EXECUTIVE SUMMARY OF COMPLAINTSand RECOMMENDATIONS

A Review of 643 Documented Complaints of Adverse Reactions Following the CDFA's Aerial Spraying of two Pesticides based on Pheromones over Densely Populated Neighborhoods in Santa Cruz and Monterey Counties in September, October and November 2007

As of December 20, 2007 various governmental agencies and citizen groups have received **643** documented complaints from Monterey and Santa Cruz area citizens who believe they suffered adverse short-term reactions following the aerial spraying of pesticides pheromones on their cities in September, October, and November 2007.

Of the 643 complaints, **509 are reported here for the first time**, along with the original 134 citizen complaints of adverse reactions following the aerial spraying of the Monterey area in September which released to state agencies and the press in October.

Summary of the Complaints

Citizens complained of a variety of adverse reactions immediately and soon after the aerial spraying, including:

- o Asthma attacks
- o Bronchial irritation
- Lung congestion and soreness
- o Difficulty breathing and shortness of breath
- o Coughing or "wheezing"
- Skin rashes (sometimes severe)
- Vision blurred
- Eye irritation
- Sore throats
- Nasal congestion
- o Sinus bleeding
- o Chest pains and tightness
- Heart arrhythmia and tachycardia (irregular and rapid heartbeat)

- Headaches (sometimes debilitating)
- An inability to concentrate and focus
- o Dizziness
- Muscle aches
- o Body tremors
- o Intestinal pain and diarrhea
- o Nausea
- o Swollen glands and lymph nodes in neck and under arms
- Feelings of lethargy and malaise
- Menstrual cramping, an interruption to menstrual cycles, and in some cases a recommencement of menstrual cycles after menopause

Several people reported severe reactions, and others have required emergency room visits. Some said the effects of the spraying were debilitating and made it impossible for them to focus, work, and take part in their normal activities. Many report they have never had any similar symptoms previously.

People with less severe reactions generally said they went on with their day-to-day responsibilities, although with diminished capacity, and did not call or visit their doctors because they did not want to take the time or incur the expense, or could not get a short-term appointment.

A number of people said they had left their homes during the spraying and experienced symptoms immediately upon returning. A tourist visiting Monterey from Pennsylvania said her symptoms appeared as soon as she got near the area after driving north on Highway One from the Hearst Castle in San Simeon.

Some reported that several members of their families experienced unusual symptoms at nearly the same time shortly after the spraying. Several said their domestic animals also experienced adverse reactions. Two pets died after developing symptoms similar to those reported by humans.

Complaint Sources

Today's report cites 317 complaints of adverse reactions received directly by the CDFA since the spraying began, 52 of which were detailed illness reports. It also cites 36 reports of illnesses sent by doctors to the Santa Cruz County Agriculture Commissioner's office. Public interest groups received 290 complaints, which are documented in the report. ¹

Potential Complaint Duplication

Because there is no single agency and no single well publicized system for tracking and investigating adverse reactions to the aerial sprayings, there is likely some overlap in the 643 complaints, if people filed complaints with more than one entity.

Underreporting Breadth of Illnesses And Symptoms

The report explains why the official numbers under-report the numbers of people with illnesses and symptoms and how complaints inherently cannot include potential long-term adverse health effects.

- Sometimes a single complaint was submitted for several members of the same family, and on one occasion, one complaint was submitted for a family of six, all of whom got sick.
- There is evidence some people could not afford the time or expense of a doctor visit, or could not get an appointment, while others did not know how to register complaints of adverse reactions. Meanwhile, some health care providers were not

¹ The total number of complaints reported in the press in September and October grew to more than 200 as governmental representatives, referring to the adverse reactions, likely added complaints they had received directly to the count, and referred to these in their communications (see "Laird Response to Sec. Kawamura," dated October 16, 2007, page 4, which referenced 200 complaints). These extra complaints are not included in the tally of 643 referenced in this report; only the 134 complaints received through ReactiontoSpraying@yahoo.com last fall, and forms sent to the related P.O. Box.

prepared to recognize and report possible pesticide-related illnesses or were not aware of state law requiring them to report suspected pesticide poisonings within 24 hours.

- "Midway through the aerial sprayings, the CDFA stated that the only way complaints of illness would be taken seriously is if they were validated by a doctor. However, I have patients who told me that other doctors refused to file a report on their reactions, even though it is required by law."
- Randy Baker, MD, a family physician practicing environmental medicine in Soquel
- The present tally of 643 complaints does not include complaints that have been made directly to the offices of Governor Schwarzenegger and other elected officials. Citizen groups have asked the Governor's office to disclose this information. They also continue to gather illness complaints through various channels, including an email address, ReactiontoSpraying@yahoo.com. The number of documented complaints count should rise as the Governor's office, city governments, and governmental representatives pass along complaints they have received directly from citizens. There is no law requiring these offices to forward pesticide harm complaints.

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Putting Health and Safety First

Despite assurances by the CDFA that the spraying would be safe, many community leaders remain concerned after learning of the larger scale of documented complaints.

"While California's agriculture business is vitally important, no one, including the Governor, I think, wants to sacrifice the health of children and other vulnerable citizens for produce. That's why the spraying needs to stop so we can have a thorough public process including an Environmental Impact Report."

- Tony Madrigal, Santa Cruz City Council

"The science establishing the safety of the spraying simply is not there. In effect, this has been an experiment on a grand scale. The Nuremberg Code, which is adhered to by the National Institutes of Health, prohibits medical experimentation on human subjects without their informed consent. I believe the same code of ethics should be adhered to in this situation."

– Dr. Doug Hulstedt, *pediatrician*, *Monterey*

"The number of people who have reported adverse reactions is alarming, and I believe further spraying must be halted until we can be certain it is safe."

- Emily Reilly, Santa Cruz City Council member

"Protecting those who are most vulnerable is a hallmark of our society, and while the aerial spraying might not adversely impact everyone, there is reason to believe it is harming some people, including those with chemical sensitivities, impaired immune systems, and asthma and other respiratory ailments. The rights of these citizens need to be protected."

– Jeff Haferman, Monterey City Council member

"Article One of the California Constitution clearly states that all people have a right to pursue and obtain safety, and the aerial spraying of synthetic pheromones and other chemicals on neighborhoods, playgrounds and schools could be in violation of this right," said Mike Lynberg of *Concerned Citizens Against Aerial Spraying*.

"We, as elected officials, have a responsibility in matters of public safety to make sure that decision-making process is transparent to the citizenry. Thus far, the state has not lived up this standard."

-- Ryan Coonerty, Santa Cruz Mayor

"Far more effective non-spraying alternatives exist. Aerial spraying has been called the 'least effective' way to control the light brown apple moth because at least 99 percent of the spray has no effect on the widely dispersed moths at all. A more effective and less costly solution is targeted, pheromone-scented sticky traps², which the state has used to trap essentially all the 9,000 moths they've caught in California so far."

– David Dilworth, Executive Director, Helping Our Peninsula's Environment (HOPE)

"Given the number and seriousness of the health complaints, and the heavy presence of the Checkmate LBAM F capsules in the river and along Cowell Beach after the spraying, I think there is reason to believe that a line has been crossed and that the aerial spraying is not environmentally responsible, possibly violating the authority under which it was initiated.

- Ed Porter, Member of the Santa Cruz City Council

"CDFA has undertaken aerial spraying under the pretext of an emergency. Clearly there is no emergency in the legal sense. An emergency is a sudden and unexpected occurrence threatening life and property. There is no way in law that the LBAM situation can be considered an emergency." Ibid

"Unfortunately, many people did not know how to register complaints of adverse reactions, and primary care health providers were not adequately instructed how to recognize and report possible pesticide-related illnesses among their patients. Also, citizens and health practitioners were assured by the CDFA that the spraying would not make anyone sick, so it's possible that many attributed their adverse reaction to other causes. Ibid

² Targeted pheromone-baited Sticky Traps are the only solution to catch and kill the LBA moths. Twist ties and aerial spraying do not catch or kill the LBA moths. "Targeted" sticky traps are used only where the moths are found. This is in sharp contrast to saturation trapping to cover an entire region. For more detailed information on this effective and less expensive solution please see **1hope.org/checkmate**

- "Midway through the aerial sprayings, the CDFA stated that the only way complaints of illness would be taken seriously is if they were validated by a doctor. However, I have patients who told me that other doctors refused to file a report on their reactions, even though it is required by law."
- Randy Baker, MD, a family physician who practices environmental medicine in Soquel

"Unfortunately, there is very little in the way of objective testing doctors can do to tell if a **c**omplaint actually is related to chemical exposures. And many people could not afford the time or expense of going to a doctor, or could not get a timely appointment. Should their complaints be ignored?" Ibid

METHODOLOGY: HOW THE COMPLAINTS WERE COMPILED

Mike Lynberg, a husband and father of two in Pacific Grove, who is also a bestselling author and business writer, was concerned about the safety of spraying untested pesticides on large urban populations and started Concerned Citizens against Aerial Spraying in September 2007. Then, when some of his friends and neighbors had adverse reactions to the aerial spraying, he began to collect and compile their complaints, and to seek records of complaints from other sources.

Collected and compiled by Lynberg, this report includes or makes reference to:

- 317 citizen complaints submitted by citizens directly to the CDFA; 52 of them in the form of detailed illness reports, and 265 in the form of phone calls, email messages and other correspondence. These 317 complaints, disclosed to Lynberg by the CDFA on December 20, 2007, are the total received so far by the CDFA following all three rounds of spraying in Monterey and Santa Cruz Counties.
- 290 citizen complaints of illnesses have so far been received by public interest groups, including via a dedicated email address, ReactiontoSpraying@yahoo.com, a dedicated P.O. Box, and two citizen petitions. Of the complaints, 134 followed the first round of spraying in the Monterey area in September, and 156 of them followed the second round of spraying in the Monterey area in October and the first round of spraying in the Santa Cruz area in November.
- 36 complaints submitted by local physicians to the Santa Cruz County Agriculture Commissioner's office following the November spraying in that county, consistent with a law that requires physicians to report illnesses that could be pesticide-related. These reports of illnesses are being investigated by Sean Fields, an inspector in that office, and will be forwarded by it to the appropriate state agencies at a later time.

While care has been taken to delete duplicate complaints in this report, there could be some overlap (i.e., some people might have reported their adverse reactions to more than one entity). That overlap, to a significant degree, results from the lack of a single, well planned and managed system for tracking and investigating adverse reactions, established and funded by the state, and ideally undertaken by a reliable and trusted third party, and peer reviewed by experts in the area of pesticide-related illnesses.

Despite possible duplicate complaints, HOPE believes the known complaints are likely just a fraction of the total illnesses linked to the spraying for the reasons described above.

Moreover, in late October, the CDFA began to say publicly that the only way citizens' complaints of illnesses would be taken seriously is if they were validated by a doctor. "What about people who could not afford the time or expense of going to a doctor, or who couldn't get an appointment?" asks Lynberg. "Are their complaints not worth taking seriously?"

Finally, the total number of complaints in this report is likely to be much lower than the actual number of people who believed they suffered adverse reactions to the aerial spraying because the complaints reported herein do not include:

- Complaints of illnesses received by Governor Schwarzenegger's office
- Complaints of illnesses and adverse reactions received by other elected officials such as state and federal representatives
- Calls, messages and letters sent by people who believe they got sick to the mayors of the city clerks of the many cities sprayed
- Complaints of illnesses received directly by the Monterey and Santa Cruz County Health Officers

Working with other public interest groups, Lynberg is presently working to obtain this information so it can be publicly disclosed. In time, the total number of citizen complaints of adverse reactions related to the aerial spraying of urban populations in California in late 2007 could grow.

CDFA Could Spray Continuously through 2010

The California Department of Food and Agriculture (CDFA) agency declared an emergency and obtained a permit from the US-EPA to spray urban populations through 2010, as often as every 30 days, and to do so without any advance testing of the pesticide's health harm to humans.

Three rounds of aerial pesticide spraying using two different pesticides³ occurred late last year beginning on the Monterey Peninsula and then expanding to Santa Cruz County. Each round involved airplanes spraying untested pesticides at high-speed⁴ largely over densely populated areas from 500 - 800 feet above the ground⁵. At that altitude there is considerable sideways drift of the pesticides, potentially miles from the release location.

The pesticide ingredients and concentrations are a closely held secret. Two days after an LA Times editorial the Governor released a few of the names of ingredients of only one of the two pesticides. The disclosed ingredients include a synthetic pheromone

³ Checkmate OLR-F and Checkmate LBAM

¹⁶⁰ mph

⁵ Crop dusting normally takes place only a few yards above the ground and at speeds below 100 mph.

as the active ingredient, and variety of so-called "inert" ingredients⁶. Some of the disclosed ingredients are known to be hazardous at certain levels. Concentrations of the ingredients and chemical residues of the manufacturing process were not disclosed. US-EPA has explicitly refused to disclose that information on an expedited basis.

The tiny light brown apple moth has been widely across California from Los Angeles to Napa, including highly populated areas such as San Francisco, Berkeley and Marin County. *The LBA moth does not cause physical harm to people which is in sharp contrast to the West Nile Virus*.

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⁶ Pesticides almost always contain chemicals that are secrets, misnamed inerts. "Despite their harmless sounding name, many so-called inerts are dangerous chemicals that can cause cancer, reproductive harm, nervous system damage and other health effects." (NCAP Report "Toxic Secrets")

RECOMMENDATIONS & ALTERNATIVE SOLUTIONS

There are three broad questions related to the recent aerial spraying of pesticides using pheromones and potentially toxic "inert" ingredients by the State of California on hundreds of thousands of its citizens:

- Is it necessary?
- Can it be effective?
- Is it safe?

Experts have expressed opposing viewpoints on whether the aerial spraying is necessary or effective. For example, Jim Carey, a professor of entomology at the University of California-Davis and a respected Invasion Biology expert, has cast doubt on whether the aerial spraying can be effective, saying the pest is too established to be eradicated. "This thing is so widespread that there is no way that they're going to eradicate it," said Carey in a *Monterey Herald* interview in December. When a pest is not eradicatable, we can only try to control it. Pest control requires dramatically less urgency and less draconian measures than eradication.

While the first two questions are critical, and while some experts believe the spraying is neither necessary nor effective, this report is primarily focused on complaints of adverse reactions to the spraying.

Out of a deep concern for the health and safety of our families, friends and neighbors, HOPE and those supporting this report strongly and respectfully recommend that :

- 1. The State of California immediately stop further aerial spraying to eradicate the light brown apple moth, given the evidence the spraying may significantly harm human health and is therefore not being done in an "environmentally responsible" way, as described in Senate Bill 556.
- 2. Our governmental representatives vigorously defend and uphold every citizen's **constitutional right to pursue and obtain safety**, as established in the California State Constitution, Article One, Section One.
- 3. The State of California abide by international codes of ethics pertaining to experimentation on human subjects without their informed consent (such as the Nuremberg Code adhered to by the National Institutes of Health), since the chemical mixtures being sprayed have not, prior to the wholesale spraying of large urban populations, been tested for their health effects on human beings.
- 4. The health complaints received so far be thoroughly investigated by an objective and trusted third party not by an agency or organization that serves or supports agriculture

and related interests – and peer reviewed by panel of experts in the fields of toxicology, environmental medicine and other appropriate disciplines. The California Dept of Public Health may be a good start.

- 5. The ingredients in the products being sprayed on unwitting populations be thoroughly disclosed, including their relative concentrations and the residues that result from their reaction, and this data be studied by an objective and trusted third party -- not an agency with a clear conflict of interest and loyalty to agricultural and economic interests such as CDFA and DPR, and peer reviewed by an appropriate panel of independent toxicologists, physicians and other specialists.
- 6. The State of California prepare a thorough Environmental Impact Report that includes the findings of the investigations into the spray's ingredients and the adverse health effects among the population, and objectively and thoroughly evaluates non-spraying alternatives.
- 7. The CDFA implement non-spraying solutions to eradicate or control the light brown apple moth, such as the targeted pheromone-scented sticky traps it has used successfully to trap essentially all the 9,000 LBA moths found in California so far, instead of measures that put people at risk and possibly sacrifice their health and safety for the interests of others.
