LATE TESTIMONY

William P. Kenoi
Mayor

William T. Takaba
Managing Director

County of Hawaii
CIVIL DEFENSE AGENCY
920 Ululani Street • Hilo, Hawai'i 96720-3958
(808) 935-0031 • Fax (808) 935-6460

Quince Mento
Administrator

John T. Drummond
Administrative Officer

William Hanson
Administrative Officer

February 6, 2009

The Honorable Ryan I. Yamane, Chair
And Committee Members of the House Health Committee
The Honorable Faye Hanohano, Chair
And Committee Members of the House Public Safety Committee
Hawai`i State Capitol
415 South Beretania Street
Honolulu, Hawai`i 96813

Re: House Bill 312, RELATING TO HAZARDOUS SUBSTANCES

Aloha, Chair Yamane, Chair Hanohano and Committee Members:

The Hawai'i County Civil Defense Agency supports in principal House Bill 312 - RELATING TO HAZARDOUS SUBSTANCES which "directs the Department of Defense to develop and implement a program to ensure that an adequate number of monitors to detect sulfur dioxide are strategically placed throughout areas of the state where high incidences of vog, sulfur dioxide, or both occur."

Hawai'i County invites State Department of Defense support of sulfur dioxide monitoring efforts for Hawai'i Island. Volcanic emissions from Kilauea Volcano presents an ongoing hazard to the citizens of Hawai'i County.

Sincerely,

Quince Mento
Civil Defense Administrator
Hawai'i County

LATE TESTIMONY

Committee on Health
Rep. Ryan I. Yamane, Chair
Rep. Scott Y. Nishimoto, Vice Chair

Committee on Public Safety
Rep. Faye P. Hanohano, Chair
Rep. Henry J.C. Aquino, Vice Chair

February 7, 2009

Support for HB 312
Relating to Hazardous Substances

My name is Jessanie Marques, I would like to submit testimony in support of HB 312 relating to vog, sulfur dioxide monitoring.

I am an asthmatic and live in Pahala on the Big Island of Hawaii, in the District of Ka'u. On July 27, 2008 I experienced a severe asthmatic attack when high levels of sulfuric dioxide, seeped through my jealousy windows, creating a "gas chamber" effect of which the sulfuric dioxide and particulates filled my parlor, kitchen and hallway. As a resident of Pahala for over 30 years, I had never experienced such distress.

I called my doctor, and he advised me to immediately evacuate the area. After leaving the area, I was examined by my doctor, he advised me to move out of Pahala, away from the hazardous environmental conditions created from Kilauea's newest vent at Halemaumau crater, ...or I would die. Moving away from our home and family, was not an option, we chose to remain in Pahala.

The health and public safety on human life, agriculture and economic impact on tourism is vital to our community. By establishing an effective system to monitor and warn the public of dangerous levels of sulfur dioxide / particulates in vog would alert many residents of the hazardous conditions and enable them to immediately take shelter in a safe place.

HB 312 would ensure that an effective system was in place to monitor and warn the public of dangerous levels of sulfur dioxide, enabling them to seek shelter in a safe place.

Thank you for providing me this opportunity to share my comments, and urge passage of HB 312.

LATE TESTIMONY

McCall Flower Farm, Inc.
Mail to: P.O. Box 837
Ship to: 96-1029 Center Rd.
Pahala, HI 96777
Phone (808) 928-6456
Fax (808) 928-9016

TO:

FROM: Jeffrey McCall

DATE: February 7, 2009

I am offering this testimony in support of the following bills:

HB 318 Relating to Vog

HB 316 Relating to Agriculture

HB 312 Relating to Hazardous Substances

I am a farmer in Ka'u, growing temperate cut flowers for the local Hawaii market. We have been farming since 1983 and started our farm in Wood Valley in 1992. My business has been heavily affected by the vog from Halemaumau. Our farm had sales of $870,000 in 2007 and 14 employees on payroll before the vog began affecting our crops. We are predicting sales in 2009 to be about $250,000 and have had to lay off or reduce the hours of most of our employees. The majority of our crops have been killed or rendered unsalable by the vog. We are hanging on to the crops that are most resistant to the vog and have begun planting coffee on our outside fields. Our farm has been downsized and is no longer able to employ us all. I have taken outside employment and my son is now running the farm. My wife has developed an allergy to sulfites and we have moved to Hilo to avoid the worst of the vog.

Vog has affected our business and quality of life as it has for most residents of Ka'u. I ask for your support for any measures that will help us cope with this ongoing disaster.

LATE TESTIMONY

William P. Kenoi
Mayor

William T. Takaba
Managing Director

Walter K.M. Lau
Deputy Managing Director

County of Hawai'i

891 Ululani Street • Hilo, Hawai'i 96720-3982 • (808) 961-8211 • Fax (808) 961-6553
KONA: 75-5706 Kuakini Highway, Suite 103 • Kailua-Kona, Hawai'i 96740
(808) 329-5226 • Fax (808) 326-5663

February 7, 2009

The Honorable Ryan I. Yamane, Chair
And Committee Members of the House Health Committee
The Honorable Jerry L. Chang, Chair
And Committee Members of the House Higher Education Committee
The Honorable Karl Rhoads, Chair
And Committee Members of the House Labor & Public Employment Committee
The Honorable Joseph M. Souki, Chair
And Committee Members of the House Transportation Committee
The Honorable Faye Hanohano, Chair
And Committee Members of the House Public Safety Committee
The Honorable Clift Tsuji, Chair
And Committee Members of the House Committee on Agriculture
Hawai`i State Capitol
415 South Beretania Street
Honolulu, Hawai`i 96813

Re: House Bills 313, 318, 316, 312, 317, 314 and 315

Aloha, Chairpersons and Committee Members:

Thank you for this opportunity to provide comments in favor of these seven House Bills designed to cope with the health and economic effects from vog. We will provide more specific testimony on the individual bills, but please let me express my appreciation to members of the Legislature for addressing this serious problem that is affecting our people's lives and livelihoods.

As you know, sulfur dioxide emissions at the summit of Kilauea volcano began climbing in December 2007, and on March 12, 2008 increased sharply from the new vent at Halema`uma`u Crater. The trade winds have generally swept the gasses and acid rain southwest, causing major agricultural damage and particular hardship in communities such as Wood Valley, Hawaiian Ocean View Estates, Na'alehu and Pahala.

As you will hear today, crops have been damaged, agricultural infrastructure has deteriorated from the fumes, and people have become ill.

Ranchers, farmers and homeowners who have spent their lives building businesses and raising families in rural Ka'u, South Kona and Volcano have suddenly had to cope with completely unexpected economic losses and illnesses.

We deeply appreciate the efforts of Representative Herkes and all of the committee chairpersons and members in taking this time to search for the best methods of safeguarding the health of our Hawai'i Island residents, and the best ways to provide relief to businesses that are threatened by the increased emissions.

We particularly thank you for your willingness to address the problem in these difficult economic times, and welcome any assistance you can provide for our residents and for the many Hawai'i County agricultural operations that are trying to cope with this new threat.

Aloha,

Billy Kenoi

LATE TESTIMONY

Testimony In Support of the Intent of
HB 312
Relating to Hazardous Substances
HB 315
Relating to Volcanic Emmissions
HB 317
Relating to Medical Mobile Care

February 7, 2009
9:00 am
State Capitol
CR 325

Rell Woodward, MD
President
Ocean View Community Development Corp.

HB 312
There are reliable sources for portable SO2 monitors that cost between $300 to $395 per unit. The units have a data storage capacity and datalink capabilility. Rick Ward, who heads the ???? Community Emergency Response Team (CERT) has established a large network that advises the community in case of emergencies. A network of monitoring units should be in the possession of trained CERT members who could rapidly notify the citizenry of dangerous levels of SO2

HB 315
No one knows what the effects of long-term low dose exposures are. A study would help answer this question. It would require baseline and follow-up pulmonary function tests of the subjects to see if there is a significant decline over time with chronic exposure. Also, you would need to have SO2 monitoring equipment where the subjects live so you could really tell what levels of exposure they had over time.

For sensitive people (children born prematurely, asthmatics, those with respiratory or cardiac conditions, etc.) even fairly low levels of SO2 can cause problems. That is why Hawaii County's "color" coded system triggers the highest alert level (purple) at 2ppm (parts per million) SO2.

In May 2008, the SO2 level recorded in Ocean View was 15 ppm. A voluntary evacuation was in force, and called off two hours later when levels dropped off significantly. The levels have since remained under 2 ppm. I am including information from the National Institute of Health SO2 (see attached information.)

HB 317
A great idea.

****

[The following is a synopsis of the raw data from the National Institute for Occupational Safety and Health (NIOSH) Department of Health and Human Services, a branch of the Centers for Disease Control.]

The IDLH "immediately dangerous to life or health air concentration values" concentration for Sulfur Dioxide is 100 ppm.

SULFUR DIOXIDE
LCLo (inhalation, human) = 3000 ppm/5 minutes
LC50 (inhalation, rat) = 2520 ppm/1 hour
LC50 (inhalation, mouse) = 3000 ppm/30 minutes
LCLo (inhalation, guinea pig) = 1039 ppm/24 hours

SHORT-TERM INHALATION STUDIES: Most studies indicate that high concentrations of Sulfur Dioxide effect the mechanics of respiration. A dose-related narrowing of the bronchiole tubes leading to bronchio-constriction was seen in guinea pigs exposed to concentrations of 0,2-100 ppm for 1 hour. Exposure of male mice for up to 72 hours to concentrations around 10 ppm produced nasal cavity injury (runny nose, ciliary loss, fluid accumulation, and tissue death). The effects became more severe as exposure time increased. Less severe effects were seen in the trachea and lungs. Other studies have not been reported any effects after 1-2 hour exposures to less than 1 ppm.

SULFUR DIOXIDE (continued):

LONG-TERM INHALATION STUDIES: Exposure to 5 ppm for 225 days produced pulmonary function changes in dogs. Increased swelling, secretions, and reddening of the trachea, as well as decreased mucosal flow was seen in dogs intermittently exposed to 1 ppm for 12 months. There was no apparent effect on pulmonary function. No adverse effects were seen in guinea pigs exposed for 22 hours day, 7 days a week, for 52 weeks to concentrations of 0.13-5.72 ppm. No adverse effects were seen in monkeys exposed for 78 weeks to 0.14 - 1.28 ppm.

Definitions
An LC50 value is the concentration of a material in air that will kill 50% of the test subjects (animals, typically mice or rats) when administered as a single exposure (typically 1 or 4 hours). Also called the median lethal concentration and lethal concentration 50, this value gives you an idea of the relative acute toxicity of an inhalable material.
This is closely related to the LCLo value which is the lowest concentration reported to have killed animals or humans.
This value applies to vapors, dusts, mists and gases. Solids and liquids use the closely related LD50 value (50% lethal dose).

LATE TESTIMONY

AGR-HED-HLT-LAB-PBS-TRN Hearing
Saturday, February 7, 2009
9:00 am
State Capitol
CR 325

Testimony in support of:

HB 312
HB 313
HB 314
HB 315
HB 316
HB 317
HB 318

We are 100% on Bills 312,313,314,315,316,317 and 318.

Thank you for your time and efforts.

Don and Martie Nitsche
Ocean View Residents