

Where to seek out information and resources:

Cooperative Extension Service, CTAHR

Hawaii County: Hilo Office
875 Komohana Street, Hilo, HI 96720
Tel.: 808 981-5199

Hawaii County: Kona Office
79-7381 Mamalahoa Hwy, Kealahou, 96750
Tel.: 808 322-4892

Kauai County:
3060 Eiwa St. Rm 210, Lihue, HI 96766
Tel.: 808 274-3471

Maui County:
310 Kaahumanu Ave. Bldg. 214, Kahului, 96732
Tel.: 808 244-3242

Oahu County:
1955 East West Road, Honolulu, HI 96822
Tel.: 808 956-7138 or Tel.: 808 956 8236

Natural Resources Conservation Service

Prince Kuhio Federal Building
300 Ala Moana Blvd., Rm 4-118,
Honolulu, HI 96850
Tel.: 808 541-2600 ext. 111
Tel.: 808 322-2484 ext. 105

To locate a NRCS and Soil & Water Conservation
District office nearest to you, see website;
<http://www.pia.nrcs.usda.gov/contact>

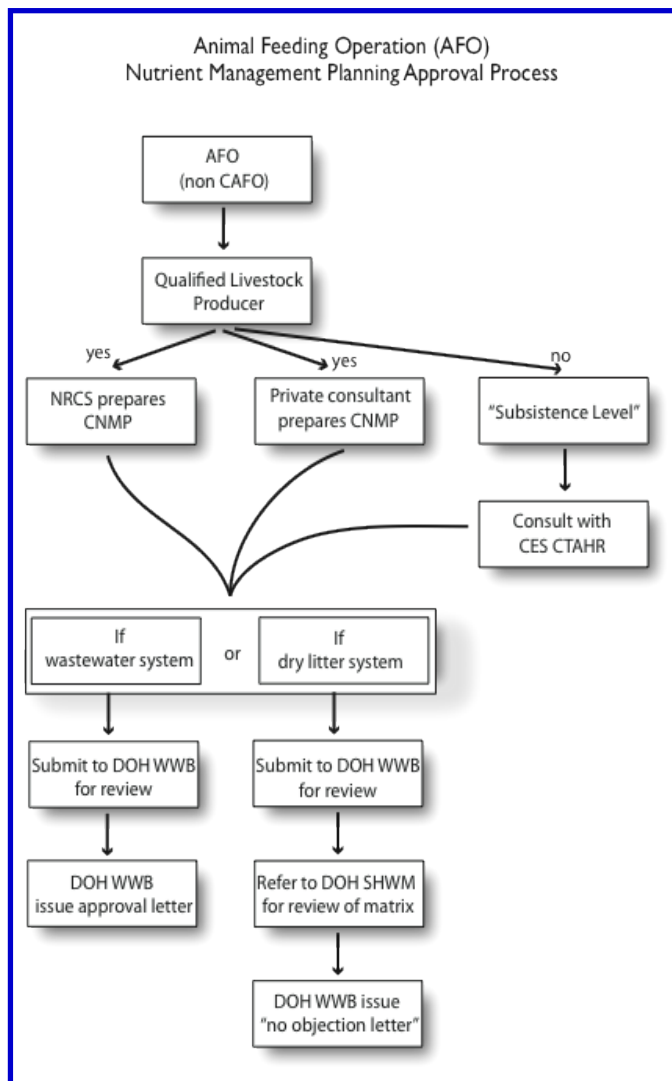
Hawaii State Department of Health

919 Ala Moana Bldg., Rm 300
Honolulu, HI 96814

Clean Water Branch (DOH-CWB)
Tel.: 808 586-4309

Wastewater Branch (DOH-WWB)
Tel.: 808 586-4294

Solid and Hazardous Waste Branch (DOH-SHWB)
Tel. 808 586-4226



Industry and Agency Partners

Hawaii Egg Producers Association
Hawaii Pork Industry Association
Hawaii Cattlemen's Association
Hawaii Fresh Milk Industry

Guidelines for livestock nutrient management in Hawaii

2010



Prepared by:

The University of Hawaii at Manoa, College of
Tropical Agriculture and Human Resources,
Cooperative Extension Service

In Collaboration with:

Hawaii State Department of Health
West Maui Soil & Water Conservation District
USDA - Natural Resource Conservation Service
U.S. Environmental Protection Agency,
Pacific Southwest Region 9

Livestock Nutrient Management



Frequently Asked Questions:

What is a CAFO? (administered by DOH CWB)

It is an acronym for Concentrated Animal Feeding Operation (see Table 1) with large number of animals or if the facility discharges or proposes to discharge into waters of the US.

What is an AFO? (administered by DOH-WWB)

It is an acronym for Animal Feeding Operation. Any facility where animals are confined and fed for 45-days or more, in a 12-month calendar year, is an AFO.

What is NPDES?

The National Pollutants Discharge Elimination System (NPDES) permits control water pollution by regulating point sources that discharge into US waters. Permits are regulated by the US EPA or the authorized state agency and are subject to public review; in Hawaii it is the Department of Health Clean Water Branch.

What is CNMP?

Comprehensive Nutrient Management Plan (CNMP) is a set of management practices and activities that address natural resource concerns for soil, water, plants, air, people and animals. (Call USDA-NRCS). The objective of a CNMP is to provide AFO owner/operators with a plan to manage manure and organic by-products by combining conservation practices and management activities into a system that, when implemented, will control soil erosion.

What is a BMP?

Best Management Practices (BMP) are designed to help reduce the amount of polluted runoff from farms and AFOs to drinking wells and state waters. Implementing agronomic practices and incorporating good record keeping will minimize odors and insect problems.

Table 1. CAFO Category

Livestock	Total Head
Beef	> 1,000
Dairy	> 700 cows
Broilers	> 30,000
Layers	> 82,000
Sheep	> 10,000
Swine	> 2,500 over 55 pounds

FAQs, continued:

Am I a CAFO if I discharge wastewater?

Any discharge into US waters could result in the operation being defined as a CAFO, regardless of the size of the operation. Discharge without permit is a violation of the Clean Water Act.

When can I discharge?

A facility is not allowed to discharge unless it has been permitted (NPDES permit) and only in event of a 24-hr, 25-year storm. The appropriate authority (DOH-WWB) should be informed whenever a discharge occurs.

EPA CAFO NPDES Regulations

In December 22, 2008, the U.S Environmental Protection Agency published the final CAFO rules; details are available at: www.epa.gov/npdes/caforule

The USDA-NRCS assists with plans for soil conservation including nutrient management. Use USDA-NRCS Conservation Practice Standard 590 Nutrient Management, as a guide. www.nrcs.usda.gov/technical/nutrient.html

Other Useful Websites:

Livestock Waste Management Guidelines can be found at: <http://hawaii.gov/health/environmental/water/wastewater/pdf/livestock.pdf>

Treatment and reuse of recycled water:

<http://hawaii.gov/health/environmental/water/wastewater/pdf/reuse-final.pdf> (see pg. 15-27)

Information on composting:

<http://www.nrcs.usda.gov/FEATURE/backyard/pdf/compost.pdf>
[ftp://ftp-fc.sc.egov.usda.gov/NHQ/practice-standards/standards/317.pdf](http://ftp-fc.sc.egov.usda.gov/NHQ/practice-standards/standards/317.pdf)

Proper handling of compost:

<http://www.extension.umn.edu/distribution/horticulture/M1192.html>
<http://www.agnet.org/library/eb/531/>

Food waste feeding laws in Hawaii:

<http://hawaii.gov/hdoa/admin-rules/subtitle-3-division-of-animal-industry/AR-17.pdf>
(see sub-chapter 5)

Food Safety:

Food safety is of primary importance for all sectors of the food and agricultural industries following outbreaks of E. coli or salmonella.
<http://www.ctahr.hawaii.edu/oc/freepubs/pdf/FST-37.pdf>
<http://www.csrees.usda.gov/nea/food/food.cfm>

Photos courtesy of G.K. Fukumoto