. He had taken it off and it had dried, but when you drench any clothing with pesticides, hats included, they must be washed or thrown away. In this case, he wore his hat a few days after the eye-incident and as soon as he started to sweat, it reactivated the dried material and it ran into his eyes....again. This poor applicator learned the hard way, you have to clean contaminated clothing!

We talk the talk, but we've had to "walk the walk" too before. We had a Biologist that was accidentally sprayed in the eyes by an applicator that dropped their spray gun. [As you can imagine, the applicator was mortified] Our Biologist had to wash his eyes on site and he had to call for someone to come to the application site to take him to the clinic. Talk about an interesting pesticide exposure report write-up! (We didn't cite the applicator in this case since it was clearly an accident.) But, it does point out that accidents can and will happen when you least expect it!

Busting Bugs: USDA Creates Online Tools to ID Pests

Posted by Natalie Loggans, USDA, APHIS, Public Affairs

Created by USDA-APHIS' Identification Technology Program (ITP), ID Tools helps agency staff to quickly identify pests, including insects, diseases, harmful weeds, and more, through an efficient, online database system. ID Tools currently includes more than 30 websites covering a vast array of pests and pests associated with specific commodities. These tools help to keep international cargo—and economic activity—moving as efficiently as possible at U.S. ports of entry. However, ITP's ID Tools web site, which receives about 12,000 visitors a month, is not for experts alone.

“One of our main reasons for creating ID Tools is to empower non-experts—including students, educators, and the general public—with access to expert information,” said ITP Coordinator Dr. Terrence Walters. “With many experienced researchers, Extension specialists, pest identifiers, and other professionals retiring, we saw a crucial need to capture their identification expertise in digital format and provide it to the next generation before it was too late.”

Using identification key software called “Lucid,” users select a specimen's distinguishing characteristics (e.g., color, shape, size) with the aid of illustrations and photographs; they don't need to know the scientific terms for the specimen's anatomy. Each characteristic they choose can eliminate up to hundreds of possibilities and lets them quickly narrow the search to the exact species. Users will find Lucid keys in the majority of the tools.

For example, if you wanted to use ID Tools to identify a terrestrial mollusc (think slugs and snails) that you believe is a pest species, you would first choose whether the creature has a shell. This choice immediately narrows down the possibilities, making the system vastly more efficient than a text version. That efficiency is especially important if you are using the ID Tools' Terrestrial Mollusc Tool on the job.

If you feel that identifying characteristics is not your style, ID Tools offers users a wonderful diversity of other media to support the identification process. Many of the tools contain an image gallery, glossary, visual dictionary, and species fact sheets with descriptions and diagnostic images. Try out ID Tools for yourself by visiting this website:

<http://www.idtools.org/identify.php>

Pesticides in Santa Clara Valley Creeks

Article written by Courtney Siu and Vishakha Atre from SCVURPPP



Pesticides are helpful in many situations – but one place they're not useful is in our water ways. Urban runoff is a major source of water pollution in local creeks and the San Francisco Bay. Polluted runoff happens when rain and irrigation water carry pollutants, such as litter, sediment, and pesticides from our streets, yards and driveways into storm drains. Water entering storm drains flows directly into local creeks and the Bay without any treatment.

These pollutants, including pesticides, degrade water quality in local creeks. “Water quality monitoring data indicates the presence of pesticides in waterways throughout California,” says Jill Bicknell, Assistant Program Manager, Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP). “Even small amounts of certain pesticides can be highly toxic to aquatic organisms.” SCVURPPP is a coalition of 15 municipal agencies in Santa Clara Valley that work together to prevent the pollution of local creeks and the San Francisco Bay.

To address pesticide toxicity in local creeks, SCVURPPP and its member agencies have been implementing a variety of measures, such as using Integrated Pest Management (IPM) techniques on municipal properties, educating residents on IPM, and working with regulatory agencies to ensure that water quality impacts are considered during the pesticide registration process.

Water quality monitoring over the last 15 years has shown that these efforts are paying off. For example, diazinon, once very prevalent, is no longer detected in Santa Clara Valley urban creeks. However, as diazinon use decreased, pyrethroid and fipronil use increased, and these pesticides are now being detected in local creeks.

During 2012-2015, 20 water samples were collected from Santa Clara creeks and 13 were toxic to test organisms. Fipronil and a suite of pyrethroids were detected in almost all of these samples. During the same time period, 12 creek sediment samples were analyzed, and four were toxic to the test organism. Bifenthrin was detected in all four of these samples, and cyfluthrin and permethrin were detected in three of these samples.

In addition to fipronil and pyrethroids, water quality agencies, such as the San Francisco Bay Regional Water Quality Control Board (RWQCB), are also concerned about diamides, diuron, indoxacarb, carbamates, and organophosphates. Many of these active ingredients are found in products used for structural pest control.

SCVURPPP offers the following suggestions for pest control professionals:

- Practice IPM – Use IPM techniques such as physical controls and habitat modifications to manage pests. If you need to use a pesticide, choose the least-toxic option available. Avoid using pesticides with active ingredients that are of water quality concern (*see list below)
- Follow label directions – Apply pesticides according to label directions. Never apply pesticides outdoors when rain is in the forecast.
- Become IPM-certified – Obtain an IPM-certification to meet the growing public demand for eco-friendly pest control operators. You can choose from three certification programs: EcoWise, Green Pro, and Green Shield.
- Educate your clients – Talk to clients about taking simple steps that can prevent pest problems, such as, keeping dumpster areas clean, fixing leaking faucets and pipes, and sealing cracks and holes.

“Pest control professionals can help prevent the pesticide pollution of local creeks by adopting IPM practices and becoming IPM-certified,” says Ms. Bicknell. “IPM practices can protect our communities from pests, and also protect our waterways”.

For information on IPM-certification programs and educational fact sheets, visit SCVURPPP's outreach website www.MyWatershedWatch.org.

*Pesticides of concern, as listed by the RWQCB:

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

2016 Pesticide Horror Stories

DPR compiled pesticide illnesses

These cautionary tales are merely a sample of the preventable deaths, unnecessary sicknesses, hospitalizations, and serious injuries reported to the California Department of Pesticide Regulation ([DPR](#)) this year.



Unfortunately, these stories are real – not fiction – and they highlight the importance of heeding warning signs, properly storing pesticides, and following pesticide label instructions and other laws. Since some of these real-life cases are still under investigation by local agricultural commissioners' offices, DPR will not identify the people involved or discuss potential violations/fines. ... We have injected some humor in these stories, but they should still hopefully put a chill on consumers who otherwise might mishandle pesticides.

Dangerous drink

A Reedley-area boy was hospitalized in mid-May after drinking an herbicide stored in a beverage container. The boy's grandfather had discovered a grocery bag sitting in the yard with a bottle of what appeared to be a sports drink inside. The boy's grandmother put the bottle in the refrigerator to cool it off, she told an investigator. While she was not looking, the boy took it from the refrigerator, had a sip and began to scream. The boy's father said the bottle contained glyphosate. He took the boy to a hospital emergency room. He was hospitalized for four hours, vomiting.

The father reportedly told investigators he'd gotten the glyphosate from a friend who had a one-gallon container, likely purchased at a retail store. The case remains under investigation by Fresno County Agricultural Commissioner.

Injuries arising from people consuming pesticides stored in improper containers are sad but all too common. Takeaway: Sharing is great but do it safely. It's dangerous to store pesticides in food or drink containers. It is also against the law.

Another container scare

A 38-year-old man who works at a Merced County dairy was seriously sickened in August when he accidentally drank formaldehyde stored in a soda bottle at his work

station. The man immediately recognized his error, became very anxious, had difficulty breathing and went home. There, he said, he vomited and suffered extreme pain in his legs. He was seen the next day at a local hospital but refused to stay for overnight observation. However, the next day he was admitted "due to his complaint of feeling like he's burning internally." The man was later discharged.

It's unclear how the chemical got in the bottle. However, formaldehyde is commonly used at dairies as a disinfectant. The Merced County Agricultural Commissioner's Office continues to investigate the case. - Again, don't store pesticides in food or drink containers.

Fumigant tent death

Los Angeles County reported deaths and injuries this year involving people entering tented buildings undergoing fumigation. In one case, in August, a man died several hours after entering a tented building for what was an apparent burglary attempt. An incident report says the man, 25, was exposed to the chemicals being used to fumigate. He was inside for three hours before neighbors heard him calling for help and dialed 911, according to a police report. After emergency responders retrieved him, he was taken to a local hospital suffering symptoms including breathing difficulty, skin rash and drooling. Unfortunately, he later died.

Mosquito repellent horror

In late July, a 12-year-old boy attending an arts camp in Riverside County was sickened after he repeatedly applied 98 percent DEET to his body, face and mouth area. The boy's father told the county agricultural commissioner's office investigators that his son had gotten the DEET at a camp store after a repellent his mother had given him didn't provide him relief from mosquitoes. Responding to screams from children in the sleeping area, counselors found the boy that night lying unconscious in a doorway. His symptoms included hallucinations and excessive pupil dilation, in addition to drowsiness. He was taken by ambulance to a hospital for treatment and was ultimately hospitalized for 2 ½ days, as he was being treated with medications to control seizures. The Riverside CAC has contacted the camp about possibly restricting or monitoring pesticide sales to minors. The case remains under investigation. Moral of the story? More is not always better. Read the label.

Continued on page 5

Bed bug scare

A woman in September reportedly sprayed her 5-year-old grandchild with an unidentified “bedbug spray.” Later that day, the child experienced possible seizures, according to a preliminary poison control report. The child was admitted to the intensive-care unit at a local hospital. The child was discharged about 36 hours after the exposure. The Alameda County Agricultural Commissioner’s Office continues to investigate. Moral of the story? Make sure Grandma reads the pesticide label.

Bleach scare

In October, a 35-year-old woman in Los Angeles County was hospitalized after she mixed bleach with another cleaner while in the process of cleaning her house. According to a preliminary incident report, she suffered chlorine gas inhalation. Chlorine gas can result from mixing bleach with cleaning products like ammonia. Her breathing labored, the woman was taken to local hospitals and was released. The Los Angeles County Agricultural Commissioner's office is investigating this episode. Moral of the story? Having a clean house shouldn't kill you.

A takeaway from all these stories?

It’s critical to follow label instructions (That includes not mixing pesticides or cleaners with other chemicals unless directed). It’s also extremely important to heed warning signs, and to not store pesticides in food or beverage containers.

Bay Area Registration Fees

The registration fees will be the same as last year

County	Ag PCB	Maintenance Gardeners	Branch 1
Alameda	\$70	\$25	\$25
Contra Costa	\$50	\$25	\$25
San Francisco	\$60	\$25	\$25
San Mateo	\$60	\$25	\$25
Santa Clara	\$50	\$25	\$25
Santa Cruz	\$50	\$0	\$10

Pesticide Use Reporting On-Line

By *Biologist Kristian Barbeau*

Many pest control businesses registered in Santa Clara County have switched over to reporting their pesticide use electronically through the Cal-Ag Permits website. This change has significantly reduced the number of paper reports that the County receives, and with continued effort, we may one day become completely paperless.

User comments have been positive and many have said that using the system is easy. Growers have stated “it has been nice to have all the information stored and available when needed”.

If you are on-line, please be sure when you submit a pesticide use report, you check that it is accepted and the status of the PUR is “OK”. If your reports shows any other status (INC, ERR, DFT) please feel free to give me a call so that we can correct the problem. Most of the time, it is a simple fix.

If you are one of our holdouts or are unsure about signing up for this service; I am available to help anyone who needs a little guidance on the use of the system! My phone numbers is (408) 201-0650 and my email is: Kristian.Barbeau@cep.sccgov.org Give me a call so I can set you up!

Pesticide Use Records

The more information we have to show what was done at the site, the better!

We had a recent case where the pest control company noted the time they were in each apartment unit at a complex. (Use records require the date, but not the time.) Because the applicator noted the time of his applications, we were given an accurate timeline of events and it was extremely helpful. We have also had companies thoroughly detail where they applied a material. Use records require companies to record “the site treated”. For structural companies, “inside” is the bare minimum of what needs to be recorded, but needless to say, that description is not very helpful. We had another case that required us to look closely at a company’s use records. They had treated the same apartment unit several times in a 1-month span with a material they hadn’t realized had a 2-week treatment restriction. But, because they recorded details of where exactly they had treated inside the unit, they could clearly show they had treated different areas within the unit so were not in violation of the label treatment interval.

DPR Newsbox

DPR circulates a News Blog to Commissioners and we thought you would find these recent articles of interest:

Indian American hotelier in Michigan to be jailed for bringing pesticides from India to kill bed bugs

<https://www.americanbazaaronline.com/2016/11/01/indian-american-hotelier-in-michigan-to-be-jailed-for-bringing-pesticides-from-india-to-kill-bed-bugs418914/>

An Indian American hotelier in Michigan, Dipen Patel, 34, will be sentenced to jail after he admitted to using illegal chemicals he got from India to eliminate bed bugs in his guest rooms.

Patel, of Dyer, pleaded guilty last Thursday in U.S District Court in Hammond to unlawful use of pesticides. The Class A misdemeanor offense could bring up to a one-year jail sentence and a \$100,000 fine. No sentencing date has been set, but the next hearing in the case is scheduled for Nov. 21, according to court records, according to the South Bend Tribune.

Patel is the owner of Knights Inn at Michigan City and the manager at the Super 8 motel in Howe. According to court documents, Patel brought Dichlorvos in his luggage on a flight from India to the United States and for close to a year, starting in February of 2014, gave it to his housekeeping staff for use in the guest rooms.

Patel allegedly instructed the employees to mix the chemical with water and apply it to carpeting, bedding and mattresses to rid the rooms of bed bugs, court documents revealed. Dichlorvos is a chemical nerve agent.

Research shows exposure to the pesticide can produce symptoms ranging from weakness, headache, blurred vision, nausea, vomiting and diarrhea and, in higher amounts, convulsions and even death.

Twenty-nine rooms at Knights Inn and 27 rooms at Super 8 tested positive for Dichlorvos during a February 2015 inspection headed up by the Office of Indiana State Chemist, court records stated. The rooms testing positive were condemned and Patel was ordered to replace bedding and mattresses and decontaminate all affected surfaces at his own cost.

In a release, the U.S. Attorney's office said the product is not registered with the U.S Environmental Protection Agency, which is required for legal use. According to OISC officials, the investigation stemmed from a complaint by a maintenance manager at the Knights Inn who reported becoming ill after handling the chemicals.

[in another case] Earlier this year, a LaPorte [Michigan] landlord was fined \$14,625 for illegally bringing Dichlorvos into the United States from China.

According to OISC officials, Zai Feng "Kevin" Yang applied the pesticide at high levels to eliminate bed bugs and cockroaches then left some of the chemical with his tenants to perform follow-up applications.

Sacramento Bee: Farm workers sickened by pesticide to receive restitution

<http://www.sacbee.com/news/local/health-and-medicine/article111717217.html>

Owners of a West Sacramento farm will pay \$23,565 in costs, penalties and restitution after spraying farm workers with pesticides, Yolo County District Attorney Jeff Reisig announced Monday. The District Attorney's investigation found that Bypass Farms sprayed at least nine farm workers with pesticides on Aug. 18, 2014, after failing to follow pesticide instructions and warn the workers of the planned pesticide application. The farm workers who were sprayed immediately began experiencing various symptoms consistent with pesticide exposure – including headaches, nausea and vomiting – and had to go to the hospital.

Yolo County Superior Court Judge Timothy L. Fall ordered Bypass Farms to pay the amount after parties reached an agreement on this and other terms through a stipulation, according to a District Attorney's Office news release. "The failure to follow pesticide regulations can lead to serious injury to farm workers, as this case unfortunately shows," Reisig said in a written statement. "The District Attorney's Office is committed to enforcing environmental and workplace safety laws that protect workers from this kind of behavior and to preventing these violations from reoccurring."

Under the terms of the settlement, Bypass Farms will pay the costs, penalties and restitution to those harmed by the pesticide and is required to use pesticides in a manner that better protects farm workers. The restitution funds will reimburse those sprayed for lost personal items and uncompensated sick time, authorities said.

Bypass Farms has cooperated with the investigation and, in recent months, has implemented new policies and procedures designed to prevent future violations of pesticide safety, according to the District Attorney's Office.