Testimony In Support of HB2922, HD2 LATE

Chair Gabbard, Chair English and members of the Committees on Energy and Environment, and Transportation, International and Intergovernmental Affairs, good afternoon.

Thank you for the opportunity to testify in support of HB2922, HD2.

My name is Chun Hui Chen

We all know the effects mercury has on the human body: intestinal bleeding, damage to the brain, damage to the central nervous system, damage to the reproductive organs, and damage to the fetus, to name a few. Knowing this, we continue to permit mercury to be emitted into our environment. How is it getting there? The fluorescent lamps and compact fluorescent lamps (CFL's) that we all have in our homes are the primary culprits. These lamps contain anywhere from 5 – 7 milligrams of mercury. These fluorescent lamps and CFL's are disposed of daily in our landfills or incinerated to produce electricity. The problem with disposal and incineration is the leaching of mercury into our atmosphere, soil, groundwater, and finally into our food supply. Elemental mercury turns into methyl mercury as it moves up the food chain, increasing its potency and ill effects on humans.

It is estimated that 8 – 10 million lamps are imported into the state annually. Of all the lamps imported into the state, it is estimated that 49 percent of all fluorescent lamps contain 7 milligrams of mercury, on the average, 66 percent of all CFL's contain 2.5 milligrams of mercury, on the average, and 97 percent of all high pressure sodium lamps contain on the average 30 milligrams of mercury. Although each individual lamp contains a very small quantity of mercury it takes only 1 CFL, containing 5 milligrams of mercury, to contaminate 6,000 gallons of water. Additionally, if 500,000 fluorescent lamps and CFL's combined, with each averaging 5 milligrams of mercury, were

to be discarded annually, this will amount to 5.5 pounds of mercury that is contaminating our air and our groundwater. We are not saying that the use of fluorescent lamps and CFL's is wrong, however, we must be mindful that they must be disposed of properly. The benefits of energy efficiency will be outweighed by its negative impact on the environment if we are not responsible for a product's end of life handling. Currently 12 states ban the landfill disposal of all mercury containing lamps.

All components of a fluorescent lamp or compact fluorescent lamp can be recycled: glass, end-caps, phosphors, mercury, etc. Presently, there are no programs for commercial recycling in Hawaii, however, Home Depot, to my understanding, is the only facility that accepts residential lamps for recycling. These lamps must then be shipped out of state for recycling, which can be costly. However, this does not mean that because there is no recycling facility in the state we ignore the fact that continuing to dispose of fluorescent lamps and CFL's into our landfills and refuse-to-energy incinerators can detrimental to the health and wellbeing of Hawaii's residents in the long run. Additionally, because of environmental concerns Hawaii may never have a recycling facility.

I ask that you consider the health and welfare of your constituents and support of HB2922, HD2.

Thank you.