

AGRICULTURAL BEST MANAGEMENT PRACTICES



Be an Everyday Environmental Hero!

Be **AWARE**, take **ACTION**, note **ACTIVITIES**
that adversely affect streams, drainage channels and the ocean.

BE AWARE OF IMPACTS DOWNSTREAM:

Lack of vegetation on stream banks can lead to erosion. Overgrazed pastures can also cause erosion, filling streams with sediment and turning the ocean brown. Excess fertilizers and pesticides can poison aquatic animals and cause excessive algae to grow. Livestock in streams can contaminate waterways with bacteria, making them unsafe for human contact.

TAKE ACTION:

- **CORRAL THEM:** Keep livestock and animal waste away from stream banks to minimize runoff of animal waste into waterways. Plant areas along the stream banks, preferably with native species, to prevent livestock from easily getting into the stream. Animal feces contaminate streams.
- **STORE PROPERLY:** Store and apply manure and other fertilizers away from streams and other wetlands. Fertilizers contain nutrients such as nitrogen and phosphorous that can wash into streams and cause algae to grow. As excess algae dies it uses up the oxygen in the water that fish and other organisms need to breathe.
- **READ THE LABEL:** Apply fertilizers and pesticides according to label instructions to save money and minimize pollution of streams and the ocean. Avoid mixing, storing or cleaning near waterways. Pesticides and herbicides contain toxic substances that are harmful to fish, corals, stream life and human health.
- **PREVENT EROSION:** Plant cover crops whenever possible. When it rains, native plants work well to trap any excess fertilizers, chemicals, and soil as rainwater flows across fields. This helps to keep these harmful substances away from our ocean.

For more information;

City's Environmental Concern Line at **768-3300** or www.cleanwaterhonolulu.com

State of Hawaii Department of Agriculture, Pesticides Branch, Educational Certification Section
at **973-9409** or **973-9424** or <http://hawaii.gov/hdoa>

University of Hawaii at Manoa, College of Tropical Agriculture and Human Resources,
www.ctahr.hawaii.edu/ctahr2001/

Honolulu Extension Office **956-7138**, Kaneohe Extension Office **247-0421**,
Pearl City Extension Office **453-6050**, Wahiawa Extension Office **622-4185**

Reference: epa.gov/weatherchannel/after_the_storm



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PESTICIDES

- **READ AND FOLLOW THE LABEL:** It is illegal to use any registered pesticide in a manner inconsistent with its label. The label is the law.
- **CONTROL ODORS:** Be aware of environmental conditions such as wind drift. A best management practice is to preserve natural vegetative buffers that control odor.
- **PROTECT YOURSELF:** The first step to ensure your safety when working with pesticides is determining what Personal Protective Equipment (PPE) to wear. By law, that information must appear on every pesticide label.
- **KEEP ACCURATE RECORDS:** Records must be made and kept for all chemical applications even if it is an organic substance.
- **SAFE STORAGE AND DISPOSAL ***

ON THE FARM

- Always store pesticides in a locked storage area to keep out animals, vandals, or children. In addition, pesticides should never be stored near animal feed, which could become contaminated by vapors or be accidentally mixed with the pesticide.
- Always keep pesticides in their original, labeled container. The label has important information on the legal uses for the product, and other matters like first aid. A pesticide should never be stored in an unlabeled bottle or jug. A child may see the bottle and think it contains soda pop, and become poisoned.
- Never keep pesticides that have been banned, such as DDT, Chlordane or Dieldrin. A person who uses banned pesticides is breaking federal and state laws, and is endangering his or her own health and the environment.
- Order only what you need. Avoid lengthy or poor storage conditions that may alter the chemical by ordering enough pesticides for the current season only.
- Always triple rinse or pressure rinse empty pesticide containers immediately, and pour the rinse water into the spray tank. By rinsing at this time, pesticide concentrate will not dry on the container and become difficult to clean. The spray tank also acts as the perfect disposal site for rinse water. Avoid mixing near a water source such as streams to minimize runoff.

IN THE FIELD

- Calibrate equipment to ensure you are applying pesticides at the rate specified by its label.
- Occasionally, even the best farm manager will end up with leftover pesticide spray in the tank. Excess pesticide should be applied evenly back to the crop just treated. You also can apply the product on another crop or site that is listed on the label.
- The worst scenario is to dump gallons of excess or unwanted pesticide solution on the ground. Although the soil and weather normally degrade most pesticide sprays, dumping large amount of pesticide overloads nature's ability to break down the chemicals. In fact, some pesticides may leach through the soil and contaminate the groundwater. Certain areas are particularly vulnerable. Pesticide dumping is illegal and unethical.
- Practice caution when using granular pesticides, too. There are numerous examples of farm children or animals tasting small piles of granules left in the field or shed and becoming poisoned. No matter what the formulation (liquid, granular, dust, etc.) all pesticides should be stored, handled, and disposed of with care.

* If you have banned, unlabeled, or unwanted pesticides, call 768-3201 for an appointment to drop off these pesticides at the household hazardous waste handling facility contracted by the City and County of Honolulu. Drop off days are coordinated every two months. Before you call to schedule a drop-off, please take an inventory of the materials you wish to dispose of (including type and quantity of material).



E Mālama I Ka Wai Ola

Protect our waters...
FOR LIFE

“This is our home, our island, and we are all responsible for its health and beauty.”

—Mufi Hannemann, Mayor
City and County of Honolulu

