





## LEGEND

- ▲ Elementary Schools
- Hospitals
- Roads
- Buffer 1500 feet

### Map

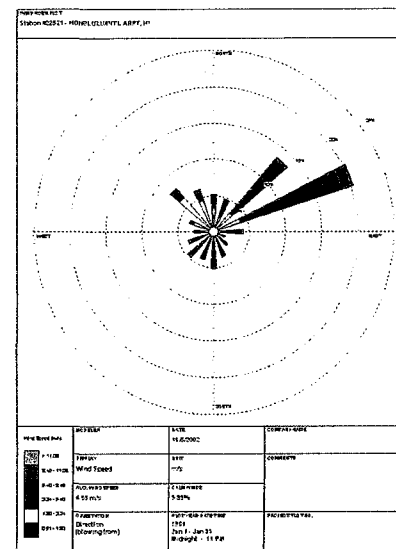
Datum: North American 1983

Projection: UTM Zone 4N

Data retrieved from Hawaii State GIS website.

Buffer created using ArcGIS tools.

Feb2008/cyz



# WAIMEA CANYON ELEMENTARY & INTERMEDIATE SCHOOLS

See also: Requirement or notification to HDA or other state use of the State which requires a minimum of one week prior to application.



## LEGEND

- ▲ Schools
- Roads
- Buffer 5miles
- Buffer 1500 feet

### Kauai (High res)

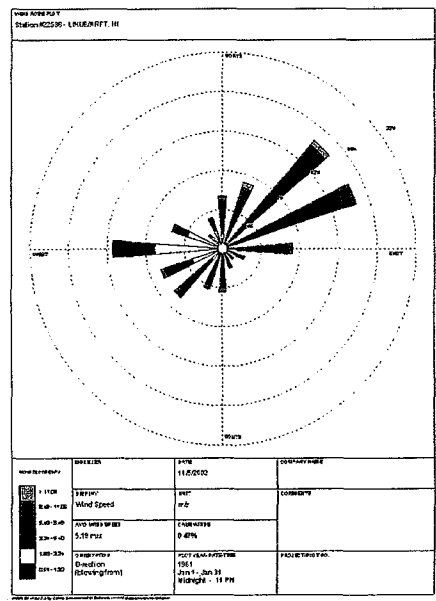
#### RGB

- Red: Band\_1
- Green: Band\_2
- Blue: Band\_3

### Map

Datum: North American 1983  
 Projection: UTM Zone 4N  
 Data retrieved from Hawaii State GIS website.  
 Buffer created using ArcGIS tools.

Feb2008/cyz





# LATE TESTIMONY

Strong Support for SB 3170

Committee on Education  
Sen. Sakamoto, Chair and Sen. Jill Tokuda  
Committee on Energy and Environment  
Sen. Menor and Sen. Hooser

Hearing Date: February 4, 2008 at 1:15  
Conference Room 225, State Capitol

The illnesses experienced by Waimea Canyon Middle School children on multiple occasions after herbicide spraying in fields adjacent to the school must be a wake-up call to our legislators. We must protect our children. They are not lab rats or mere expendables in the pursuit of corporate profits.

Please carefully consider this reasonable legislation. Mahalo.

Juan Wilson

Architect-Planner  
PO Box 949  
Hanapepe HI 96716  
(808) 335-0733



Monday, February 4, 2008 1:15 p.m.  
Conference Room 225

**Committee in Education & Committee on Energy and Environment**  
**RE: Senate Bill No. 3170 RELATING TO: Pesticide Spraying Safety Zone**

Chair Menor, Chair Sakamoto and Honored Committee Members:

My Name is Wendy Tannery. I am a teacher at Waimea Canyon Middle School located on the Westside of Kauai. I have been teaching on Kauai for 20 years, and have taught 6<sup>th</sup> -8<sup>th</sup> grade Physical Education at Waimea Canyon Middle School for the past 6 years.

Before I begin my testimony I would like to take this opportunity to thank Senator Hooser for introducing Senate Bill 3170.

I am here today as a representative of the students, faculty and staff of Waimea Canyon Middle School to testify in support of Bill 3170 This bill would create a pesticide free buffer zone around schools and mandate a 72 hour written notification of spraying .

As a teacher it is my responsibility to ensure that students are in a safe and healthy learning environment while they are in school. Sadly, in the last couple of years I have not been able to fulfill this obligation .

In the past two years our students, faculty and staff have experienced illness spikes which have coincided with spraying in nearby fields. Two significant incidences occurred in November, 2006 and again on January 25,2008 .

In November of 2006, after the neighboring fields had been sprayed, sixty-one students were sent to the health room complaining of headache, nausea, vomiting, diarrhea, and dizziness. Thirty seven were sent home. The spraying continued, as did the illness spikes throughout the year.

On January 25, 2008. while playing on the P.E. field , my 2nd period class and I noticed a strong odor. Many of the students complained that it smelled like "garden fertilizer." With in minutes of smelling it, my class and I, along with a nearby custodian, started to feel dizzy and ill. At that point I reported the incident to our school administration. Over the course of the day, approximately 60 students were sent to the health room. Twelve people, including a staff member, were sent to the emergency room and countless others suffered silently.

Later that day I found out that every student but one in my 2nd period class had become very ill and some had to go to the emergency room to be treated for nausea, burning eyes, difficulty breathing, vomiting, headache, diarrhea and extreme dizziness. You can imagine how I felt knowing that my students were exposed to something toxic while under my care. I felt ill for the next four days.

The following week parents, students, faculty and staff received a letter from the

principal informing us that the field adjacent to the campus would be sprayed with Lorsban, an insecticide. In this letter we were asked to evacuate the campus by 4:30 pm and remain away from the campus throughout the weekend. Many teachers stay after school and come back to do work in their classroom on weekends. A teacher's job is never done and we should be ensured a safe environment at all times.

In closing, I ask for your support of Senate Bill 3170 in hopes that, together, we can ensure a safe and pesticide free learning environment for all of Hawaii's children.

Thank you for this opportunity to present my testimony.

Monday, February 4, 2008 1:15 p.m.  
Conference Room 225

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In closing, I ask for your support of Senate Bill 3170 in hopes that, together, we can ensure a safe and pesticide free learning environment for all of Hawaii's children.

Thank you for this opportunity to present my testimony.

# LATE TESTIMONY

In regards to Senate Bill 3170

Due for presentation to Energy and Education Committees on Monday, Feb 4th  
1:15pm

Please support this bill.  
Please protect the health of our keikis!

Mahalo-  
Lorraine Newman

## LATE TESTIMONY

Committee on Education  
Sen. Sakamoto, Chair and Sen. Jill Tokuda  
Committee on Energy and Environment  
Sen. Menor and Sen. Hooser  
Hearing Date: February 4, 2008 at 1:15  
Conference Room 225, State Capitol

Relating to Pesticides: establishes a pesticide-free buffer zone around elementary schools and imposes a seventy-two hour written notice to all schools in immediate area of spraying requirement.

Dear Honorable committees;

### **I testify in strong support of this bill, SB 3170**

My name is Richard Conrad, I am a Ph.D. biochemist and a resident of Oahu. I testify that the scientific evidence of long-term harm to the immune system, brain and nervous system of humans, especially children, of even low levels of pesticides is overwhelming. The significant contribution of pesticide exposure to the 40% plus rate of cancer in our country is well established. There is no balance or other side to this story, period, except for junk science sponsored by industry. Anyone supporting a position that pesticides are nothing to worry about or control is either ignorant or highly unethical. There is every good reason to pass this bill, and no good reason to oppose it. Altruism should, especially in this case, be given priority over the self-serving interests of the chemical companies.

Sincerely, Richard H. Conrad, Ph.D.

Sent: Sun, 3 Feb 2008 9:40 pm  
Subject: Education committee

L A T E

February 4, 2008 1:00

Bill 3170  
Pesticides and school campuses

I am a Nationally Board Certified teacher, who has taught at Waimea Canyon school for two years. Last year I had two severe and one medium health events while working after 2:00 pm at WCMS. One afternoon I stayed after school until 3:00 and the next day I stayed until 8 pm because we were doing a community outreach event called Family Science. By 4:00 p.m. I had a severe head ache, urinary incontinence, and vomited. By 8:00 p.m. as we were cleaning up the hall, my head ache continued and I had unquenchable thirst. By the time I had driven home I had vomited two more times.

I visited KVMH Emergency room doctors to get as much information as possible and was lead to believe that a blood test would show my experience. I was ready to get tested at the time of my second milder reaction. By the time I obtained a referral from my doctor, took care of the after school chores of my family, and went and had my blood drawn, my body had cleared any chemical evidence. With further research I learned that the goal of the farmers is to find a pesticide that kills the insects or weeds and "if it is absorbed by humans" we are able to clear it quickly with no permanent damage. They have succeeded.

What is allowable collateral damage to the teachers and children at this school? It gives us headaches and makes us afraid, we throw-up, we wet our pants and we talk like we are dingy.... These are not the behaviors I want to have in front of a class of 8th graders!

I could have crashed my car as I was driving home. I know I did not do as well as I wished on a job interview on one of the days I was sick. Those are potentially permanent changes to my life.

The solutions that have been offered up along the way have just pushed the spraying into the times of day when the teachers are grading papers and doing the preparation for the next day, meeting with parents, and coaching our teams. It should be noted that many schools are built alongside county parks and Waimea Canyon is no exception. I am curious to know how the after school team players and coaches are doing now that the spraying has been pushed later into the day.

It just is not a good idea on a windy island to be spray applying pesticide to a field next to a school with no glass in the windows. If they must spray then--- seal the windows, build us a good gym, air condition the school, and do not complain about the resultant electric bill.

Sincerely,  
Linda G. Sciaroni  
Math/Science/ ESLL teacher  
National Board Certified Adolescent Young Adult Science  
Master in Gifted Education

February 3, 2008  
In strong support of SB 3170  
Committee on Education  
Sen. Sakamoto, Chair and Sen. Jill Tokuda  
Committee on Energy and Environment  
Sen. Menor and Sen. Hooser  
Hearing Date: February 4, 2008 at 1:15  
Conference Room 225, State Capitol

Relating to Pesticides: establishes a pesticide-free buffer zone around elementary schools and imposes a seventy-two hour written notice to all schools in immediate area of spraying requirement.

Dear Honorable committees;  
I testify in strong support of this bill, SB 3170

My name is Howard Hurst. I've been a teacher at Waimea Canyon Middle School on the island of Kauai for the past 13 years. When I first arrived at the school my classroom was in T-building. T-building is located on the western border of our campus adjacent agricultural lands. As our afternoon winds are predominately out of the western quadrant they blow off the ag lands over our campus almost daily.

On the outside of the building I have an aquaculture project that students built and maintain. Although from healthy stock, fish that we were raising began showing signs of genetic deformity, stunted size, and rarely grew to adulthood without dying. The adult breeders were kept in an 800 gallon tank and did not seem affected. The fry were all in 100 gallon tanks. All tanks had the same filtration system and water. These deformities did not occur during the period of time that the ag lands were planted with sugar cane. They only began to occur after the planting of GMO corn and application of organophosphate pesticides that is done weekly (sometimes twice weekly). A complaint was filed with the Dept. of Ag and the extent of their investigation was to take pictures of floating dead fish. The project was put on hiatus and the adult breeders moved to another location. Since this move multiple generations of fry have been raised to adulthood without one instance of genetic deformity or die off.

I am a former Ocean Lifeguard and was a member of the competition team. Today at 45 years old I still work out on a daily basis and swim a mile in 30 minutes. That is until ag lands upwind of my classroom were sprayed with organophosphate pesticides. Despite multiple trips to my personal physician which included a full exercise Stress Test in an effort to determine the cause of chest pain, headaches, nausea, a general malaise, muscle cramps, and loose stool; my physician was not able to make a diagnosis. These symptoms would come and go then disappear completely during summer break. I started to recognize a pattern of illness that coincided with the application of pesticides on the ag lands upwind of our school. I also was able to correlate illness "spike" notices from the health aide with winds from the western quadrant blowing off adjacent ag lands that had recently been sprayed. A 2nd misuse report to D.O.A. was followed by them doing a pesticide swab sampling after the half life of the applied pesticide and a storm that required a flood warning.

Currently numerous students and staff regularly express the same symptoms that I've described. As teachers began talking about their health this pattern became a reality that governmental agencies find it expedient to ignore. Last year and again this year the day after Syngenta applied pesticide to the field adjacent our campus numerous children and adults became ill and some required hospitalization. Having worked at the school for 13 years the specious explanation of Cleome gynandra as the cause is insulting. After last year's incident we were told to "trust Syngenta".

Our trust has been replaced with fear. I strongly support SB 3170 and hope that you do the same. It is a minor inconvenience to ag companies who repeatedly throughout the country and world have shown can not be left to regulate themselves. Alternative crops can be grown in the buffer areas that do not require the use of endocrine disrupting pesticides so land owners also have limited loss. SB 3170 is a solution. It will not cause hardship for land owners or GMO business interests and will protect children

from the detrimental effects countless studies have implicated pesticide exposure to cause. They include but are not limited to:

- Chronic exposure has been found to cause long-term neurological, developmental and reproductive disorders
- Chronic exposure causes disruption of the endocrine system -- the glands and the hormones children produce that guide the development, growth, reproduction, and behavior of human beings. Disruption of the endocrine system may result in reproductive disorders, birth defects, immune suppression, and other harmful effects.
- Exposed children demonstrated decreases in stamina, gross and fine eye-hand coordination, 30-minute memory.
- Increase in aggressive behaviors observed in pre-school children known to be exposed to pesticide.
- Autism linked to maternal exposure to pesticide

Your attention to this matter is greatly appreciated and your final decision will weigh heavily on the voters minds next election period.

Altruistically,

Howard Hurst



# LATE TESTIMONY

February 3, 2008  
In strong support of SB 3170  
Committee on Education  
Sen. Sakamoto, Chair and Sen. Jill Tokuda  
Committee on Energy and Environment  
Sen. Menor and Sen. Hooser  
Hearing Date: February 4, 2008 at 1:15  
Conference Room 225, State Capitol

Relating to Pesticides: establishes a pesticide-free buffer zone around elementary schools and imposes a seventy-two hour written notice to all schools in immediate area of spraying requirement.

Dear Honorable committees;  
I testify in strong support of this bill, SB 3170

In support of **SB 3170 amendments** should include "*all schools*" and the use of "*mechanized spray vehicles*" when applying pesticide.

Howard Hurst

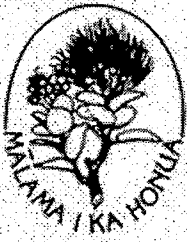
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- Autism linked to maternal exposure to pesticide

Your attention to this matter is greatly appreciated and your final decision will weigh heavily on the voters minds next election period.

Altruistically,

Howard Hurst



## Sierra Club Hawai'i Chapter

PO Box 2577, Honolulu, HI 96803  
808.537.9019 hawaii.chapter@sierraclub.org

### SENATE COMMITTEE ON ENERGY AND ENVIRONMENT SENATE COMMITTEE ON EDUCATION

February 4<sup>th</sup>, 2008, 1:15 P.M.

(Testimony is 1 page long)

### TESTIMONY IN SUPPORT OF SB 3170

Chairs Menor and Sakamoto and members of the committees:

The Sierra Club, Hawai'i Chapter, with 5500 dues paying members statewide, supports SB 3170, requiring a buffer zone around elementary schools where pesticides cannot be used. This common sense measure would help to reduce students' exposure to potentially harmful pesticides.

Studies have closely linked certain pesticides with breast cancer.<sup>1</sup> Others have demonstrated that herbicides cause significant increases in soft tissue sarcomas and lymphomas.<sup>2</sup> Pesticide laden runoff threatens our nearshore waters as well.<sup>3</sup> A National Academy of Sciences report commissioned by the EPA have revealed that the public (particularly children) is exposed to pesticides to a greater extent than previously assumed and that the consequence of so much exposure is insufficiently understood. In fact, only roughly seven percent of the 499 pesticides used today have been fully tested for safety by the EPA. Glyphosate -- the main ingredient in Roundup -- is not as benign as it has been billed. The chemical was once the highest reported cause of illness among landscape maintenance workers.<sup>4</sup>

Please forward SB 3170.

Thank you for the opportunity to testify.

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<sup>1</sup> See, e.g., Silent Spring Institute: J.G. Brody et al., "Mapping Out a Search for Environmental Causes of Breast Cancer," *Public Health Reports* 111 (1996), 495-507; New York Times, Oct. 24, 1993, A21; Honolulu Star Bulletin & Advertiser, June 7, 1992.

<sup>2</sup> Rachel's Hazardous Waste News, Sep.2, 1993; H. Becher et al., "Cancer Mortality in German Male Workers Exposed to Phenoxy Herbicides and Dioxin," *Cancer Causes and Control* 7 (1996), 312-321.

<sup>3</sup> Department of Health, *HAWAII'S ASSESSMENT OF NONPOINT SOURCE POLLUTION WATER QUALITY PROBLEMS* III-2 (Nov. 1990).

<sup>4</sup> Mother Jones, January 1997.

# LATE TESTIMONY

Dear Honorable Committees:

I testify in strong support of SB 3170 which establishes a Pesticide-free buffer zone around schools. As a middle school teacher on Kauai, I have experienced first-hand the detrimental effects of large agricultural spray operations taking place near our school. We have had students flooding the health room more than once with symptoms indicative of pesticide poisoning shortly after or during spray events. Recently, ten of our students were taken to the health room and then to the ER for further treatment and evaluation. Three teachers on our faculty have been told by their doctors that their ill health is indicative and the result of pesticide exposure. This is a very serious public health concern and I urge you to consider that the current labels and MSDS's for pesticides are not aligned with the physiology of children and adolescents. I urge the honorable committees to apply this bill to all schools in Hawaii, not just elementary, and to identify whether tractor spray machines classify as backpack or aerial application. I would also hope that these would fall under the 1/2 mile buffer. I understand that there are financial ramifications associated with any regulation on industry, yet I hope that you consider the short and long term health of our keiki and public employees as of paramount importance to the livelihood of the state of Hawaii. Thank you for your consideration of this very important matter.

Sincerely,  
Matthew Snowden

February 3, 2008

L A T E

**Committee on Education**

Sen. Sakamoto, Chair and Sen. Jill Tokuda

**Committee on Energy and Environment**

Sen. Menor and Sen. Hooser

*Hearing Date: February 4, 2008 at 1:15*

*Conference Room 225, State Capitol*

Relating to Pesticides: **SB 3170** establishes a pesticide-free buffer zone around elementary schools and imposes a seventy-two hour written notice to all schools in immediate area of spraying requirement.

Aloha Senators,

Greetings from Kaua'i. Mahalo for hearing SB 3170. I testify in strong support of this bill, SB 3170 which establishes a pesticide-free buffer zone around elementary schools and imposes a seventy-two hour written notice to all schools in immediate area of spraying requirement

My name is James Gerard Trujillo. I am a parent of a seven year old first grader. Her mother and I do all we can to provide a safe and healthy environment. We trust that when she goes to school each day that the school staff also try to provide a safe and healthy environment in the classroom and on the playgrounds.

Please vote in favor of SB3170 and help to protect Hawaii's schoolchildren from another industrial accident waiting to happen. SB3170 will add additional protection for my daughter and her peers to prevent exposure to hazzardous chemicals from accidental overspray during agricultural operations. Modern agricultural operations often involve industrial practices, many of which developing children should not be exposed to or impacted by nor suffer from.

Mahalo Sen Hooser for sponsoring SB3170. I hope that the members of the committees will support SB 3170 and pass this bill on to the House for further consideration. Mahalo again for your support of Hawaii's schoolchildren and SB3170.

Sincerely,

James G Trujillo  
PO BOX 33  
Kapa'a, HI  
96746

February 3, 2008

In strong support of SB 3170

Committee on Education

Sen. Sakamoto, Chair and Sen. Tokuda

Committee on Energy and Environment

Sen. Menor and Sen. Hooser

Hearing Date: February 4, 2008 at 1:15

Conference Room 225, State Capitol

From: Lorrin Pang MD, MPH  
as Private Citizen  
166 River Rd,  
Wailuku, HI 96793  
[Panghi@hawaii.rr.com](mailto:Panghi@hawaii.rr.com)  
166 Riuver

Relating to Pesticides: establishes a pesticide-free buffer zone around elementary schools and imposes a seventy-two hour written notice to all schools in immediate area of spraying requirement.

Dear Honorable committee memebers:

I testify in strong support of this bill, SB 3170. I investigated a previous incident at this school as a private citizen. I submitted my report to all those involved including DOH. If the most recent incident was handled in a similar manner then for the sake of precaution this Bill is a better alternative than status quo rules and investigaiton procedures.

In my nearly 30 years experience as a practicing physician, board certified in preventive medicine, I have followed and taught the following guidelines:

1. Beware of those with conflict of interest.
2. Beware of investigators who start off with their minds made up, they will only see what they are looking for.
3. Beware those not willing to put what they say in writing.
4. Make sure investigations are fair – looking for markers of harm as well as safety. Consider both sides of every observation.
5. Use the precautionary principle - weigh the risk of harm of status quo against the alternatives.
6. Beware of those who blindly follow rules – since many rules are changed based on findings of investigations.



For those who think this is merely academic find out what happened in 2002-4 in upcountry Maui when residents complained that their rashes were due to EPA mandated water additives.

The vast majority of outbreak investigations in the field never reach definitive conclusions regarding cause. Often there are many factors operating simultaneously. In the case of Waimea Canyon School this may include the wind, the humidity, the pesticides alone and in combination, duration and timing of exposure, exposing children, the presence of stinkweed, etc, etc. And so we can never be absolutely certain about how we should intervene. This uncertainty will polarize a community with some saying that spraying should continue status quo until we are certain of harm, while the other extreme position will demand cessation until we are certain of safety. There are no absolutes but varying degrees of probability or improbability. I am rather shocked by those who claim certainty, either safety or harm, especially when it is during the early stages of an incident before an investigation is completed, presented and discussed. Time and time again we have seen how conflict of interest has trumped sound scientific principles of an investigation. I was asked to review one of the incidents at Waimea Canyon School. For reasons stated in the report I believe the investigation was not very thorough with some biased interpretations. Perhaps the reason for this was to support the forgone and publicly announced conclusion of safety and "stinkweed" as the cause.

I still think that maybe the pesticides did (and continue to) cause the symptoms. I made specific recommendations following the first outbreak. I signed my name as a physician. I sent copies to those involved and got no feedback – I assumed they concurred. I am very curious to see what was done during the second, recent incident. If my recommendations were not followed then I would like to now know why, but more importantly ...if that is the way we continue to investigate then I have no option but to wholeheartedly support the alternative outlined in this Bill. I still recommend that the school be monitored since the buffer zone may not be far enough under certain climate conditions.

Thank you for this chance to testify.

Lorrin Pang, MD, MPH  
Retired Army Medical Corp  
WHO Consultant  
Americas Best Doctors (2006-8)

As reference, my report follows:

23 March 2007

FROM: Dr Lorrin Pang, MD, MPH  
(as private citizen)

On November 14 and for the next few days Waimea Canyon School teachers and children (60 reporting to school health aide) complained of symptoms thought to be related to Syngenta's pesticide spraying of the adjacent fields. Various local agencies were contacted/responded to evaluate the situation and a final report was submitted by the State Department of Agriculture (Dept of Ag) a few months later. I visited the community the first week of December 2006 and again mid March 2007 to read and comment on the Dept of Ag report. Since my first visit there have been additional episodes of pesticide spraying which worried the school staff.

The report submitted by the Dept of Ag with input from Dept of Health and Syngenta describes spraying schedules, substances used, wind conditions and testimony of those ill and exposed. All who have read the report now have the advantage of hindsight but at the time of the investigation some concerned parents and teachers did not know when and what pesticides had been sprayed. This report assumes everyone has access to the report and makes comments in hindsight.

In general one should practice precaution in this situation. The principle of precaution takes the approach that possible causes of the illness should be valid reasons for preventive actions or at least further investigation. It may be that there will be more than one possible cause and so one is obliged to pursue multiple routes of control. One does not have the luxury of pursuing only the most likely cause. One does not have to prove causality before taking action. Conversely, along the lines of precaution, one must prove non causality to justify not taking action.

The investigation of an outbreak starts with symptoms and it is good to get both passive reports (patients who come forward to report their illness) as well as active surveillance (conduct interviews of those who are not reporting passively). Passively, one can count the cases easily enough but one needs a sample of a group (say an entire class room) to determine that for every passive case there were X cases found by active detection. In the school setting this is important since the passive cases may feel that their complaints are "legitimate" only if associate with a "smell". In reality it may be that many cases would have been found actively that do not resemble the cases detected passively. I did not see attempts for any active surveillance.

Investigators seemed too accepting that symptoms were caused by what was causing the smell – in this case stinkweed (cleome gynandra). While this is possible a couple other explanations are as follows:

- 1) The symptoms were caused by the pesticides which were blown on the wind which also carried the smell of the stinkweed. It is also reported that on some days the winds are variable with quick directional changes.

- 2) The symptoms were caused by pesticides not blown on the winds of 14 November but sprayed and deposited previously on the 9 November (school was not in session 10-12 and on the 13<sup>th</sup> some reported symptoms but it is unclear how receptive to reporting the staff was). So it may be that the smell just happened to be on the day that symptoms appeared.
- 3) According to case reports not all illnesses were associated with the smell or the same smell. Again, active surveillance may have found illnesses not associated with any smell.

While it is interesting that the stinkweed was soon ploughed under, this was only one possible cause. A more thorough evaluation, including environmental sampling for pesticides, is described below.

The reported spraying schedule shows a lot of pesticide spraying (Nov 3, 6, 9, and 14) before the date (14 Nov) when passive surveillance detected symptoms. This spraying used a variety of pesticides. While the symptoms of 14 Nov are vague and can be a result of many different types of pesticides, laboratory tests of the agents sprayed on that day (glyphosate) shows that it did not travel beyond the fields. The most worrisome episode was the 9 November spraying of the combination of alachlor, atrazine, and mesotrione. On the 10, 11, and 12 school was not in session. On the 13<sup>th</sup> school records will have to be examined to see if there were reported illnesses. I believe there is a teacher's report of illness in students (though maybe none reported to the school health aide) on this date. Samples on 14 Nov were taken for compounds sprayed on the 9<sup>th</sup> from the school windows (4 samples) and from two distant "control" areas. No positive or negative controls were done. Mesotrione tests were not performed. No alachlor was found in any sample though there was a high ratio of alachlor to atrazine used in the spray mix. Atrazine levels were found in all six samples but were higher in the school samples.

The Dept of Ag report concludes that the laboratory tests do NOT support that the school was affected by Syngenta spraying, arguing that a) no alachlor was found, b) atrazine was found in all samples including the controls c) atrazine was found at low levels and d) that since no negative controls were used the atrazine levels could have represented contamination of the samples. I have a different interpretation and argue that it is possible that the spraying did (and continues to) affect the school:

- 1) Compared to control samples atrazine was found in higher (small number of samples preclude statistical interpretation) levels at the school. The "control" samples may have been close enough, depending on wind conditions, to have been affected by the spraying.
- 2) Once deposited alachlor vaporizes at a much higher rate than atrazine, especially under humid conditions. This may explain why after 5 days no alachlor but only atrazine was found.
- 3) The "low levels" of atrazine (and no alachlor) found 5 days after spraying on window surfaces may not reflect possible higher levels of both agents on the day of spraying.

4) If the Dept of Ag argues that lacking a negative control brings into question the uniformly positive findings of atrazine, then the lack of a positive control brings into question the negative findings of alachlor (i.e. the sampling methods/testing for alachlor may not have been valid).

Recommendations:

- Consider moving the actively planted fields farther away from the school.
- Enforce stricter use of sprays when winds are variable or absent.
- When there are reports of pesticides drifting into school areas conduct active surveillance for symptoms on a few classes nearest the fields (separate interviews, though time consuming, will help to minimize hysteria). In hindsight this occurs more frequently than just the episode on the 14<sup>th</sup> Nov.
- When complaints are made have environmental samples taken the day of spraying for the compounds sprayed. This may entail training DOE staff for sample collection. Obtain more samples (at least 10) from a variety of school locations.
- Besides the use of laboratory positive and negative controls, arrange for field samples to be taken from known negative and positive areas to serve as field controls. Positive field controls may be taken from the field that are sprayed. Negative controls can come from a distant area upwind known to be negative for pesticides tested. All samples should be run by the laboratory blinded to where samples were taken. This will entail coding the samples and someone other than Syngenta or Dept of Ag holding the code until laboratory results are available.

# LATE TESTIMONY

January 31, 2008

Subject: In strong support of SB 3170

Committee on Education

Sen. Sakamoto, Chair and Sen. Jill Tokuda Committee on Energy and  
Environment Sen. Menor and Sen. Hooser

Hearing Date: February 4, 2008 at 1:15

Conference Room 225, State Capitol

Relating to Pesticides: establishes a pesticide-free buffer zone around elementary schools and imposes a seventy-two hour written notice to all schools in immediate area of spraying requirement.

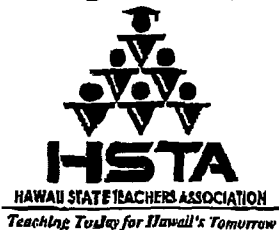
Dear Honorable committees; While I actually prefer a complete and total ban of all agricultural chemical and pesticide use, I testify in strong support of this bill, SB 3170, which is certainly a prudent first step.

Mahalo for your swift positive action in this matter.

Mahalo for a positive confirmation of this email.

My name is jonathan jay

My address is       5424 Kuapapa Street  
Kapa`a Kaua`i, HI 97646-2236



LATE

1200 Ala Kapuna Street • Honolulu, Hawaii 96819  
Tel: (808) 833-2711 • Fax: (808) 839-7106 • Web: www.hsta.org

**Roger K. Takabayashi**  
President

**Wil Okabe**  
Vice President

**Karolyn Mossman**  
Secretary-Treasurer

**Mike McCartney**  
Executive Director

**TESTIMONY BEFORE THE SENATE COMMITTEES ON  
EDUCATION AND ENERGY & ENVIRONMENT**

**RE: SB 3170 – RELATING TO PESTICIDES.**

**February 4, 2008**

**ROGER TAKABAYASHI, PRESIDENT  
HAWAII STATE TEACHERS ASSOCIATION**

**Chairs Sakamoto, Menor and Members of the Committees:**

**The Hawaii State Teachers Association strongly supports SB 3170.**

**The purpose of this bill is protect children from the dangers associated with chemical exposure by creating a pesticide-free buffer zone around elementary schools and requiring that all schools be given notice of pesticide use in the immediate area.**

**On November 14, 2006, Waimea Canyon Elementary School experienced a horrific scare, as 61 students reported to the health room with symptoms of nausea, dizziness, headaches and eye irritation. The mass illnesses were reportedly caused by an odor from a noxious weed. However, many began suspecting it was caused by pesticide spraying in nearby fields farmed by the Syngenta Seed Company.**

**Despite these illnesses, our state agencies—the Department of Agriculture and Department of Health—failed to ascertain the exact causes. Senator Gary Hooser had asked Syngenta to stop spraying the pesticides near the school. Despite Senator Hooser's appeal, Syngenta continued to spray "lawfully" approved pesticides in their fields.**

**Then on January 23, 2008, several teachers and staff report watery eyes and skin irritation while a field near the school is being sprayed. Again, on January 25, about 60 children and several teachers experienced symptoms of nausea, dizziness and headaches. About 10 students and one teacher had to go to the hospital.**

**It was learned that one of the pesticides used was a product called Lorsban\* 500 EC Insecticide. According to the label, "*Symptoms of excessive exposure to chlorpyrifos may include pallor, nausea, vomiting, diarrhea, abdominal cramps, headache, dizziness, eye***



*burn, blurred vision, constriction or dilation of the eye pupils, tears, salivation, sweating, and confusion."*

On January 29<sup>th</sup>, HSTA UniServ Director Tom Perry, DOE's Complex Area Superintendent Bill Arakaki and Representative Roland Sagum met with the agricultural company that was responsible for the pesticide spraying. These concerned leaders had appealed to Syngenta to cease and avoid pesticide spraying until all precautions could be taken to ensure the safety of the school community. The company refused, and instead decided to schedule spraying on Friday, February 1<sup>st</sup>, at 5:00 p.m.

Outraged by Syngenta's decision, it took dozens of courageous teachers, administrators and parents to stand up in public protest, with signs calling for the company to stop spraying pesticides. It took the Hawaii State Teachers Association (HSTA) to file a motion in district court for a restraining order to stop the pesticide spraying. As important as these actions were, they are only temporary. It is now up to you as lawmakers to do the right thing and protect our keiki. Otherwise, the spraying of pesticides near our schools will continue to be "lawful."

We thank Senator Gary Hooser for introducing this bill, and strongly urge the committee to pass it.

Thank you for the opportunity to testify.

TESTIMONY ON SB 3170  
SENATE COMMITTEES ON  
ENERGY AND ENVIRONMENT, and EDUCATION

CHAIRPERSONS: Senators Menor and Sakamoto  
BILL NO: SB 3170  
TITLE: Relating to Pesticides Applied Near Schools

L A T E

HEARING DATE & TIME: Monday, February 4, 2008, 1:15 P.M.  
HEARING LOCATION: Conference Room 225  
NUMBER OF COPIES REQUIRED: 35

Chairpersons Menor and Sakamoto and members of the committee:

My name is Jerry Nishek, a Landscape Contractor and Nurseryperson on Kauai. I also have a certification for restricted Pesticides use.

I am testifying in opposition to this bill.

Besides all the misleading statements in the preamble of this bill I strongly object to the arbitrary banning of the application of pesticides when scientifically tested and produced product labels do the same thing if not more.

This bill is brought on by paranoia of teachers who have no background in the use of pesticides. I don't doubt if these same teachers have a can of Raid in their desk drawer to kill cockroaches and spiders in their classroom, or a can of mosquito repellent to chase away mosquitoes in times of wet weather. These are also pesticides and would be banned by this bill. There is no scientific evidence that children have been poisoned by pesticide applicators in the state to my knowledge. The incidence on Kauai of children being poisoned at Waimea Canyon School was proven unfounded by the Department of Agriculture. Again a case of a paranoid teacher.

Restricting the application of pesticides without consideration for the purpose of their use does not lend itself to the other side of the issue, which is, the purpose of the spraying in the first place.

Pesticide definitions currently include many chemical compounds used as disinfectants and for the elimination of fungus, bacteria, and rodents. Not just insects.

Pesticide labels are very specific about the proper application and handling of the materials within the container and the label is the law. It is a violation of state and federal law to not follow the label instructions. Any additional law, such as that which is included in this bill, is just unnecessary redundancy.

This bill **would prohibit** pesticides applications within 1500 ft of a school, aerial application over a school, aerial application within ½ mile of a school, and **reporting of all pesticide applications** within a five-mile radius **one week prior to application.**

How is a farmer to know one week before that he will need to spray his crop next week for grasshoppers? By the time he fills out the paper work required in this bill, his crop, located five miles from the school, will be gone.

What if the elementary school that your child attends has a Red Ant infestation coming from the pasture next door and from ant nests within the schoolyard? Doesn't this bill prevent the application of pesticides in these ant-infested areas? Maybe give each child 2 blocks of wood so they can kill ants during recess.

The reporting requirements under this bill would take at least two weeks to fill out and get posted prior to the application. By that time, the ants would be inside the schoolroom with the kids having lunch.

This bill, as it is written, is nothing but a sneaky way to ban the use of any and all pesticides and serves no useful purpose, but to take away from the public, pesticide benefits for controlling human disease, infections, and/or poisonous insects.

Thank you for the opportunity to offer testimony.

Jerry Nishek  
3-1550 Kaunualii Highway  
Lihue, HI 96766

TESTIMONY ON SB 3170  
SENATE COMMITTEES ON  
ENERGY AND ENVIRONMENT, and EDUCATION

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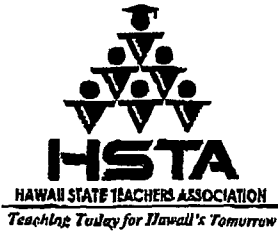
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L A T E

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Thank you for the opportunity to testify.

L A T E

Committee on Education  
Sen. Sakamoto, Chair and Sen. Jill Tokuda  
Committee on Energy and Environment  
Sen. Menor and Sen. Hooser

Hearing Date: February 4, 2008 at 1:15  
Conference Room 225, State Capitol

Relating to Pesticides: establishes a pesticide-free buffer zone around elementary schools and imposes a seventy-two hour written notice to all schools in immediate area of spraying requirement.

Dear Honorable committees;

**I testify in strong support of this bill, SB 3170**

My name is Bobby McClintock, and I represent people with respiratory & environmental disabilities, especially those disabled with MCS (Multiple Chemical Sensitivities).

The numbers of keikis and teachers being sent to hospitals because of pesticide exposures have been growing exponentially on all islands. Some of the MCS patient population is being driven from their homes because of spraying either by neighbors, agri-business, or even our own City & County. Current research of these toxics has shown bioaccumulation. ALL of us are being affected by them. Our immune systems are delicate. Once compromised, some will never recover, ask anyone with MCS. Because there is no test to tell us how our individual immune systems are functioning, the only way to keep them safe is to avoid all toxics.

We are also finding these chemicals, not only in our bodies but as far away as the arctic. Wind barriers created by tree plantings to mitigate chemical trespass, we now know, are ineffective. If they can reach the arctic you are guaranteed they will drift a few miles away, especially with our trade winds.

When checking with the FDA or EPA we are finding the companies, themselves, are responsible for reporting the toxicity of their own products. Upon further research we find many of these products grandfathered in and have never been checked by the government. In fact, a series of reports by the Government Accountability Office scheduled to be released this Tuesday February 5, 2008, at a hearing of the House Energy and Commerce Committee will show the Food and Drug Administration is so understaffed that, at its current pace, the agency would need 27 years to inspect every foreign medical device plant that exports to the United States, 13 years to check every foreign drug plant and 1,900 years to examine

every foreign food plant. That is just for imports. US companies are given even more latitude. And, the EPA is just as overworked.

Hawaii cannot fall behind in protecting its citizens. Many other states already have protections in place and, in particular, are limiting any kind of spraying around schools, daycare centers and elderly housing with much larger buffer zones.

It seems Hawaii has gone the way of the mainland: do anything to attract big business to our communities at the expense of the individual citizen. BUT, let us not forget: the individual citizen put you there to protect *us*, not big business. We are asking you to just do your job and protect us all.

Thank you for your time,

Bobby McClintock, Founder RED AHI (Respiratory & Environmental Disabilities Assoc of HI)

Good morning!

Here is a letter in regards to bill SB3170. Thank you!

L A T E

This email is concerning the spray of the crops that is affecting the school's children and educators. How many sick people does it take to realize that there is something amiss, here? Education is one of our most precious resources. If the teachers and children are getting sick, then we are essentially taking away those opportunities for learning. (In addition, knowing that the sprays are making many sick is also a learning situation--can we take advantage of it and actually learn something? That would be ideal.)

As a mother who feeds my family with only organic and "clean," unsprayed produce, I ask that the spraying be seriously reconsidered. I do understand the farmer's needs for keeping their crops whole and untouched by insects. Yet is putting toxic chemicals into our foods and bodies the answer? Please look at this issue more carefully and consider the health of our people.

Mahalo!

Aloha,

Ruth Suli Urman

**Testimony**  
**Monday, February 4, 2008**  
**1:15 p.m. Room: 225**

**RE: Senate Bill No. 3170 RELATING TO: Pesticide Spraying Safety Zone**

My name is Suzanne Schott. I am a teacher at Waimea Canyon Middle School on the Westside of Kaua'i in Waimea. I have been a teacher at Waimea Canyon School since 1991 and have taught grades 4 through 8 there. I am submitting this testimony in support of Senate Bill 3170 relating to the spraying of pesticides near schools. I would like to take this opportunity to thank Senator Hooser for introducing this important legislation.

The purpose of this bill is to establish a pesticide-free buffer zone around schools and post a 72 hour written notification of spraying.

I am here today on behalf of the children, teachers and staff at our school. My job as a teacher is to teach, which is a profession I am not only proud of, but truly enjoy. As a teacher it is my duty to see that all children remain safe and well cared for while under my supervision. It is a huge responsibility and one that I take seriously. If passed, this bill would help to ensure a healthy learning environment for our students and workplace for our teachers, free of pesticides.

I have been at Waimea Canyon School for many years, long before the spraying of pesticides near our school. It has only been in the past few years that there have been spikes in illnesses of the students and staff that coincided with pesticide spraying.

In November of 2006, students and staff reported a foul chemical smell that sent sixty-one students to the health room. Thirty-four were sent home complaining of nausea, stomach cramping, vomiting, headache, dizziness and diarrhea. The nearby field adjacent to the school had just been sprayed.

The most recent incident occurred on January 25, 2008 where again, a foul chemical smell was present and approximately 60 students saw the health aide at the school for symptoms ranging from burning eyes, difficulty breathing, nausea, vomiting, headache and dizziness. Six of these students were sent to the hospital via ambulance and six others arrived throughout the morning in the ER. While most received symptomatic treatments and were sent home, one was put on an IV and received anti-vomiting medicine and others received albuterol on a nebulizer to open their airways. I, too, was treated for vomiting and headache and witnessed these events firsthand.

These spikes in illnesses at Waimea Canyon Middle School have had a direct correlation with pesticide spraying in the nearby field.

Please take into consideration the well being of our children. Logic dictates that spraying pesticides near any school is not in the best interest of our students. I support Bill 3170 and hope that my testimony here will encourage you to help keep our children and teachers safe.

.

Thank you for the opportunity to submit my testimony.

**SB 3170  
RELATING TO PESTICIDES**

**L A T E**

**SEAN M. O'KEEFE  
DIRECTOR – ENVIRONMENTAL AFFAIRS  
ALEXANDER & BALDWIN, INC.**

Chair Menor, Chair Sakamoto, and Members of the Senate Committees on  
Energy & Environment and Education:

I am Sean O'Keefe, testifying on behalf of Alexander & Baldwin, Inc. (A&B) and  
its agricultural operating units, Hawaiian Commercial and Sugar Company (HC&S) and  
Kauai Coffee Company, Inc. (KCOF) on SB 3170 Relating to Pesticides.

A&B respectfully opposes this bill, which would prohibit commercial application of  
pesticides within 1,500 feet of any elementary school property, prohibit aerial  
applications of pesticides within one half mile of any elementary school property, and  
require notification to the Department of Agriculture a minimum of one week in advance  
of any pesticide application within five miles of any school or educational institution  
property. This bill is unnecessary and would impose an unreasonable burden upon  
agricultural operations throughout the state, as well as on the Department of Agriculture.

HC&S, KCOF, and other commercial agricultural operations throughout the state  
rely upon the judicious use of pesticides to control infestations of weeds, insects, rats,  
and other pests that could otherwise cause severe crop losses and threaten the very  
viability of agriculture. In addition, both HC&S and KCOF augment the efforts of the  
Department of Health Vector Control Branch to control mosquito populations on and  
around their farms through the application of mosquito larvicides and, where necessary,

through localized fogging for adult mosquitoes. The use of pesticides is heavily regulated by the Hawaii Department of Agriculture and the U.S. Environmental Protection Agency, including through pesticide label requirements for the control of drift into non-target areas. In addition to adhering to these regulatory requirements, A&B's farming operations self-impose additional restrictions, where appropriate, to further reduce the potential for off-site impacts from pesticide applications. Such measures may include restrictions on pesticide application times (for example, to ensure that pesticides are not applied at times when nearby schools or churches are in session) and the use of buffer zones around sensitive areas.

This bill would impose far greater restrictions on pesticide applications than are necessary in order to control drift into non-target areas. At HC&S, for example, weed control operations would be prohibited on over 200 acres of the plantation. In addition, aerial applications of sugarcane ripener, which are necessary to maximize the sugar content of the plant at harvest, would be prohibited on over 600 acres, resulting in markedly decreased sugar yields. HC&S would also be prohibited from using mosquito control agents on nearly ten percent of its fields irrigated with sugar mill wash water, hampering an effective mosquito control program which has helped to prevent the introduction of West Nile virus in Hawaii.

Perhaps the most onerous burden imposed by this bill, however, is the requirement to notify the Department of Agriculture in advance of any pesticide application within five miles of an educational institution. Due the central location of the HC&S plantation, virtually any pesticide application anywhere on the 37,000-acre farm would require this notification, imposing an unreasonable reporting burden upon the

plantation as well as on the Department of Agriculture. Based on the number and locations of schools on the island, the vast majority of agricultural operations on Maui would face similar reporting burdens. It is unclear what benefit, if any, would be provided by daily notifications of pesticide applications all over the island. Moreover, the requirement that these notifications be made one week in advance of pesticide applications will severely hamper farmers' flexibility to respond to pest control requirements in their fields as they arise.

Based on the aforementioned, we respectfully request that this bill be held in Committee.

Thank you for the opportunity to testify.



## HAWAII AGRICULTURE RESEARCH CENTER

MAUI SUBSTATION • P.O. BOX 88 • PUUNENE, HAWAII 96784

TELEPHONE: (808) 877-6916

February 4, 2008

TESTIMONY BEFORE THE SENATE COMMITTEES ON  
ENERGY AND ENVIRONMENT  
AND  
EDUCATION

### SENATE BILL 3170

### RELATING TO PESTICIDES

Chairs Menor and Sakamoto, Vice Chairs Hooser and Tokuda, and Members of the Committees:

My name is Janet Ashman and I am testifying on behalf of the Hawaii Agriculture Research Center, our scientists, farming members and clients.

#### **We oppose Senate Bill 3170 for the following reasons:**

#### The bill would severely hamper the ability of farmers and others to control pest infestations.

Farmers throughout the state rely upon the judicious use of pesticides to control infestations of weeds, insects, rats, and other pests. This bill would limit the ability of farmers to protect their crops by restricting areas of their farms where pesticides can be applied, even when conditions are favorable for making such applications with little potential for off-site drift. In some cases, the inability to control pests on even limited areas of a farm can have adverse consequences for the rest of the farm, as pests migrate from the unprotected areas. Farmers who are not able to adequately protect their fields from pests are likely to suffer serious crop losses that could threaten the viability of agriculture.

#### EPA and the State already strictly regulate the use of pesticides.

The use of pesticides is strictly controlled by the U.S. Environmental Protection Agency and the Hawaii Department of Agriculture, both through detailed use requirements specified on the pesticide label and through state and federal regulations. Label requirements for the safe use of pesticides are developed through a thorough registration process that includes careful consideration of potential environmental and human health impacts that could result from use, or misuse, of the chemical.

Among other things, pesticide labels typically provide guidance for preventing drift into off-site areas. Such guidance may include specific limitations on wind conditions, requirements for appropriate buffer zones, and other measures deemed necessary during the review process to ensure that the pesticide will be applied safely.

Where deviation from label requirements results in a documented occurrence of pesticide drift, regulatory agencies have authority to take appropriate enforcement action. The additional, across-the-board, limitations on the use of pesticides proposed in this bill, including buffer zones of over ¼-mile for ground applications and ½-mile for aerial applications, go far beyond those developed through the comprehensive scientific review and analysis which all pesticides must undergo, are arbitrary and unnecessary, and will limit farmers' ability to effectively protect their crops.

#### Department of Agriculture and Hawaii Farm Bureau drift control training

Commercial pesticide applicators are required to undergo comprehensive and continuing training and certification on the safe use of pesticides. Additionally, the Department of Agriculture, in conjunction with the Hawaii Farm Bureau, has initiated a new program that will specifically train pesticide applicators in preventing drift. These classes will begin in March on Kauai and will be held on each island.

#### Notification within a five mile radius

The notification requirement required in this bill serves no purpose and on Maui for example, will cover virtually the entire island. The regulatory agencies, the community, parents, and teachers will be inundated with information that will not be helpful to them in protecting children.

Thank you for the opportunity to testify on this matter of great importance to agriculture.

HARC respectfully requests that you hold SB 3170.

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## LATE TESTIMONY

To: Senator Norman Sakamoto, Chair of Committee on Education and Senator Ron Menor, Chair of Committee on Energy and Environment;

**I am writing to you in regards to SB3170. I agree that the problem of herbicide application needs to be addressed. The bill as it is written now will create a lot more problems than it solves. It appears as if this bill is an emotional reaction to what has happened in the past near schools. We complete hundreds of pesticide applications a day without incident. Again I agree that something needs to be done, but I would implore you to find a better resolution to the problem than what you are currently proposing. Your current proposal is such a drastic measure and it will only create more problems for all businesses and residents in Hawaii. The liability you will create by passing this bill will by far supersede the desired solution.**

**Again I agree that we need to come to a resolution and that the problem needs to be addressed, but I ask that we apply some emotional intelligence to the situation to ensure the outcome is desirable. Thank you for your time.**

Joshua Joyce  
Region Manager  
The Hawaii Region #2957  
808-479-1352

# LATE TESTIMONY

February 4, 2008

In strong support of SB 3170  
Committee on Education

Sen. Sakamoto, Chair and Sen. Jill Tokuda  
Committee on Energy and Environment  
Sen. Menor and Sen. Hooser

Hearing Date: February 4, 2008 at 1:15  
Conference Room 225, State Capitol

Relating to Pesticides: establishes a pesticide-free buffer zone around elementary schools and imposes a seventy-two hour written notice to all schools in immediate area of spraying requirement.

Dear Honorable committees;

I testify in strong support of this bill, SB 3170. My name is Diane Lobre, I live Kaimuki on Oahu. I am a concerned citizen, who believes we should protect the health of our children and those that work in school environments.

I understand that excessive amounts of multiple pesticide and herbicide sprays are being partnered with the industrial seed crop production by companies such as DuPont/Pioneer Seed, Syngenta and Monsanto. Many of the crops growing are resistant to these chemicals, allowing the fields to be spray liberally. Other fields are conducting tests as to how much these plants can withstand heavy spraying of these chemicals. These test sites are next to homes, schools, and waterways, with no monitoring of the adverse health effects, damage to soil or presence in ground water. These sprays are named Tilt, Warrior, Touchdown, Atrazine, Lasso Liberty, Prowl, Asana, Lorsban, Carbaryl, Accent, Banvel, Buctril, Dimethoate, Quadris, Round Up and Malathion.

How can we say no harm is found, when no agency is monitoring for presence? Even when we have sickened teachers and students, their calls for help have been ignored. This is not just one time, it has happened again and again.

To blame these health reactions on 'stink weed' is insane. The smell of stinkweed is only an indicator of wind direction. These poisonous sprays are being applied too close to schools and neighborhoods, and too close to the coastline.

Labels warn not to use them where they may contaminate groundwater, or in windy conditions. There are not many places in our Islands where you are not in contact with the water table, and there are even fewer days when our trade winds are not present.

These strong poisons are especially hazardous to a young person's developing body and mind. Exposure to these chemicals at a young age weakens the immune system and increases the risk of developing allergens. So many children are allergic to wheat, milk and peanuts. These crops are heavily contaminated with pesticides and herbicides. The suppression of the immune system create the bodies allergic response to the ingestion of the foods.

Pesticide residue from ingesting fruits and vegetables can be detected by swabbing the inside of a child's cheek. Contact with agricultural chemicals in children can impact developmental retardation and compromises their reproductive systems. What are we thinking by allowing our keiki to be in direct contact of these chemicals as they are sprayed into the air that they breathe?

Ingesting chemicals is directly linked to lower brain function and lower intellect. Who is speaking out for the field workers who are exposed to unsafe workplaces? Many are slaves to the conflict of fear. They participate because they cannot afford to lose their jobs.

Let us begin by protecting the children. How ironic that we send them to school to gain knowledge, yet we are allowing these chemical companies, with a clear conflict of interest (corporate profits) to use us as guinea pigs and impede the growth and development of our most precious resource. These children are our future leaders. Protect the health and well-being of all our citizens.

We are counting on you, our elected officials, to represent us and to protect us from things that we have the ability to control.

With sincere gratitude,

Diane Lobre