

LINDA LINGLE
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. Box 3378
HONOLULU, HAWAII 96801-3378

Bill No. 65

Support Y N

CHYOME LEINAALA FUKINO, M.D.
DIRECTOR OF HEALTH
Date 3/30/09

Time 1458

Cat AF AS AX BC
In reply, please refer to:
File:

Type 1 2 WI

HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

**HCR 65/HR 58, REQUESTING HAWAII AMERICAN WATER COMPANY TO
IMPLEMENT AN ODOR MITIGATION PLAN FOR ITS FACILITY IN HAWAII KAI**

**Testimony of Chiyome Leinaala Fukino, M.D.
Director of Health**

**March 31, 2009
10:00 a.m.**

1 **Department's Position:** The Department of Health (Department) cannot support this resolution as
2 written.

3 **Fiscal Implications:** None.

4 **Purpose and Justification:** The resolution requests that the Hawaii American Water Company
5 (Company) develop an odor mitigation plan identifying the improvements and a schedule of
6 implementation for the East Honolulu Waste Water Treatment Plant. The resolution also requests the
7 Department to monitor the improvements and report to the Hawaii Kai Neighborhood Board on its
8 progress.

9 The Department investigated odor complaints but has not found any violations of our rules so
10 far. Staff handled 6 complaints over 2007-2008 and measured the hydrogen sulfide in the ambient air
11 with only low level results. Hawaii has an ambient air quality standard for hydrogen sulfide of 25 parts
12 per billion (ppb), 1-hour average, which is based not only to protect the public health but also as an
13 average odor threshold to minimize odor nuisances. However, the hydrogen sulfide level that a person
14 can detect varies with one's nose and may be as low as 5 ppb. The Department is not opposed to Hawaii

1 American Water Company developing and implementing an odor mitigation plan for the East Honolulu
2 Waste Water Treatment Plant, but has concerns that the Department must monitor the compliance and
3 progress of the plan. The Department has no authority over the Company to develop and comply with
4 the mitigation plan and schedule, and therefore, recommends that the Company be self-monitored and
5 required to provide a written status and progress report on a monthly basis to all the applicable agencies
6 and entities including the Hawaii Kai Neighborhood Board.

7 Thank you for the opportunity to testify.

8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24

**TESTIMONY OF LEE A. MANSFIELD, PE
MANAGER OF HAWAII AMERICAN WATER
TO THE
HOUSE COMMITTEE ON ENERGY AND ENVIRONMENTAL PROTECTION
MARCH 31, 2009**

MEASURE: HCR 65
ENTITLED: "REQUESTING HAWAII AMERICAN WATER TO IMPLEMENT AN ODOR MITIGATION PLAN FOR ITS FACILITY IN HAWAII KAI"

Chair Hermina and Members of the Committee:

DESCRIPTION:

This concurrent resolution proposes that Hawaii American Water, owner and operator of the East Honolulu Wastewater Treatment Plant serving the Hawaii Kai community, develop and implement an odor mitigation plan.

POSITION:

Hawaii American Water (HAW) opposes this resolution and offers the following brief testimony.

INTRODUCTION:

My name is Lee A. Mansfield; I am a licensed professional engineer in the state of Hawaii and currently manager of Hawaii American Water.

TESTIMONY:

Hawaii American Water (HAW) is a privately owned and publicly regulated utility that provides wastewater treatment and disposal service to the community of Hawaii Kai in East Honolulu. HAW is opposed to this resolution as we believe we have already complied with its request: HAW has developed and implemented an odor mitigation plan. In addition, HAW has and continues to meet the State of Hawaii standards for odor emissions.

In 2006 HAW completed an odor management study which identified several sources of odors within the treatment facility. Based upon the recommendations of that study HAW evaluated the efficacy of the addition of certain chemicals to the process stream to control odors; and initiated and completed five capital improvement projects to reduce odors. The tests carried out on chemical addition showed that optimization of the past practice of adding chemicals to the main pump station was most effective in reducing odors. The five improvement projects accomplished the following in regards to odor mitigation:

- Optimum usage of ferric chloride at the main pump station to control odors at the plant.
- Elimination of odorous emissions from the plant's anaerobic digesters.
- Elimination of two open storage tanks, both of which had been a source of odors.
- Process flexibility in operation that allows for a reduction in odors released near the plant's fence line.
- Significant reduction in the production of odors in the primary clarifiers.

In addition, HAW purchased a "state of the art" portable hydrogen sulfide analyzer and has monitored the plant site and surrounding neighborhood weekly for odors since the beginning of 2007. To date all measurements taken show that hydrogen sulfide levels are well below the State of Hawaii standard of 25 parts-per-billion (ppb) and, in most cases, range between 0 and 3 ppb.

While HAW has not completely eliminated odor emissions from its plant, HAW has made significant progress. Last year HAW received only 4 complaints regarding odors from the plant. Further reductions in odors will incur significant capital costs while offering diminishing returns in regards to odor reduction and most cannot guarantee a completely odor free facility. To pursue this would place an unfair financial burden upon our rate payers.

Thank you for the opportunity to testify.

Sincerely,



Lee A. Mansfield, PE
Manager, Hawaii American Water