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Personal Matters / Ex. 6

March 5, 2014

State of Hawaii
Department of Health
Gary L. Gill
Deputy Director for Environmental Health
P.O. Box 3378
Honolulu, HI 96801-3378

RE: Dept of Health Practices to "Approve" Unsafe Housing for the Military Families

Dear Mr. Gill,

This is a formal complaint regarding the Department of Health (DOH) practices to allegedly "approve"[1] the construction of unsafe housing projects for military families and others. The DOH "approval" for the elevation of pesticide soil contaminants in and around residential housing projects for military families without a safe human health risk assessment that meets recognized standards and acceptance cannot be permitted, especially without full transparency to all of the residents. Military families are plagued with unexplained illnesses as a result of living in the unsafe housing.

Beginning in 2004, I have communicated my concerns to the DOH and complained about the unsafe practices to expose military families to unsafe housing. During this period I have communicated with the DOH, Congressional Delegation, the military, as well as the press to ensure military families are warned of their increased health and exposure risks to contaminants in and around their assigned homes and, in an effort to stop the unsafe practices of increasing the safe levels of contaminants around existing and new residences. Unfortunately my previous efforts were not successful and now many military families are experiencing numerous unexplained illnesses. It is a sad state of affairs that we must revisit this issue now, more than nine (9) years later, because military family members are expressing concerns that they have been exposed to harmful contaminants resulting in unexplained health issues.

If the allegation is true that the DOH is approving the elevated pesticide contaminated soils around the military housing actions must be taken. It is imperative that the DOH immediately cease and desist from any further approvals of such

[1] Ohana Military Communities and Forest City allege that the State DOH approved their management plans including their human health risk assessments. See attached FAQ sheet.

allowances, permissions, permits or any other authorization for the contamination of residential areas with elevated levels of pesticides or other hazardous materials. The conditions to raise the safe and allowable concentrations of pesticides in the soils around residential buildings i.e., environmental action levels (EALs) with different tiers are unacceptable because it places contaminants in and around children, infants, pregnant women, individuals with compromised immune systems, and others. None of the provided documents allegedly approved by the DOH addressed the exposure to the unborn, newborn, infants and children. The mathematical manipulations used in these unacceptable soil management plans to "risk away" the health and exposure risks to infants, pregnant women, toddlers, individuals' with compromised immune systems, pets, and others ignored the many health effects now experienced by these military families.

The erroneous perception that raising the contaminant levels in and around the residential buildings of military families is acceptable because they are only exposed for 4 to 6 years is an absolute betrayal of trust to the public and our military families. The DOH allegedly accepted the increased risk of cancer and other illnesses on their behalf because of their assumed exposures of only four (4) to six (6) years. This manipulation of data puts unsuspecting families at increased risk for cancer, neurological disorders, respiratory, skin. gastrointestinal disorders and numerous other debilitating illnesses. The effects from the short term exposures, i.e., 4 to 6 years are compounded because unexplained illnesses may not develop until twenty (20) or more years later. Added to the facts that they are fearful of reprisal and retaliation should they express concerns about the safety of the military family housing; that they are "military" and no one will listen; and that they have no other choice but to live in these unsafe housing units are their reality.

The reality for our military service members and families stationed at Marine Corps Base Hawaii (MCBH) is that they are assigned to, required to pay for and live in unsafe homes. Months or years later the onset of unexplained health issues leads them to suspect they have been exposed to harmful contaminants in their unsafe homes. Due to their military status and fear of raising such concerns with their housing provider and military chain of command, they are helpless and can do nothing to ensure their families live in safe housing environments. It is widely understood amongst these families that if they do express such concerns and ask for safe housing in exchange for their monthly basic allowance for housing (BAH) allotments, their military career and livelihood will be jeopardized. For this reason, most do nothing and simply choose to "tough it out" until assigned to their next duty station, which could be another contaminated military base. The DOH alleged approval to allow elevated pesticide levels in their residential environment hurt these families.

At least since 2004, and possibly longer, the DOH has engaged in collaborative practices to raise the allowable concentration of pesticides and potential hazardous materials in the soils around military housing residences. The consequences of increasing the cancer risk as well as the risk of illnesses from low level exposures are not properly assessed. The basis for these actions is the development of various plans, procedures, guides and inaccurate assessments to "risk away" the human health risks to human health and illnesses. As a result of an informal survey taken of more than 250 past and present MCBH residents, we know of a wide range of medical illnesses, disorders and diseases these families, including their children, have suffered. In many cases the medical community ruled out genetic or other causal factors and can only conclude the causal factors are environmental.

The creation of environmental action levels (EALs) and various tiers by private contractors that allow the presence of pesticides in the soils around residential buildings has caused and is causing illnesses. Increasing the concentration of these pesticides in the soils around the residential buildings creates exposure to the unborn, newborn, children and adults. These families, should NOT be exposed to pesticides in any concentration that could result in any increased potential for health effects and increased risk of cancer. The basis of the allowance to increase the concentration of pesticides in the soils is the assumption that military families are <u>only</u> exposed for 4 to 6 years and allegedly approved by the DOH. The various assumptions and other factors and experiences are briefly discussed below:

1. The original preliminary remediation goals or action levels or screening levels by the Environmental Protection Agency (EPA) was based on scientific data that showed <u>no health effects</u> from exposure for a lifetime, i.e., 70 yrs[2]. at that level. The manipulation of the numbers by using military tours as the length of exposure was manufactured to save money. This assumption simply applied says that 6 yrs/30 yrs (lifetime exposure) would result in an increase of a factor of 20. The safe levels are now multiplied by 20 and the new elevated soil contaminated concentration is used to spread contaminated soil around the residential buildings. This manipulation of numbers is not based on any human health risk assessment to examine exposure, or effects of exposure. The <u>only</u> benefit seen is the saving of millions of dollars by not placing clean and safe soils around these residences. The cost benefit analysis results in savings for the private contractors without consideration for the cost of increased illnesses, medical disorders and suffering for the military families.
2. The development of multi-incremental sampling, composite sampling and other methods of soil sampling to skew the actual conditions and further reduce costs in efforts to characterize the potential of human health exposure is another great

[2] The EPA PRGs were originally based on lifetime exposures of 70 years and not 30 yrs.

money-saving scheme. The use of actual and representative sampling to provide real scientific data is lacking in the above manipulation process allegedly approved by the DOH. The cost benefit analysis is savings for the private contractors while the cost, again, is illnesses, medical disorders and suffering for the military families. The absence of accurate and detailed data prevents any development of acceptable evaluations of exposures at the time of approval and now 10 years later.

3. The soil management plans allegedly approved by the DOH do not provide for real monitoring or sampling. **IF** the assumptions made above to save contractors money are acceptable to the DOH, then the collection of actual and accurate scientific data to validate the safety and the effectiveness of these actions would have been conducted and available for review today. Over the last 10 years there should be sufficient scientific and accurate data to provide at least a preliminary validation of the safety of the assumptions and plans approved above. Not only does this data not exist, but the contractors and DOH did NOT bother to collect the data and, even worse, no plans or actions were identified to monitor and assess the impact to human health when these increased concentrations were allegedly approved. The bottom line is: - if allowing increased concentrations of these pesticides in the topsoil of the yards, playgrounds, dog parks, etc. for our military families is safe, then show us the scientific data that demonstrates and validates there have been no negative health effects, and the atmospheres are safe.
4. Family members from military families are experiencing a wide range of illnesses. Unexplained miscarriages, neurological disorders/illnesses, high frequency of asthma in children, liver disorders/illnesses, skin illnesses and respiratory distress, and a long list of other illnesses continue. Military families are not informed and the medical community is also unaware of their patients' exposures to these contaminants. There are no efforts by the DOH to educate and work with the medical communities in this State to address the low level exposures created by their unacceptable alleged approval of such actions to elevate the background levels of pesticides in the residential area.
5. Examples have surfaced where the contractors failed to comply with the plans, procedures, and other written promises to control the contaminated soils and prevent harmful exposures to unsuspecting military families. No significant enforcement actions were taken to ensure these families were/are protected from harmful exposures, much less informed about their potential health and exposure risks. In the meantime, these military family members are exposed to undetermined levels of contaminants from the topsoil in their own yards, playgrounds, in-home day care facilities, dog parks, etc. Exposure

determinations and risks of these exposures are not developed and the suffering of these military families has largely been ignored.

6. The decision to raise soil concentrations with contaminants are addressed in some of the military housing projects and it begs the question regarding the other housing projects in the State. Not all of them have been evaluated and addressed to ensure military families are provided safe housing. Raising the soil concentrations cannot be supported if the actual airborne concentrations in the house, the surface contamination in the house and the amount of transfer resulting in skin exposure are not adequately assessed for human health risks, including the children. The assessment must address the long history and hardly understood health issues associated with long term low level exposure to pesticides. This requires long term actions to continuously assess the safety of these housing environments.

The human health risk assessment (HHRA) must objectively address the paths of exposure. The assurance of human health protection has to be the primary objective and cannot be subservient to any other objective. Various studies from EPA, Annual Review of Public Health and others support the identification of human health issues associated with chronic low level exposures to pesticides. Raising the contaminated soil concentration levels around residential homes for our military service members and their families affects human health. The DOH was and is required to identify these risks and to ensure they are addressed to provide safe environments BEFORE any consideration is given to approving an increased risk of health effects.

- Allowing higher concentrations of contaminated soil in the yards and playgrounds of military families where their children, babies and pets routinely play, dig in the topsoil, etc. causes increased opportunities for inhalation, ingestion and skin exposures that can causes illnesses.
- Allowing higher concentrations of contaminated airborne particulates in and around their assigned homes, in the air conditioning and ventilation systems, etc. creates opportunity for airborne inhalation of pesticides that can cause illnesses.
- Allowing the families to come into contact with the contaminated dust in and around their assigned homes leads to the ingestion of pesticides which can cause illnesses.
- Allowing the families to come into contact with contaminated dust in and around their assigned homes causes skin contact and absorption of these pesticides into their bodies, which can cause illnesses.
- Allowing the unborn to be in an environment with increased exposure to these pesticides results in birth failures and illnesses.
- Allowing newborn infants to be exposed to these pesticides at increased concentrations results in early childhood illnesses.

The private contractors alleged that the HHRAs were developed with and approved by the DOH. The documentation that is available only seems to address the soil concentrations and sampling of soils. All of the data and information in the soil management plans or other similar documents fail to address the risk for acute and chronic human health exposures. Over the last 10 years there should be no excuse for not having human health data to validate the approval for raising these soil concentrations. Saying it is safe does not mean it is safe, especially when there are unexplained illnesses.

The DOH practices fail to meet the public's trust to ensure public health and safety when allegedly approving and working with contractors handling elevated levels of contaminated soils. Well over 100 military family members who were assigned to live in the new family housing on MCBH have reported wide ranges of illnesses because of the mishandling and mismanagement of elevated levels of pesticide contaminated soils. The many years of housing demolition and construction in the occupied housing areas exposed many families to undetermined concentrations of pesticides and other hazardous materials. The increased concentrations of these contaminants were evident by the lack of control of the demolition dust and debris. These contaminants settled on personal belongings, homes, neighborhoods and, entered new HVAC systems in the new homes. These unacceptable conditions existed because the DOH failed to recognize the inadequacies of the HHRA and to ensure safe measures were in place to protect these families. Now the only measure is the debilitating medical conditions, diseases and disorders many of the exposed family members now suffer.

The DOH failed when they allegedly approved unacceptable plans which created an "experiment" in which our military families were and continue to unknowingly serve as the guinea pigs. Using military families for this "experiment" has worked because of the overall failure to recognize that military families have a right to safe housing. Their ability to complain, voice their concerns and even seek appropriate and relevant medical care for the health issues they suffer is severely restricted:

1. They are in the dark as no one, not even the housing contractor charged with doing so, bothered to inform these military service members and their families of the contaminated soil, their health and exposure risks or otherwise.
2. They are mistakenly told that they must "eat handfuls" of contaminated soils to get sick. Or there is no airborne exposure because the pesticides cling to the soil particles. Half-truths can be damaging.
3. They are not aware or educated of the contaminated soils and they are unable to inform their physicians.
4. They are easily intimidated and discriminated against because they are military families. If they complain too often or too loudly they can be removed from their assigned military family housing unit and their military career jeopardized.

5. They are the perfect "experiment" because they move or relocate after 4 or 6 years and would be unlikely to suspect exposure in Hawaii, especially when never informed of their exposure to increased concentrations of harmful contaminants.
6. The private contractors can and have disturbed the contaminated soils without protective measures resulting in the exposure to military families. There are no measures identified to ensure the contractors meet safety precautions to ensure the safety of the military families. The DOH allegedly approved plans lack the consistency and the management for the safety of the military families.

The private contractors alleged that the housing projects are safe and the actions to elevate the soil concentrations were accepted and approved by the DOH. The DOH had no right or authority to accept and allow the huge liability on behalf of the State of Hawaii if these allegations are correct. Attached is a FAQ sheet issued by Forest City reflecting the State's direct involvement in the lack of a positive human health risk assessment showing no health effects with the elevated pesticides in the soils around the residential houses. The houses are safe and directly implies that the DOH approved the "safety" of these houses.

The military privatization housing initiative was created to protect the military families from the substandard housing that existed and to ensure that new and SAFE housing would be constructed and managed. The primary objective to improve the quality of life and the safety for our military families resulted in the privatization of the housing for military families. The DOH should not engage in activities with the private sector to override the congressional intent and approval for safe housing. The DOH must protect the right to safe housing for everyone.

The DOH must take immediate actions to mitigate these deplorable conditions and to strictly enforce and monitor actions to ensure our military families are protected:

1. An epidemiological survey or study or both of all past and present military family housing residents should be initiated as soon as possible to identify, classify and evaluate the illnesses and disorders experienced. We must learn from our mistakes and ensure we memorialize our lessons.
2. The unusual amount of illnesses and deaths for short term exposures by their pets must be investigated and evaluated. Historically, man has observed and used animals to identify hazardous environments, e.g., miners used canaries or other birds to identify hazardous atmospheres. The many illnesses and deaths of the pets can be a significant indicator and should be treated seriously and scientifically. The DOH and the contractors cannot continue to ignore the difference between acute and chronic exposures.

3. If the DOH is "approving" these plans or risk assessments or other documents without true characterization and assessment of human health risks then the DOH should cease and desist. The perception of the DOH approval and allowing unsafe conditions that are based on the manipulation of numbers to benefit funding entities without accurate and confident scientific data reflecting true characterization and human health exposure should be clarified to the residents and the general public.
4. Development of sampling plans to monitor real human pathways. Specifically, air sampling in and around houses; wipe samples in and around houses; and strict monitoring of all maintenance, repair and renovation work to ensure these families are protected and accurate data collected. The collected data must be used to continuously analyze and to trend the impacts to human health.
5. Be strict, consistent and fair with the contractors to ensure they actually follow the safe protocols to protect the military families and comply with directions from the DOH. Enforcement and monitoring are tools to protect the people.
6. Development and implementation of effective, meaningful and OBJECTIVE oversight committees to ensure proper procedures, protocols, and protective mitigation measures. Transparency must be an integral part of all the efforts.

Immediate and proactive actions must be initiated and put into effect as soon as possible for the many military family housing projects built in the last twenty (20) years that allowed increased health and exposure risks to families to be ignored. We ask that you protect the health of our military families especially the unborn, newborn and children. A sense of urgency is needed because each day actions are not taken is another day a mother and a child will have to visit the emergency room with unexplained illnesses.

Your immediate actions are appreciated and we request that you publicize these actions to aid in reassuring the public, our honorable military service members, and their families that their safety is important.

Thank You,

Walter Chun

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FAQ Regarding Pesticides
in Navy & Marine Corps Family Housing

BACKGROUND

In 2004, the Navy and Ohana Military Communities formed a public-private partnership to construct, rehabilitate, and manage existing and new homes in a number of military neighborhoods on Oahu and Kauai. Since that time, the partnership has completed substantial construction and rehabilitation work in over a dozen neighborhoods. This work has significantly improved the quality of life for military families on Oahu and Kauai.

PESTICIDES IN HAWAII

The term "pesticides" refers to a general category of substances intended for preventing, destroying, or repelling pests. Pesticides containing compounds such as chlordane, aldrin, and heptachlor are known as "organo-chlorinated pesticides." These pesticides were used to control termites throughout the country from the mid 1940s to the late 1980s. Residual/trace amounts of these pesticides are present near Navy and Marine Corps housing throughout the United States.

In Hawaii, these pesticides were used primarily by pest control businesses in urban areas, but also by homeowners, the military, the state, and the county. These pesticides were commonly applied into the soil beneath buildings and around the foundation perimeter. Because these pesticides break down slowly in the environment, they provided effective protection against termites, and residual/trace amounts may still be found in treated soils throughout Hawaii.

Nearly all of the neighborhoods where the partnership has completed construction or rehabilitation have contained some amount of these pesticides.

WHAT PRECAUTIONS WERE TAKEN?

All phases of the construction project included surface and subsurface soil investigations for organo-chlorinated pesticides. The investigations were conducted by third-party environmental firms that have been operating in Hawaii for many years and that are familiar with the environmental and pesticide issues specific to Hawaii.

After conducting soil investigations, these firms created a "Soil Management Plan." The Soil Management Plan is a detailed document that spells out exactly what precautions must be taken with respect to rehabilitation and new construction in the affected neighborhoods. In general, soil from beneath and around the foundations of new and rehabilitated homes—i.e., those areas most likely to contain pesticides—was removed and replaced with clean soil, regardless of whether the soil actually contained pesticides. All construction, demolition, and other activities have been completed in compliance with the Soil Management Plan.

WAS THE STATE INVOLVED?

The Soil Management Plan was submitted to the State of Hawaii, Department of Health (DOH). The DOH actively evaluated the Soil Management Plan, and on March 23, 2007 it approved the Soil Management Plan.

IS THE SOIL UNDER OR AROUND MY HOME SAFE?

The health effects from these pesticides depend on the amount of exposure. People live safely around soil with low levels of these pesticides. **Your home is safe.**

Why are these Needed if the homes are safe?

The pesticides that may be in the soil around your home are not a health concern for several reasons:

- Pesticide-impacted soils were removed from newly constructed neighborhoods
- Soils in neighborhoods where new construction was not completed may still have some low levels of pesticides in the soil, but are below the surface and covered by gravel, grass, or other ground cover.
- Most health effects result from relatively high exposures to chlorinated pesticides by people who worked with the products as part of their job in the mid 1940s to the late 1980s.

WHAT PRECAUTIONS CAN BE TAKEN?

Exposure to organo-chlorinated pesticides can occur through absorption through the skin and inhalation, but the primary exposure pathway is from ingestion of contaminated soil or through contaminated foods. Some precautions you can take include:

- Maintaining the ground cover around the foundation of your home (the highest concentrations of chlorinated pesticides were found in subsurface soils within a few feet of the foundations of existing structures)
- Keeping children or pets from playing in dirt near the foundation of your home
- Do not grow edible produce near the foundation of your home
- Additional information can be obtained from the Hawai'i State Department of Health's publication entitled *"Past Use of Chlordane, Dieldrin, and other Organochlorine Pesticides for Termite Control in Hawai'i,"* available at http://health.hawaii.gov/

FOREST CITY MILITARY COMMUNITIES HAWAII