

March 5, 2014

To: IPM Advisory Committee

From: Michael Sullivan, Shirley Shelangoski, Matt Valdin, and Susan JunFish of
Parents for a Safer Environment

Good Morning Committee members. Parents for a Safer Environment, PfSE, will be addressing the **responses by the IPM Coordinator to the Triennial report's list of Unresolved Issues** that was submitted recently to the Board of Supervisors. **My name is Michael Sullivan and I am a resident of Lafayette and a retired school teacher.** I thank you for your attention to these issues that matter very much to the public. We are depending on each one of you to ask why these issues have not been resolved for years and be prompted to help find clear answers.

- 1) There is no IPM language in contract with pest control contractors applying rodenticides in our county parks managed by the Special District Division of the Public Works Department. IPM coordinator Drlik admits this, but says they use purchase orders only because they are hired for a specific pesticide application and do not perform IPM services nor make decisions. We are told that the decision has already been made by staff to apply pesticides. Then I'd ask the county to show us how staff made the decision to use rodenticides to control burrowing rodents in our county parks where children and pets frequent. Second, be transparent about how the contractor received this work. Contractors should be hired in part by their track record of implementing IPM at other agencies and should be able to provide suggestions to staff with alternatives to conventional and risky methods like rodenticides. The IPM coordinator states that the committee has voted and resolved this issue and has referred PfSE to TWIC for further resolution. I wish to be very clear here. The IPM Advisory Committee did **not** vote on whether the issues were resolved or not but voted to *list* the unresolved issues stated by the public in the Triennial Report for documentation. **Attachment 2.**

- 2) We want the Public Works Department to consider the residual activity (or half-life) of pesticides prior to application. Particularly along the Flood Control District before a forecasted rain that can wash pesticides into the channels and contaminate the water that flows to the Bays. Ms. Drlik states that pre-emergents must be applied before the rain to activate pre-emergents. She also says that it is not applied to the banks, but only to the flood control access roads only. They feel that they can use less chemicals if they use pre-emergents. For the past years, Garlon 3A with a half life of 45 days on soil was used in the largest quantity along the flood control district, and this is **not** a pre-emergent. **Attachment 3.**

We contend that application of ANY herbicides with half-lives longer than an impending rain storm will likely run-off into the channels, including when sprayed onto the access roads that are adjacent to the banks. We urge the county to cease this risky practice and immediately characterize the pesticides being considered for usage in a transparent manner before application. Second, there are sustainable alternatives such as 1) long-term restoration of flood control channels by planting native grasses and low growing sedges to compete out weeds, 2) goat grazing and 3) Alternative Work Programs that provide free labor for manual removal of weeds that are being done in many towns and counties. **Attachment 4.**

My name is Shirley Shelangoski and I'm a resident of Pleasant Hill.

- 3) Ms. Drlik reports that in 2009 the posting policy was developed, but not applicable to right of ways, (which includes the flood control district and roadsides). **Attachment #5**
- 4) In 2012, the policy went to permanent signs with posting on the website. We have seen no evidence that posting was ever done on the website nor at treated locations outdoors before or during applications in areas where people recreate or have foot access such as trails and parks. We ask this Committee to address this "right to know" problem. Dog owners, bicyclists, joggers, and parents walking kids to school or children playing in creeks all have the right to have a choice to avoid treated areas with posting at the site of treatment and/or online.
- 5) The county states that there has been no name-calling nor shouting at the meetings. Ms. Drlik and Jill Ray were present at one of the worst sessions at the October 29, 2013 Decision Making Subcommittee when the Chair screamed and called a public member names for asking a question that was difficult to answer, namely about why the county does not address runoff risks when choosing pesticides before a rainstorm. In earlier meetings, I have witnessed dismissiveness, staff interrupting the public during public comments and not allowing community members to speak during public comments. We have asked that sessions be taped however two staff members and the Chair who blew up on Oct 29th, having had the most problems refraining from contempt of the public have opposed the recordings. The PfSE Steering Committee has received reports from two members who were called and interrogated by Staff on the veracity of their statements. One senior who was bed-ridden and groggy during a stint of rehabilitation from a serious fall and surgery felt very intimidated after the IPM Coordinator demanded to know each date of the meeting she attended and said she could not have possibly experienced hostile treatment if she couldn't remember the dates. Even young people do not remember dates off hand, but Margaret Lynwood did attend four IPM related meetings (8/27 Decision , 9/4 Advisory, 9/5 TWIC,) and at least once more in

place of my absence. Much of these civility conflicts would be resolved by simply taping the meetings and uploading them onto the IPM webpage. Technology is now inexpensive, simple to use, and quick.

- 6) The public wants an IPM Ordinance adopted for Contra Costa County. Twice, it was voted down by the IPM Committee. We contend that erroneous information was provided that resulted in the Ordinance being discounted. Counsel mis-referenced the county statutes in the 2009 document. Other counties could not have adopted an Ordinance and with no opposition if their action was illegal as stated in the 2013 document. Other counties have advised PfSE that their IPM program could not have been nearly as successful without an IPM Ordinance that provided administrative consequences for staff who violated the Ordinance. We do not oppose further instruction from an Administrative Bulletin, but it should complement the overall mission as set in the Ordinance. We wish to see this issue looked at closely by a subcommittee and the two short documents that PfSE submitted reviewed. *Simply saying that the issue has been revisited multiple times does not make it resolved if there was never a thorough evaluation.*

My Name is Matt Valdin and I hold a Masters Degree in Environmental Sciences from UCSB.

- 7) Ms. Drlik states that bad actors as well as all pesticides are reported in the Annual Report and that the IPM Committee voted to include only Bad Actors identified on the PANNA database. This is true, but Ms Drlik and Mr Kent perhaps forgot to state when presenting the Annual Report, that major misidentification of Bad Actors resulted in under-reporting in the tune of thousands of pounds annually. Staff and Committee members who attended Dr Kegley's presentation acknowledged that the county should identify at least the acutely toxic pesticides with the "danger" label as Bad Actors from that time forward.

The full IPM Advisory Committee voted for staff to begin reporting all the "danger" labeled chemicals staff missed as Bad Actors in the past years. This is a major acknowledgement of characterization of pesticides being used and *should* have been mentioned in the Annual Report but was not. A change in identifying Bad Actor Pesticides will impact the accurate tracking of Bad Actor usage from year to year. In 2002 when the Board of Supervisors passed the IPM Policy, they also accepted the Public & Environmental Health Advisory Board (or PEHAB's) advice to phase out bad actors whenever possible, therefore the distinct tracking began at inception of the IPM policy.

Unfortunately, the county is still under-reporting additional Bad Actor groups of chemicals that are even more hazardous. Toxic Release Inventory listed reproductive and developmental toxins and salted products of Bad Actor Parents are also **not** tracked as Bad Actors. We trust that each of you on the Committee expect accuracy and would move quickly to resolve this issue.

- 8) PfSE requested in Sept, 2012 that the County address **a study concluding that Kestrels (and likely other birds of prey) are 20-30x more sensitive to Diphacinone**, a 1st generation rodenticide used in open space by our Ag Department. Studies done to approve the Diphacinone for the market were tested on fowls that were much more tolerant. A special permit has to be obtained to experiment with birds of prey like Kestrels so few toxicity studies are done with these protected birds of prey.

My name is Susan JunFish and I will finish our public comments. *(read underlined only)*

In January, 2013 Susan JunFish compiled LD50 and rodents/predator weight data from both the Cornell University and the UC Davis IPM Cooperative Extension programs. LD 50 literally means the lethal dose in which 50% of the animals die from being administered a substance. It is a measurement of acute toxicity of the worst kind, *death*. When you see LD50 numbers, you know you are dealing with an acute toxicity study. The purpose of this white paper was to calculate whether it was even possible for a Kestrel or other predator with a known LD50 to Diphacinone, to eat enough poisoned rodent such as a ground squirrel to reach even close to its LD50, or amount of poison killing a median number of its kind. A ground squirrel and rat had low tolerance relatively and a larger bird of prey would have to eat many to get secondary poisoning.

A Kestrel is the size of a large dove, and would likely only attack a mouse or a smaller prey. It turns out that mice have an unusually high LD 50, about 10 times more than rats or ground squirrels, which means that given the same weight, the mouse can accumulate in its body, 10x more diphacinone than the other rodents before dying. Multiplying the high end of tolerance of 300 mgs/kg for mice with the weight of a large mouse of .04 kg, provides an LD50 of 12 mg of diphacinone before it kills 50% of that mice population. That means perhaps half of the mice population with 12 mg of diphacinone in its body are still foraging and not dead yet, being susceptible to being caught by a Kestrel or other predator. The LD50 for a Kestrel to Diphacinone is 97 mg/kg and their weight can be as small as .08 kg. It takes as little as 7.8 mg to kill a kestrel, whereas a mouse can potentially be foraging about with 12 mg of diphacinone in its body, which could easily kill a Kestrel.

We appreciate that Commissioner Guise eventually commented on the paper a year later when no one else in the county would. Although the study was not refuted, the county still maintains that diphacinone is not causing secondary poisonings based upon the assumption that birds of prey and other wildlife are not being found dead near the treatment areas.

First, the assumption of ground squirrels and other rodents eating poisoned grains dying almost exclusively in their burrows is unlikely. *Second*, since diphacinone can take a week to kill, and longer for mice, it is very likely that these animals are in essence walking storage houses of diphacinone since 1st generation rodenticides kill slowly. The predators and pets in the meanwhile have easier access to these poisoned rodents that tend to become disoriented and lose their agility. *Third*, as shown by the UCLA bobcat study, acute or immediate death is not the only way to devastate wildlife. Low levels of rodenticides found in Bobcats were found over a course of a year to cause what appeared to be a slow death from a frequently occurring parasite that healthy bobcats with no rodenticides in their bodies did not incur. The common animal mite, also called Mange, was correlated to the death of nearly every bobcat that had even small levels of rodenticide in their body, including one with diphacinone alone. Bobcats with no rodenticides in their bodies were tolerating the mange. The authors concluded that low levels of rodenticides can still cause demise of wildlife by perhaps weakening their immune system and making them susceptible to illness and premature death. **I will leave 4 sets of handouts referencing this paper and photos of a bobcat from the study.**

This finding is not very surprising since public health researchers have known for years from laboratory experiments on rodents that cumulative stress on the body can lower the immune system. Stress, whether it be pesticides, radiation, viral infection, or even emotional stress, have all been shown to contribute to the demise of one's health and lead to chronic illness.

The colony collapse disorder crises in our country with honey bees dying has been so far linked to susceptible bees to a common viral parasite when the bees have been exposed to sub-lethal or minute levels of a class of pesticides called neonicotinoids. Again, the immune system crashes and cannot protect the organism from a naturally occurring virus that other bees deal with fine, but in the presence of this pesticide, the bee appears to perhaps become disoriented and does not return to the hive. It is not clear, but wildlife that is poisoned with rodenticides often act disoriented. I have seen on various occasions, rats staggering in the dark during an evening walk, coyotes and foxes acting disoriented and confused and not scampering away from approaching people. These are common signs of rodenticide poisoning or other severe illness.

There were only about 250 dead carcasses submitted to the CA Department of Fish and Games for autopsy that was determined to be from rodenticide poisonings from 1999-2011, a 12-year period. The average detection rate of finding rodenticides is 65% in any given carcass. CDFG found only 20 autopsies per year, indicating a very small number, probably fewer than 30 a year that were autopsied by this state agency from submittals coming from all over the state as shown in the database. In this CDFG data, the predominant rodenticide found is the 2nd generation rodenticides. However, a handful of autopsies found with only diphacinone, in a bald eagle, a coyote, a bobcat, and a wild boar. I have provided a copy of the print out.

8. The Ag Department conducted a pilot trial and concluded that trapping was too costly over 100 miles of critical infrastructure. His conclusion was \$5074 per linear mile for trapping as opposed to \$220 per linear mile with rodenticides, asserting that trapping is over 23X or 2,300% more expensive than using rodenticides. All the presentations we received from great speakers did not address the less known emerging problems of the 1st generation rodenticides like diphacinone. Commissioner Guise also concluded that that using perches, owl boxes and trapping are not feasible and we would beg to differ seeing other counties successfully using all these alternatives in a financially feasible manner.

If Santa Clara County has paid \$7,500 for every 300 ground squirrels caught and removed by a contractor, we believe that's a pretty good deal considering that our rodenticide program costs over \$120,000 and we don't have many bodies of squirrels to show for it. We decided to graph the diphacinone usage by the Dept of Ag from 2004 to 2013 and show the change of this rodenticide over the 9 years. This is just a draft graph, but what we see here is the usage of about the same amount of diphacinone mixed into about 27,000 lbs of grain from year to year. We ask this Committee to look more closely at the effectiveness of a program that risks the health of natural predators and one which cannot account for effectiveness since the amount of rodenticides used year to year has really not changed significantly. We believe that the county should be tracking each pest control program's pesticide usage and assessing the effectiveness by tracking pesticide usage, tracking the pest population, and tracking consequences of the activities as well as the positive feedback from benefactors. This is currently not being done for each program.

Thank you on behalf of the Parents for a Safer Environment Steering Committee for your attention to our concerns. We will provide you an electronic copy of our public comments and any references you wish to see.

Attachments:

- 1) Responses by the IPM Coordinator to the Triennial report's list of Unresolved Issues.
- 2) Meeting Minutes of November IPM Advisory Committee meeting: Vote was on whether or not to record in the Triennial Report that there were "unresolved issues." County Staff's (IPM Coordinator and the Chair's) wish to have unresolved issues recorded in the Triennial Report was voted down by the Committee.
- 3) Decision Making Tree of Public Works Dept's use of Garlon 3A along the Flood Control District for weed abatement. Submitted in subcommittee meeting 10/20/13.
- 4) Town of Moraga Fact Sheet on their IPM and Free Labor Programs Utilized for their Parks and Trash Clean Up programs.
- 5) Contra Costa County most recent Posting Policy for pesticide spraying on county grounds.