

AAA BestWater Co.

A Kama' aina Company Since 1983

Dear Homeowners:

Let us show you how you can have
all the following benefits . . .
. . . without it costing you anything more . . .
. . . than you are spending now!

With our exclusive
Ali'i 5-TECH⁺ Pure Water Quality System™

(Our most popular system selection among homeowners)

<u>STAGE ONE</u>	<u>STAGE TWO</u>	<u>STAGE THREE</u>
Whole-House System <i>Down-Flow Filtration/Purification</i> with <u>OPTI-CARB 1200+™</u>	Whole-House System <i>Softening/Conditioning</i> with <u>IONAC® C 249 NS</u>	Kitchen Sink Purification System <i>Drinking & Food Preparation Water</i> <u>Purification with SQC3</u>
Cleans, Polishes & Purifies <i>with</i> Filtration & GAC Adsorption TECHNOLOGIES	Cleans, Filters, Softens, Conditions <i>with</i> Filtration & ION Exchange TECHNOLOGIES	Cleans, Filters, Polishes, & Purifies <i>with</i> Micron Filtration, Carbon Adsorption, & Reverse Osmosis TECHNOLOGIES



You will enjoy all the following benefits!

*Please look through the following pages
to see why so many homeowners have chosen our exclusive system.*

BENIFIT: *Reduces Contaminants from your Drinking Water, Ice Cubes & Food Preparation Water*

☑ **Reduces Inorganic Contaminants *such as:***

☑ **NITRATE**:— Why is nitrate in drinking water a problem?

Nitrate can affect red blood cells and reduce their ability to carry oxygen to the body. In most adults and children these affected blood cells rapidly return back to normal. However, **the blood cells of infants who are given water with high levels of nitrate (or formula, & foods made with high levels of nitrate contaminated water) may develop a serious health condition due to the lack of oxygen.** This condition is called methemoglobinemia or "**blue baby syndrome.**" Some scientists think that diarrhea can make this problem even worse.



Blue baby syndrome is a rare but sometimes fatal disease that occurs primarily during the first four months of life. Symptoms include a blue discoloration of the lips, nose, and ears. Other symptoms include crying, vomiting and diarrhea.

Some studies have found an increase risk of spontaneous abortion or certain birth defects if the mother drank water high in nitrate. Women who are pregnant or who are trying to become pregnant should not consume water that is high in nitrate.



The Honolulu Board of Water Supply has reported **Nitrate levels up to 4.700 ppm**, in REGION 3 (Ewa-Waianae-Waipahu System). However, **Nitrate levels may rise quickly for short periods of time** because of rainfall or agricultural activity. **Virtually all the water distributed throughout Oahu, contains various levels of NITRATE.**

NOTE

U.S. mcl Standard for Nitrate: 10 ppm (Maximum Contaminant Level)

Germany mcl Standard for Nitrate: 4.4 ppm (Maximum Contaminant Level)

S. Africa mcl Standard for Nitrate: 4.4 ppm (Maximum Contaminant Level)

European Economic Community mcl Standard for Nitrate: 5.6 ppm (Maximum Contaminant Level)

The U.S. STANDARD is Half as Protective ≥

As Other Countries' Standards!!!!

"There is no substitute for Pure Water"
Honolulu Board of Water Supply

Can you put a price on 'peace-of-mind' ?

You get *Fresh, Filtered, Purified Water at your Tap and Refrigerator Dispenser,*
... of a quality better than most 'bottled water'.

Virtually all the water you'll need for food preparation, beverages, drinking water & ice.

Including all these BENEFITS, for a cost of about \$59 a YEAR! — 17¢ a DAY!

Reverse Osmosis Purification BENEFIT: *Reduces Contaminants from your Drinking Water, Ice Cubes & Food Preparation Water*

☑ Reduces Inorganic Contaminants *such as:*

☑ **Total Dissolved Solids (TDS):**— TDS is what gives your water it's heavy minerally taste. *The higher the TDS the worse the water tastes.* Based on our monthly, periodic testing of our customers water in the Ewa Beach areas, TDS levels have ranged from 350 ppm to over 600 ppm. The EPA Secondary Drinking Water Standard for TDS is a maximum of 500 ppm.

☑ **Sodium:**— Ideal for people with sodium restricted diets
Reduces excess sodium intake linked to heart disease and hypertension
Compliments homes with sodium in the water supply... reduces sodium to insignificant levels

☑ **Fluoride:**— The Honolulu Board of Water Supply has reported Fluoride levels up to 2.900 ppm, in REGION 3 (Ewa-Waianae-Waipahu System).

☑ **Chromium:**— The Honolulu Board of Water Supply has reported Chromium levels up to 9.000 ppm, in REGION 3 (Ewa-Waianae-Waipahu System).

☑ **Sulfate:**— The Honolulu Board of Water Supply has reported Sulfate levels up to 31.000 ppm, in REGION 3 (Ewa-Waianae-Waipahu System).

☑ **Radioactivity:**— The Honolulu Board of Water Supply has reported Radium 228 levels up to 0.576 ppm, in REGION 3 (Ewa-Waianae-Waipahu System). The MCLG (Maximum Contaminant Level Goal) is 0.000 ppm. The Honolulu Board of Water Supply has reported Beta/ Photon Emitters levels up to 4.100 ppm, in REGION 3 (Ewa-Waianae-Waipahu System). The MCLG (Maximum Contaminant Level Goal) is 0.000 ppm.

☑ Lead ☑ Sodium ☑ Chloride ☑ Copper ☑ Other Inorganic Contaminants

☑ Reduces Biological Contaminants *such as:*

☑ Amoebic Cysts ☑ Protozoa ☑ Giardia

☑ Reduces Particulate Contaminants *such as:*

☑ Asbestos ☑ Sediment ☑ Turbidity

☑ Reduces Chlorine

“There is no substitute for *Pure Water*”
Honolulu Board of Water Supply

Can you put a price on 'peace-of-mind' ?

You get *Fresh, Filtered, Purified Water at your Tap and Refrigerator Dispenser,*
... of a quality better than most 'bottled water'.

Virtually all the water you'll need for food preparation, beverages, drinking water & ice.

Including all these BENEFITS, for a cost of about \$59 a YEAR! — 17¢ a DAY!

**BENIFIT: Removes DBPs (Disinfection By-Products)
from all the Water throughout your home!**

What are Disinfection By-Products?

Water is chlorinated by the Honolulu Board of Water Supply to fight bacteria. Unfortunately, the chlorine is very reactive and easily combines with naturally occurring organic material to form **DISINFECTION BY-PRODUCTS (DBPs)**, such as **HAA5 (Total Haloacetic Acid)**, and **Trihalomethanes (TTHMs)**. TTHMs are a group of four chemicals: **chloroform, bromoform, bromodichloromethane and dibromochloromethane**.

It is these trihalomethanes that you are more likely to see at the tap than you would chlorine depending on where you are located within the water distribution system. The farther away from the treatment plant the more likely you will have trihalomethanes in your water as the time the water must travel within the distribution systems allows the chlorine to react.

In December 1998, the EPA enacted the stage 1 Disinfectants and Disinfection By-Products Rule. This rule lowered the maximum contaminant level (MCL) for TTHMs (Total Trihalomethanes) from 100 ppb to 80 ppb. Ground water systems were requested to comply with Stage 1 Disinfectants and Disinfection By-Products Rule by January 2004.

What are the health risks associated with DBPs?

Here is the EPA's statement: "EPA's main mission is the protection of human health and the environment. When carrying out this mission, EPA bases its decisions on the best available science. However, EPA must often make regulatory decisions with less than complete information and with uncertainties in the available information. EPA believes that consistent with public health protection goals of the SDWA, it is appropriate and prudent to err on the side of public health protection when there are indications that exposure to a contaminant may present risks to public health, rather than take no action until risks are unequivocally proven. Such is the case with the Stage 2 DBPR. **The best available science indicates that cancer, reproductive and developmental risks may be associated with exposure to DBPs and disinfected drinking water.**" ... "While recognizing these uncertainties, **EPA believes that the weight of evidence represented by the available epidemiology and toxicology studies on disinfected water and DBPs continues to support a concern for health risk** and a protective public health approach to regulation of DBPs."



"A number of epidemiology studies have been conducted to investigate the relationship between exposure to disinfected water and adverse effects like cancer or developmental and reproductive outcomes. While EPA cannot conclude there is a causal link between exposure to chlorinated surface water and cancer, **some epidemiology studies have suggested an association, albeit small, between bladder, rectal, and colon cancer and long term exposure to chlorinated surface water.** Although there are fewer published epidemiology studies that have been conducted to evaluate the possible relationship between drinking water and reproductive and developmental effects, **recent studies report increased risks for low birth weight, term low birth weight, birth defects, miscarriage, and still birth to women exposed to chlorinated surface water and elevated concentrations of TTHM.** **As with cancer,** although EPA cannot conclude at this time that there is a causal link between exposure to chlorinated water or DBPs and reproductive and developmental effects, **there is a troubling indication of an association.** Furthermore, **developmental effects may occur after short durations of exposure.**"

BENIFIT: Removes DBPs (Disinfection By-Products) from all the Water throughout your home!

Here is the EPA’s statement (continued):

“...the Agency believes the weight of evidence presented by the available epidemiological studies on chlorinated drinking water and toxicological studies on individual DBPs **support EPA’s concern about a potential health hazard.**”

“After reviewing the science, all committee members expressed concern for potential **health risks to pregnant women and their fetuses from DBPs...**”



Ozonation: Ozonation is used for disinfection in some Bottled Water production.

Here is the EPA’s statement regarding Ozonation: “...if bromide ion is present in the raw water halogenated DBPs may be formed. **These brominated DBPs appear to pose a greater health risk than non-brominated DBPs.**”



How am I Exposed to Disinfection By-Products (DBPs)?

BY INGESTION

Drinking Water , or Beverages & Food Prepared with Chlorinated Water; and,

May be found in BOTTLED WATER that uses Ozonation for disinfection.

Honolulu Board of Water Supply Distribution System Monitoring for Disinfection By-Products, 5/31/06 & 5/23/07 Reports REGION 3 (Ewa-Waianae-Waipahu System) — Tested by the State Dept. of Health

Contaminant	Average	Maximum	MCL (Maximum Contaminant Level) Allowed	MCLG (GOAL)
Bromoform	1.087 ppm	2.300 ppm	Not Yet Available	0
TTHMs (Trihalomethanes)	1.087 ppm	2.300 ppm	80.000 ppm	Not Applicable
HAA5 (Total Haloacetic Acid)	0.255 ppm	1.300 ppm	60.000 ppm	Not Applicable

5/31/06

5/31/06

NOTE: A system in compliance with an MCL could have TTHM occurrences well above the MCL. What is reported to the public is the running annual average. DBPs can peak above regulated levels. There are Health Risks with short durations of exposure to DBPs.

How will DBPs be Removed from My Water?

Best Available Technology (BAT):

Granular activated carbon (GAC) under the SDWA is the best available technology (BAT) for removing DBPs. SOURCE: EPA Guidance Manual, M-DBP simultaneous Compliance

AAA BestWater Co’s exclusive OPTI-CARB 1200+™ is a ‘superior’ Premium Grade *extra hard* highly *microporous* ‘*coconut shell*’ *granular activated charcoal* manufactured for ‘optimum’ **DBP** adsorption, and long life. The **AAA BestWater Co’s** (POE) Whole-House GAC Filter/Purification System contains the proper amount and type of GAC to handle the household flow rates, for the contact time required for the GAC to ‘adsorb’ the **DBPs**, thereby filtering all the water throughout your home.

OPTI-CARB 1200+™ meets **AWWA Standard B-600-74, ANSI/NSF Standard 61** and **Food Chemicals Codex Standards** for drinking water applications.

BENIFIT: *Removes VOCs (Volatile Organic Compounds)*
from all the Water throughout your home!



Chemical: Volatile Organic Compounds

Chemical description

What are volatile organic compounds?

Organic compounds are chemicals that contain carbon and are found in all living things. Volatile organic compounds, sometimes referred to as VOCs, are organic compounds that easily become vapors or gases. Along with carbon, they contain elements such as hydrogen, oxygen, fluorine, chlorine, bromine, sulfur or nitrogen.¹

A volatile organic compound is an organic compound which has a boiling point below that of water and which can easily vaporize or volatilize.²



Volatile Organic Compounds (VOCs) in Drinking Water

Drinking water containing high levels of volatile organic compounds (VOCs) may be harmful to human health. VOCs are a class of chemicals that have important properties in common: They evaporate, or vaporize, readily (they are volatile), and they contain carbon (and are therefore called organic).

Health Concerns

Volatile organic compounds may have a variety of harmful health effects. ... Drinking water containing one or more VOCs at levels above standards should not be consumed. In addition, **because little is known about the additive effects of these chemicals, special attention should be paid to detecting and eliminating VOC sources if two or more chemicals are found in water.** In any case, sources of VOC contamination should be eliminated if possible.

... Keep in mind, however, that **VOCs may also enter the body through skin absorption or through inhalation of water vapor.** ... POE treatment systems are recommended for VOC removal to ensure that all water used for drinking, cooking, cleaning, and bathing is free of contamination.³

How will VOCs be removed from my water?

The following treatment method has been approved by the EPA for removing VOCs:
Granular activated charcoal (GAC)²

[AAA BestWater Co's OPTI-CARB 1200+™ is a 'superior' Premium Grade extra hard highly microporous 'coconut shell' granular activated charcoal specifically manufactured for 'optimum' VOC adsorption.]

¹National Library of Medicine

²Environmental Protection Agency (EPA)

³[Prepared by: Gregory D. Jennings and Ronald E. Sneed *Extension Specialists, Biological & Agricultural Engineering, Mary Beth St. Clair, Extension Specialist, Toxicology, Published by: North Carolina Cooperative Extension Service*]

Today, over 191 wells on Oahu are contaminated with many different VOCs

— Virtually all the wells that can service most of Oahu's areas:

We have received the 2005 Report (most recent available) on the **GROUNDWATER CONTAMINATION on Oahu**, from the *State of Hawaii Department of Health*, published 7/06. According to the report all the water coming into your home meets the Federal & State standards. ***The big issue is the STANDARDS.*** — [Click Here >](#)

The report shows that **the wells that can service Oahu, can contain at least TWELVE (12) known VOC Contaminants:**

Atrazine — [Click Here >](#)

Benzene — [Click Here >](#)

CTC (Carbon Tetrachloride) — [Click Here >](#)

DBCP (1,2, Dibromo3-chloropropane) — [Click Here >](#)

DCP (1,2-Dichloropropane) — [Click Here >](#)

Desethyl Atrazine — [Click Here >](#)

Dieldrin — [Click Here >](#)

EDB (Ethylene dibromide) — [Click Here >](#)

MTBE (Methyl Tert-Butyl Ether) — [Click Here >](#)

PCE (Tetrachloroethylene) — [Click Here >](#)

TCE (Trichloroethylene) — [Click Here >](#)

TCP (1,2,3-Trichloropropane) — [Click Here >](#)

NOTE: Volatile Organic Compounds (VOCs) can be absorbed through the skin's pores and inhaled while taking a Shower, Bath, Washing Hands or Dishes at the Sink, and Standing over a Heated Pot of Water while Cooking! When you take a Shower or Bath, you could be getting as much exposure to these contaminants as drinking a couple of glasses of water!

... and ... **The BOWS reports show that**

virtually all the water distributed throughout Oahu,

Contains as many as THREE (3) different known DBPs: — [Click Here >](#)

HAA5 (Total Haloacetic Acid), TTHMs (Trihalomethanes) & Bromoform

This report also shows the possible non-carcinogenic **Health effects & EPA Carcinogen (Cancer Causing) Rating for exposure to those particular Contaminants.** Please review, with your spouse, the entire enclosed information.

When you review the **entire enclosed information**, you will understand why *we recommend you include a*

Whole-House GAC Filter/Purification System — [Click Here >](#)

as part of any *Water Treatment Systems* you install in your home.

Please see the following pages, and Equipment Brochures.

In April 1983, local TV news programs, reported that the Mililani Wells were contaminated with FOUR different **VOCs (Volatile Organic Compounds)** ≥. That was the first time any well contamination was revealed to the public. **What the public didn't know at that time**, was that the *Hawaii Department of Health and Honolulu Board of Water Supply* already knew in **February of 1981**, that the Mililani Wells were contaminated with VOCs. ... **and**, they also knew, **as far back as April of 1977**, of the first known well contamination on Oahu, that occurred in Waipahu — **with extremely high levels of VOC contamination**. The *Hawai'i Department of Health and Honolulu Board of Water Supply* did not reveal to the public what they knew about well contamination until many years later, and then only limited information was revealed to the public. **The facts were only fully revealed to the public in 1993, not by the State, or City, or the Hawaii Department of Health, but by the NATURAL RESOURCES DEFENSE COUNCIL / 1993 Publication 'Groundwater In Hawai'i'] This publication is a must read for every resident of Oahu — anyone who reads this publication will be shocked and appalled to find out what wasn't revealed to them by the responsible agencies at the time — the extent of contamination, the number of different contaminants, and the health effects associated with exposure to those contaminants.** To see the publication and get all the shocking facts and history of Oahu's well water contamination . [click here](#) ≥

Does this scenario of *government water suppliers* not revealing the extent of water contamination and related health effects to consumers, and telling the public that the water supplies are perfectly healthy and safe, 'sound familiar' ? ? ? **Have you ever seen the movies 'Erin Brockovich' with Julia Roberts and 'A Civil Action' with John Travolta?**

Today, over 191 wells on Oahu are contaminated with many different VOCs— Virtually all the wells that can service most of Oahu's areas: North Shore-Mokuleia, Waialua, Haleiwa, Waimea, Pu-pukea, Sunset Beach; Wahiawa; Mililani Town; West Oahu-Waianae; Kapolei-Ko'Olina, Makakilo, Ewa, Ewa Beach; Waipahu-Royal Kunia, Village Park, Waikele, Seaview, Crestview, Waipio; Pearl City; Aiea; Foster Village; Salt Lake; Moanalua Valley; Kalihi; throughout town to Wilder area; McCully; Kaimuki; St. Louis Heights; Palolo Valley; Maunalani Heights; Wilhelmina Rise; Diamond Head; Kahala; and East Oahu-Waialae Nui, Kalani Valley, Waialae Iki, Aina Haina, Hawailoa Ridge, Niu Valley, Kuliouou, Hahaione Valley, Mariners Ridge, Port Lock, Hawaii Kai, Kalama Valley, Queens Gate; & Wai-manalo.

In addition, virtually all the water distributed throughout Oahu, contains up to THREE different DBPs. ≥

In addition, virtually all the water distributed throughout Oahu, contains various levels of NITRATE. ≥

Please see the following pages for current information on the Water Quality Issues for your area . . .

BENIFIT: *Removes VOCs (Volatile Organic Compounds)*
from all the Water throughout your home!

Volatile Organic Compounds (VOCs):

ARE INHALED - ABSORBED THROUGH SKIN PORES

SHOWERING - BATHING
WASHING HANDS-FACE-BODY
WASHING DISHES
— IN HOT OR WARM WATER —

ARE INHALED

STANDING OVER HEATED WATER WHILE COOKING

ARE INGESTED

DRINKING WATER OR BEVERAGES PREPARED WITH WATER



SHOWERING



WASHING HANDS



WASHING DISHES



DRINKING WATER



BATHING



COOKING
OVER HEATED WATER



DRINKING BEVERAGES
PREPARED WITH WATER



BENIFIT: *Removes VOCs (Volatile Organic Compounds)*
from all the Water throughout your home!

VOC Contaminants found in Other Well Sources in REGION 3 (Ewa-Waianae-Waipahu System)
that can serve your address *(It is possible for the HBWS to change your supply sources during the year due to any one of a number of factors that may occur in the supply & distribution system)*

EPA Health Advisory on the Non-Carcinogenic Health Effects
Of Exposure to the following Contaminants Found in the Well Sources of REGION 3,
As reported by the Hawaii Department of Health, Groundwater Contamination Maps Reports

<u>Contaminant</u>	<u>EPA: Possible Non-Carcinogenic Health Effects</u>	<u>EPA: Carcinogen Rating</u>	<u>Contaminant</u>	<u>EPA: Possible Non-Carcinogenic Health Effects</u>	<u>EPA: Carcinogen Rating</u>
Atrazine	Cardiovascular System, & Reproductive Problems; & Retinal & Muscle Degeneration	Increased Risk of CANCER	Desethyl Atrazine	Cardiovascular System, & Reproductive Problems; & Retinal & Muscle Degeneration	Increased Risk of CANCER
Benzene	Anemia, Decrease in Red Blood Cells; & Chromosome Aberrations	Increased Risk of CANCER	Dieldrin	Central Nervous System, & Liver, & Kidney Damage; & Malformation of Male Sex Organs	Increased Risk of CANCER
CTC (Carbon Tetrachloride)	Liver Damage	Increased Risk of CANCER	EDB (Ethylene dibromide)	Heart, & Kidney, & Liver, & Stomach, & Gastrointestinal System, & Respiratory System, & Nervous System Damage; & Reproductive System Problems	Increased Risk of CANCER
DBCP (1,2 Dibromo 3-chloro-Propane)	Reproductive Difficulties, & Anti-Fertility; & Kidney Damage	Increased Risk of CANCER	TCE (Trichloro-ethylene)	Central Nervous System Depression; & Liver, & Kidney Damage	Increased Risk of CANCER
DCP (1,2- Dichloro-propane)	Bladder, & Kidney, & Liver, & Gastrointestinal Tract & Respiratory Tract Damage	Increased Risk of CANCER	TCP (Trichloro-ethylene)	Decreased Red Blood Cells; & Liver, & Kidney Damage	Increased Risk of CANCER

“There is no substitute for *Pure Water*”
Honolulu Board of Water Supply

Can you put a price on ‘peace-of-mind’ ?

State of Hawai'i's Department of Health Groundwater Contamination Maps 2005
Department of Health REPORT . . . States the following

“The 2005 Maps show that **groundwater contamination continues to occur in Hawai'i.** In most cases, once a groundwater source has been contaminated, it remains contaminated for many years. These maps identify locations where certain groundwater contaminants have been detected and confirmed in water sources. The Maps show that **a few wells that were previously not contaminated by a particular chemical have now shown positive detections of chemicals known to be present in nearby wells.**”

[State of Hawaii Dept. of Health Groundwater Contamination Maps Report 2005]

“The 2005 Maps identify **organic and other chemical contaminants that have been detected and confirmed in drinking water wells and select non-potable wells throughout the state.** Groundwater can become contaminated through natural processes, but anthropogenic, or human-induced, contamination poses more serious problems. **Contaminants may come from herbicides, pesticides, industrial solvents, and other sources which are applied, spilled, or leaked into the ground.** **Groundwater contamination is a significant concern because nearly all of Hawaii's drinking water comes from groundwater sources.**”

“**Some contaminated wells may not be reported** because of lack of confirmed data, or **the wells have not been tested.** The contamination levels in the report refer to reported levels of contamination on a specific sampling date. **Levels of groundwater contamination may fluctuate for a number of reasons, including actual diminishing or increasing levels of contamination, chemical breakdown of contaminants, variability in sampling and analytical methods, the effects of pumping rates, and other factors.**”

(SOURCE: 2005 State of Hawai'i Department of Health Groundwater Contamination Maps for the State of Hawai'i, distributed, July 2006-*Most recent available*)

Did you know? The Hawaii State Dept. of Health has stated that

“... what is considered safe [federal and state standards] ≥ today may not be considered safe tomorrow. ...”

“... as a matter of policy, the United States Environmental Protection Agency has taken the position that an increased cancer risk can be expected to occur at any level. Therefore, there is no “safe” level of exposure for carcinogenic agents....”

(SOURCE: Director, State Dept. of Health Advertisement, The Honolulu Advertiser, June 29, 1988)

The 2003, 2004 & 2005 Maps reports includes the following:—

Exposure to the known VOCs in Hawaii’s water supplies

have been reported by the *EPA* and the Hawaii *DOH*

to include the following known health effects:

▶ Increased Risk of CANCER

▶ Increased Risk of BREAST CANCER

- | | |
|---|--|
| ▶ Liver Damage | ▶ Muscle Degeneration |
| ▶ Kidney Damage | ▶ Stomach Damage |
| ▶ Bladder Damage | ▶ Gastrointestinal Tract Damage |
| ▶ Changes in Adrenal Glands | ▶ Nervous System Damage |
| ▶ Respiratory System Damage | ▶ Central Nervous System Depression |
| ▶ Cardiovascular System Problems | ▶ Chromosome Aberrations |
| ▶ Heart Damage | ▶ Reproductive System Problems |
| ▶ Retinal Degeneration | & Difficulties |
| ▶ Anemia | ▶ Anti-Fertility Effects |
| ▶ Decreased Red Blood Cells | ▶ Male Reproductive System Problems |
| | ▶ Malformation of Male Sex Organs |

Are you willing to risk the known health effects associated with Exposure to the VOCs in your water supply?

Pesticide combinations add up to big trouble

Associated Press

WASHINGTON - **Pesticides that by themselves have been linked to breast cancer and male birth defects are up to 1,000 times more potent when combined, according to a study.**

A federal environmental official called the finding astonishing and said if it is confirmed in other labs, it could force a revolution in the way environmental effects of chemicals are measured.

The study centered on endosulfan, dieldrin, toxaphene and chlordane, all pesticide chemicals that are known to turn on a gene that makes estrogen in animals.

Estrogen is a hormone that controls formation of female organs. **A surplus of the hormone has been linked to breast cancer and, to malformation of male sex organs.**

By themselves, the pesticides have only a very weak effect on the estrogen gene, said John A. McLachlan of Tulane University, leader of a team that tested the chemicals. "If you test them individually, you could almost conclude that they were non-estrogenic, almost inconsequential," he said.

**"These findings are
Astonishing"**

Dr. Lynn Goldman,
Environmental Protection Agency

"But when we put them in combination, their potency jumped up 500 to 1,000-fold."

McLachlan said it was expected that combinations of the chemicals would be additive; that is, the effects of two chemicals together would equal the sum of the effects of the chemicals alone.

"Instead of one plus one equaling two, we found in some cases that one plus one equals a thousand."

The study is being published today in the journal Science.

"These findings are astonishing," said Dr. Lynn Goldman, chief of the Environmental Protection Agency's Office of Prevention, Pesticides and Toxic Substances.

"The policy implications are enormous about how we screen environmental chemicals for estrogen effects."

How will VOCs be Removed from My Water?

The following treatment method has been approved by the EPA for removing: VOCs, Organic and Synthetic Organic Chemicals, *including* Pesticides, Insecticides, Herbicides, Termiticides, Fumigants, Solvents, & Gas Additives, from water.

Best Available Technology (BAT)

Granular activated carbon (GAC) under the SDWA is the best available technology (BAT) for removing synthetic organic chemicals (SOC); virtually all pesticides are SOCs.

SOURCE: Office of Pesticide Programs U.S. Environmental Protection Agency (EPA)
The Incorporation of Water Treatment Effects On Pesticide Removal and Transformations in Food Quality Protection Act (FQPA) Drinking Water Assessments October 25, 2001

“... The Panel agreed that ... Activated carbon is the treatment process that appears to have the greatest removal efficiency for pesticides. Activated carbon can be added in ... a granular form (GAC) as part of the filtration process.

SOURCE: SAP Report No. 2001-02 February 12, 2001. REPORT: FIFRA Scientific Advisory Panel Meeting, September 29, 2000, A Set of Scientific Issues Being Considered by the EPA Regarding: Progress Report on Estimating Pesticide Concentrations in Drinking Water and Assessing Water Treatment Effects on Pesticide Removal and Transformation: A Consultation

NOTE:

- 1) Filter **Cartridges** with GAC installed at the Point of Entry (POE) of the water supply to the home, **ARE NOT EFFECTIVE in removing VOCs, Organic and Synthetic Organic Chemicals, including** Pesticides, Insecticides, Herbicides, Termiticides, Fumigants, Solvents, & Gas Additives, from the household water. Those types of cartridges do not contain enough GAC to provide sufficient contact time for the GAC to adsorb the contaminant, due to the household water flow rates. (Some GAC Filter Cartridges may remove those types of contaminants from drinking water, if used at the Point of Use (POU) where flow rates do not exceed .5 to 1.0 GPM (gallons per minute), such as tied-into a sink or refrigerator water supply; and where the filter has been NSF Tested & Certified to remove that type of contaminant. Any and all GAC Filter Cartridges cannot remove those types of contaminants, unless they have the correct filter media, correct flow rate, & correct design. That is why the NSF Testing & Certification label for those types of contaminants for Drinking Water Filter Systems is a must when using such a filter system. **All Filter Cartridges/Systems ARE NOT THE SAME!**)
- 2) **AAA BestWater Co's exclusive OPTI-CARB 1200+™** is a 'superior' Premium Grade *extra hard* highly *microporous 'coconut shell' granular activated charcoal* specifically manufactured for 'optimum' **VOC** adsorption, and long life. The **AAA BestWater Co's** (POE) Whole-House GAC Filter/Purification System contains the proper amount and type of GAC to handle the household flow rates, for the contact time required for the GAC to 'adsorb' the **VOCs**, thereby filtering ***all the water throughout your home.***
OPTI-CARB 1200+™ meets **AWWA Standard B-600-74, ANSI/NSF Standard 61** and **Food Chemicals Codex Standards** for drinking water applications.

State of Hawai`i
Department of Health
Groundwater Contamination Maps
2005

The 2005 Groundwater Contamination Maps for the State of Hawai`i are the tenth edition of the Maps since they were first published in August of 1989. The Maps were not published between 1999 and 2001 due to resource limitations. However, this publication includes historical monitoring data generated since the first publication unless subsequent monitoring data shows no detection at which time the contaminant was removed from the report.

Where do these Maps come from?

The 2005 Groundwater Contamination Maps for the State of Hawai`i were prepared by the Groundwater Protection Program, Safe Drinking Water Branch of the Hawai`i Department of Health (DOH). The Maps represent current information available to the DOH between January 1, 2005, through December 31, 2005, and are based on monitoring data for public drinking water wells, select non-potable wells, fresh water springs, and other testing data available to the DOH.

What do these Maps represent?

The 2005 Maps identify **organic and other chemical contaminants that have been detected and confirmed in drinking water wells, select non-potable wells, and fresh water springs** throughout the state. **Groundwater can become contaminated through** natural processes, but anthropogenic, or human-induced, contamination poses more serious problems. **Contaminants may come from** herbicides, pesticides, industrial solvents, and other sources which are applied, spilled, or leaked into the ground. **Groundwater contamination is a significant concern** because nearly all of Hawai`i's drinking water comes from groundwater sources.

The intent of the Maps is to identify only those wells with detectable levels of groundwater contamination. **Some contaminated wells may not be reported because of lack of confirmed data, or the wells have not been tested.** The contamination levels in this document refer to reported levels of contamination on a specific sampling date. **Levels of groundwater contamination may fluctuate for a number of reasons,** including actual diminishing or increasing levels of contamination, chemical breakdown of contaminants, variability in sampling and analytical methods, the effects of pumping rates, and other factors.

These are the contaminated wells that can service the following areas:

BOWS Region 3 (Ewa-Waipahu-Waianae System):

Ewa Beach, Royal Kunia, Village Park, Waipahu, Waikele, Kapolei, Makakilo, Ko'Olina & Waianae

The **Contaminated Wells** are highlighted in 'ORANGE'

The **VOC Contaminants** for that **Well** are highlighted in 'YELLOW'

O'AHU 2005 Contamination Map						
Map #	Well #	Well Name	Use	Contaminant	Detected Level (ppb)	Date
18	2255-32	Halawa Plant (Navy)	DW	Chlordane	0.3	04/13/05
18	2255-32	Halawa Plant (Navy)	DW	Dieldrin	0.02	11/16/05
19	2255-37	BWS Halawa Well 2	DW	Dieldrin	0.04	04/07/04
19	2255-39	BWS Halawa Well 1	DW	Dieldrin	0.02	11/09/05
20	2301-34	Hoaeae, P1	DW	TCP	0.21	10/27/05
20	2301-35	Hoaeae, P2	DW	TCP	0.20	11/01/05
20	2301-36	Hoaeae, P4	DW	Atrazine	0.07	04/13/05
20	2301-36	Hoaeae, P4	DW	Desethyl Atrazine	NQ<0.05	11/03/03
20	2301-36	Hoaeae, P4	DW	Dieldrin	0.01	10/27/05
20	2301-36	Hoaeae, P4	DW	TCP	0.32	10/27/05
20	2301-37	Hoaeae, P3	DW	Atrazine	0.76	04/14/05
20	2301-37	Hoaeae, P3	DW	Dieldrin	0.01	10/27/05
20	2301-37	Hoaeae, P3	DW	TCP	0.40	10/27/05
20	2301-38	Hoaeae, P5	DW	TCP	0.23	11/01/05
20	2301-39	Hoaeae, P6	DW	TCP	0.15	10/27/05
21	2301-40	Kunia III, P1 (before)	DW	TCP	0.12	10/14/05
21	2301-41	Kunia III, P2 (before)	DW	TCP	0.10	10/27/05
21	2301-42	Kunia III, P3 (before)	DW	TCP	0.21	10/14/05
22	2302-01	Kunia Wells I, P1 (before)	DW	TCP	0.69	10/06/03
22	2302-02	Kunia Wells I, P2 (before)	DW	Desethyl Atrazine	0.09	11/10/03
22	2302-02	Kunia Wells I, P2 (before)	DW	TCE	NQ<0.5	08/05/05
22	2302-02	Kunia Wells I, P2 (before)	DW	TCP	0.48	10/27/05
22	2302-03	Kunia Wells I, P3 (before)	DW	TCE	NQ<0.5	08/08/05
22	2302-03	Kunia Wells I, P3 (before)	DW	TCP	0.29	11/04/05
22	2302-04	Kunia Wells I, P4 (before)	DW	Atrazine	0.05	03/15/05
22	2302-04	Kunia Wells I, P4 (before)	DW	TCE	NQ<0.5	07/27/04
22	2302-04	Kunia Wells I, P4 (before)	DW	TCP	0.34	10/27/05
23	2355-06	Aiea Well Pump 1	DW	Dieldrin	0.04	11/09/05
23	2355-07	Aiea Well Pump 2	DW	Dieldrin	0.03	11/09/05
24	2356-59	Kaamilo Wells	DW	Dieldrin	0.01	05/17/05
24	2356-58 & 59	Kaamilo Wells	DW	PCE	0.03	04/20/85
25	2400-01	Waipahu I, P2 (before)	DW	EDB	NQ<0.04	11/03/05
25	2400-01	Waipahu I, P2 (before)	DW	TCE	NQ<0.5	07/13/05
25	2400-01	Waipahu I, P2 (before)	DW	TCP	0.40	11/03/05
25	2400-02	Waipahu I, P1 (before)	DW	EDB	NQ<0.04	07/12/05
25	2400-02	Waipahu I, P1 (before)	DW	TCE	NQ<0.5	07/15/05
25	2400-02	Waipahu I, P1 (before)	DW	TCP	0.50	07/12/05
25	2400-03	Waipahu I, P4 (before)	DW	EDB	NQ<0.04	04/14/99
25	2400-03	Waipahu I, P4 (before)	DW	TCP	NQ<0.5	04/14/99
25	2400-04	Waipahu I, P3 (before)	DW	EDB	NQ<0.04	11/03/05
25	2400-04	Waipahu I, P3 (before)	DW	TCE	NQ<0.5	11/28/05
25	2400-04	Waipahu I, P3 (before)	DW	TCP	0.40	11/03/05
26	2400-05	Waipahu II P1 (before)	DW	TCP	0.35	10/14/05
26	2400-06	Waipahu II P2 (before)	DW	TCP	0.54	10/14/05
26	2400-08	Waipahu II P3 (before)	DW	TCP	0.25	10/14/05
27	2402-01	Kunia Wells II, P1 (before)	DW	DBCP	NQ<0.04	07/20/01
27	2402-01	Kunia Wells II, P1 (before)	DW	TCE	NQ<0.5	07/20/01
27	2402-01	Kunia Wells II, P1 (before)	DW	TCP	1.0	07/20/01
27	2402-02	Kunia Wells II, P2 (before)	DW	DCP	NQ<1.0	03/02/04
27	2402-02	Kunia Wells II, P2 (before)	DW	TCE	NQ<0.5	11/30/05
27	2402-02	Kunia Wells II, P2 (before)	DW	TCP	0.48	11/17/05

These are the contaminated wells that can service the following areas:

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Ewa Beach, Royal Kunia, Village Park, Waipahu, Waikele, Kapolei, Makakilo, Ko'Olina & Waianae

The Contaminated Wells are highlighted in 'ORANGE'

The VOC Contaminants for that Well are highlighted in 'YELLOW'

O'AHU 2005 Contamination Map						
Map #	Well #	Well Name	Use	Contaminant	Detected Level (ppb)	Date
27	2402-03	Kunia Wells II, P3 (before)	DW	DCP	NQ<1.0	08/18/05
27	2402-03	Kunia Wells II, P3 (before)	DW	TCE	NQ<0.5	11/30/05
27	2402-03	Kunia Wells II, P3 (before)	DW	TCP	0.44	11/17/05
27	2402-04	Kunia Wells II, P4 (before)	DW	DCP	NQ<1.0	08/18/05
27	2402-04	Kunia Wells II, P4 (before)	DW	TCE	NQ<0.5	11/30/05
27	2402-04	Kunia Wells II, P4 (before)	DW	TCP	1.43	11/04/05
28	2458-01	Pearl City Shaft (Manana)	DW	PCE	0.03	4/18/85*
28	2458-01	Pearl City Shaft (Manana)	DW	TCP	0.04	07/07/05
				*ND after this date. PCE detection levels raised from 0.01 ppb to 0.2 ppb.		
29	2459-19	Waipio Hts P2	DW	TCP	0.13	11/16/05
29	2459-20	Waipio Hts P1	DW	TCP	0.12	11/16/05
30	2459-23	Waipio Hts I, P1	DW	TCP	0.20	01/26/05
30	2459-24	Waipio Hts I, P2	DW	TCP	0.19	01/16/03
31	2500-01	Waipio Hts. II, P1	DW	TCE	0.60	12/16/04
31	2500-01	Waipio Hts. II, P1	DW	TCP	0.50	12/07/04
31	2500-02	Waipio Hts. II, P2	DW	TCP	0.83	10/18/04
32	2600-02	Dairy Co. (Kipapa Acres)	DW	TCE	NQ<0.5	07/19/05
32	2600-02	Dairy Co. (Kipapa Acres)	DW	TCP	0.46	12/01/05
33	2600-03	Mililani III, P7 (before)	DW	DBCP	0.07	11/08/05
33	2600-03	Mililani III, P7 (before)	DW	DCP	NQ<1.0	08/24/05
33	2600-03	Mililani III, P7 (before)	DW	TCP	0.99	11/08/05
33	2600-04	Mililani III, P8 (before)	DW	DBCP	0.09	07/18/02
33	2600-04	Mililani III, P8 (before)	DW	DCP	NQ<1.0	07/18/02
33	2600-04	Mililani III, P8 (before)	DW	TCP	2.29	07/18/02
34	2603-01	Hawaii Country Club (before)	DW	DBCP	0.04	12/02/05
34	2603-01	Hawaii Country Club (before)	DW	EDB	NQ<0.04	12/02/05
34	2603-01	Hawaii Country Club (before)	DW	TCP	0.17	12/02/05
35	2659-02	Waipio Hts III, P2	DW	EDB	NQ<0.04	10/14/04
35	2659-02	Waipio Hts III, P2	DW	TCP	0.20	11/14/05
35	2659-03	Waipio Hts III, P1	DW	EDB	NQ<0.04	11/16/05
35	2659-03	Waipio Hts III, P1	DW	TCP	0.49	11/16/05
36	2800-01	Mililani I, P1 (before)	DW	DBCP	0.12	11/08/05
36	2800-01	Mililani I, P1 (before)	DW	DCP	NQ<1.0	12/02/05
36	2800-01	Mililani I, P1 (before)	DW	TCP	3.37	11/08/05
36	2800-02	Mililani I, P2 (before)	DW	DBCP	0.06	11/03/05
36	2800-02	Mililani I, P2 (before)	DW	DCP	NQ<1.0	12/01/05
36	2800-02	Mililani I, P2 (before)	DW	TCP	0.91	11/03/05
36	2800-03	Mililani I, P3 (before)	DW	DBCP	0.06	11/03/05
36	2800-03	Mililani I, P3 (before)	DW	DCP	NQ<1.0	12/12/05
36	2800-03	Mililani I, P3 (before)	DW	TCP	1.27	11/03/05
36	2800-04	Mililani I, P4 (before)	DW	DBCP	0.27	11/03/05
36	2800-04	Mililani I, P4 (before)	DW	DCP	NQ<1.0	12/12/05
36	2800-04	Mililani I, P4 (before)	DW	TCP	3.26	11/03/05
37	2803-03-04	Kunia Battery	IND	Atrazine	NQ<0.05	09/28/93
37	2803-03-04	Kunia Battery	IND	Desethyl Atrazine	NQ<0.05	09/30/92
37	2803-03-04	Kunia Battery	IND	PCE	1.65	04/23/85
37	2803-03-04	Kunia Battery	IND	TCE	3.70	07/24/85
38	2803-05	Del Monte Kunia 3 (before)	DW	CTC	NQ<0.5	12/02/05
38	2803-05	Del Monte Kunia 3 (before)	DW	DCP	NQ<1.0	12/02/05

These are the contaminated wells that can service the following areas:

BOWS Region 3 (Ewa-Waipahu-Waianae System):

Ewa Beach, Royal Kunia, Village Park, Waipahu, Waikele, Kapolei, Makakilo, Ko'Olina & Waianae

The **Contaminated Wells** are highlighted in 'ORANGE'

The **VOC Contaminants** for that **Well** are highlighted in 'YELLOW'

O'AHU 2005 Contamination Map						
Map #	Well #	Well Name	Use	Contaminant	Detected Level (ppb)	Date
38	2803-05	Del Monte Kunia 3 (before)	DW	PCE	NQ<0.5	12/02/05
38	2803-05	Del Monte Kunia 3 (before)	DW	TCE	3.10	12/02/05
38	2803-05	Del Monte Kunia 3 (before)	DW	TCP	0.22	12/02/05
38	2803-07	Del Monte Kunia 4 (before)	DW	CTC	NQ<0.5	02/28/05
38	2803-07	Del Monte Kunia 4 (before)	DW	TCE	1.1	08/26/05
38	2803-07	Del Monte Kunia 4 (before)	DW	TCP	0.22	08/26/05
39	2859-01	Mililani II, P5 (before)	DW	DBCP	0.12	02/03/03
39	2859-01	Mililani II, P5 (before)	DW	TCP	2.13	02/03/03
39	2859-02	Mililani II, P6 (before)	DW	DBCP	0.08	11/08/05
39	2859-02	Mililani II, P6 (before)	DW	TCP	0.70	11/08/05
40	2901-02	Schofield Battery (before)	DW	PCE	0.6	12/05/05
40	2901-02	Schofield Battery (before)	DW	TCE	23.4	12/05/05
41	2901-08	Wahiawa Wells 1, P3	DW	CTC	0.6	02/20/04
41	2901-08	Wahiawa Wells 1, P3	DW	PCE	1.60	02/20/04
41	2901-11	Wahiawa Wells 1, P1	DW	CTC	NQ<0.5	12/05/05
41	2901-11	Wahiawa Wells 1, P1	DW	PCE	0.8	12/05/05
41	2901-11	Wahiawa Wells 1, P1	DW	TCE	NQ<0.5	12/05/05
41	2901-12	Wahiawa Wells 1, P2	DW	CTC	0.6	11/04/04
41	2901-12	Wahiawa Wells 1, P2	DW	PCE	1.0	11/04/04
42	2902-01	Wahiawa Wells II, P1	DW	CTC	NQ<0.5	11/04/04
42	2902-01	Wahiawa Wells II, P1	DW	PCE	0.7	11/04/04
42	2902-01	Wahiawa Wells II, P1	DW	TCP	0.12	11/04/04
42	2902-02	Wahiawa Wells II, P2	DW	CTC	NQ<0.5	08/15/05
42	2902-02	Wahiawa Wells II, P2	DW	PCE	1.5	08/15/05
42	2902-02	Wahiawa Wells II, P2	DW	TCP	0.13	08/15/05
43	3102-02	Waialua Sugar P24	IRR	DBCP	0.02	08/20/84
43	3102-02	Waialua Sugar P24	IRR	TCP	0.50	06/03/85
44	3203-01	Waialua Sugar P25	IRR	DBCP	0.12	06/07/83
45	3203-02	Waialua Sugar P26	IRR	DBCP	0.01	06/03/85
45	3203-02	Waialua Sugar P26	IRR	TCP	0.80	06/03/85
46	3307-01	Waialua Battery P2	DW	Atrazine	0.12	11/04/92
46	3307-01	Waialua Battery P2	DW	Desethyl Atrazine	0.15	11/14/92
47	3404-02	Waialua Sugar P17	IRR	DBCP	0.06	11/09/93
47	3404-02	Waialua Sugar P17	IRR	TCP	1.10	11/09/93
48	3405-01	Waialua Wells P1	DW	TCE	NQ<0.5	12/05/05
48	3405-01	Waialua Wells P1	DW	TCP	0.24	11/21/05
48	3405-02	Waialua Wells P2	DW	TCE	NQ<0.5	12/05/05
48	3405-02	Waialua Wells P2	DW	TCP	0.28	11/21/05
49	3405-03	Haleiwa Well P1	DW	DBCP	NQ<0.04	12/15/04
49	3405-03	Haleiwa Well P1	DW	TCE	0.5	12/15/04
49	3405-03	Haleiwa Well P1	DW	TCP	0.62	12/15/04
49	3405-04	Haleiwa Well P2	DW	DBCP	NQ<0.04	12/15/04
49	3405-04	Haleiwa Well P2	DW	TCE	0.5	12/15/04
49	3405-04	Haleiwa Well P2	DW	TCP	NQ<0.04	12/15/04
50	3505-01-20	Waialua Sugar P3	Inactive	DBCP	NQ<0.04	07/24/97
50	3505-01-20	Waialua Sugar P3	Inactive	TCP	NQ<0.5	07/24/97
51	3506-03	Haleiwa Battery	IRR	Atrazine	0.13	11/04/92
51	3506-03	Haleiwa Battery	IRR	Lindane	0.01	11/12/87

What do these Maps tell us?

The 2005 Maps show that groundwater contamination continues to occur in Hawai'i. In most cases, once a groundwater source becomes contaminated, it remains contaminated for many years. The Maps show that a few wells that were previously not contaminated by a particular chemical have now shown positive detections of chemicals known to be present in nearby wells. All new contaminant levels are below the Maximum Contaminant Levels (MCLs) established by the Federal Environmental Protection Agency (EPA) as part of the Federal Drinking Water Standards¹.

New contaminant(s) were found in the following wells on O`ahu in 2005.

Map #22	Kunia I, Pump 3 (Well #2302-03)	TCE
Map #27	Kunia II, Pump 3 (Well #2402-03)	DCP

MTBE detected in Wahiawa Well II, Pump 2 (Well #2902-02) in 2004 was not detected in 2005.

New contaminant(s) were found in the following wells on O`ahu in 2004.

Map #18	Navy Halawa Plant (Well #2255-32)	Chlordane
Map #20	Ho`ae`ae, Pump 3 (Well #2301-37)	Atrazine, Dieldrin
Map #21	Kunia I, Pump 2 (Well #2302-02)	TCE
Map #27	Kunia II, Pump 4 (Well #2402-04)	DBCP, DCP, TCE, TCP
Map #42	Wahiawa II, Pump 2 (Well #2902-02)	CTC, MTBE, PCE, TCP

No chemical contaminants have been detected in the drinking water wells on Moloka'i and Lana'i since the Maps were first prepared in 1989.

Is the water safe?

The 2005 Maps indicate that the contaminant concentrations detected in Hawai'i's groundwater are generally below state and federal drinking water standards. This means that as long as concentrations are below these standards and advisory levels, the water is considered safe and does not pose a serious health risk. If contamination levels approach state and federal drinking water standards, the well's owner is required to take steps to reduce the contaminant concentration to a safe level. This could involve the installation of a treatment system, blending of the water with higher quality water, or removing the well from service.

How are the Maps organized?

This report contains maps and tables for the islands of O`ahu, Hawai'i, Maui and Kaua'i. The Maps identify the locations of wells, well fields (an area where many wells in proximity share the same groundwater source), and fresh water springs with current and historical monitoring information.

The tables include information about the contaminated well or spring, such as the use of the well (e.g. drinking water, irrigation, industrial or inactive), the contaminant(s)

¹ Federal and State Drinking Water Standards and Health Advisories are listed at the end of this report, including acronyms.

BENIFIT: *Smoother Softer Skin, Etc.*

AAA BestWater helps beautify bathers

☑ **Super-sudsing *AAA BestWater* helps prevent pores from clogging for softer, smoother, more healthful skin, reducing or eliminating the need for oils, lotions and moisturizers.**

☑ **Makes shaving smoother and easier. Blades last longer, too.**

☑ **In the bath. Once you bathe with *AAA BestWater*, you'll never go back to hard water again. *AAA BestWater* leaves you with a clean fresh feeling.**

Helps eliminate the danger of polluted waters for better family hygiene and health.



☑ **Even helps protect skin by reducing or eliminating problem skin conditions such as Acne, Eczema, Psoriasis, Rashes, Dandruff, Dry, Itchy, Scaly, Irritated, Sensitive Skin.**



Smoother Skin. You couldn't ask for softer, smoother skin, even if you use fancy creams, lotions and conditioners. *AAA BestWater* rinses clean leaving your skin naturally soft, the way Mother Nature intended.

BENIFIT:

According to Dr. Mary E. Purchase, of Cornell University, her study showed that detergent residue can irritate the skin. **Some doctors are suggesting that you switch from (carbon based) detergents to soap.**

AAA BestWater

Providing Smooth Soft Skin,

Reducing the Need for Oils, Lotions & Moisturizers,

And Helping to Solve Their Skin Problems:

ACNE - ECZEMA - PSORIASIS

RASHES - DANDRUFF

DRY - ITCHY - SCALY - IRRITATED

SENSITIVE - SKIN

BENIFIT: *Providing Smoother Softer Skin,
Reducing the Need for Oils, Lotions & Moisturizers,
& Helping To Solve Skin Problems:*

**DANDRUFF
ITCHY-SCALY IRRITATED
SENSITIVE-SKIN**



Skin Rash - Pimples - Dandruff - Itchy - Dry Skin: "Eliminated skin rash, pimple, dandruff, itch and dry skin."

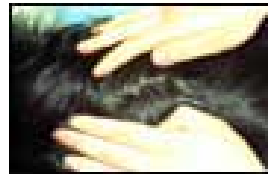
-Mr. & Mrs. Towikawa, Aiea (Halawa)

Dandruff: "Dandruff decreased."

-Mrs. Bumanglag, Waipahu

Dandruff: "Healthier scalp."

-Mr. Funakoshi, Mililani (Waipio Acres)



Dry Scalp: "[Prior to system] We noticed the need for constant use of hand & body lotion after washing & bathing. Skin [now] feels very silky after bathing. No more dry scalp." -Gary & Mitsy Royster, Ewa Beach (Ocean Point)



"Healthier hair and scalp."

-Mr. Funakoshi, Mililani (Waipio Acres)



'Clean Scalp'

Dry - Scaly Skin - Dandruff: "Since [the System], my daughter who has skin problem (dry & scaly) has improved. Her skin seems softer and not dry. She's been commenting on how she needed to use a lot of lotion all day long and no longer needs to do so. She also does not have dandruff. We have surely saved money since purchasing [the System]. We're very happy." -Mr. & Mrs. Owan, Waipahu (Village Park)

BENIFIT: *Providing Smoother Softer Skin,
Reducing the Need for Oils, Lotions & Moisturizers,
& Helping To Solve Skin Problems:*

**ACNE—ECZEMA-PSORIASIS
RASHES-DANDRUFF
DRY-ITCHY-SCALY IRRITATED
SENSITIVE-SKIN**

Skin Bumps: "I used to have bumps on the back of my arms and back. They've been there ever since I've arrived in Hawaii. But after the Softener was installed, the bumps went away. I tried even chemicals before on those bumps but nothing worked. This Softener did."

-Albert & Eva Hurgo, Ewa Beach (*Ocean Point—Mariners*)

Skin Problem - Skin Rashes: "Usually by this time of year (May/June), I will break into some kind of skin rashes, but, with [the System] my skin problem is gone!

-Jose & Nelin Jamir, Ewa Beach (*West Loch Fairways*)

Skin Rash - Rough - Dry - Itchy Skin: "Oh wow, when we use the bar soap it makes my skin softer, cleaner. Eliminated skin rash. No more dry skin. I don't even need to use lotion. Smoother skin on body, face, legs, feet, arms & hands. When we travel away from home, we realize how much we miss our [system's] water because we can feel the difference of the water, especially when we take a bath [with other water] our skin is rough, dry & itchy."

-Roland & Pacita Agbanlog, Millilani

Dry Patches - Skin Fungus: "My daughter and I noticed that we no longer have the dry patches on our faces that we used to have after a shower. My husband has also seen improvement in a skin fungus that he has had for several years." -Mr. & Mrs. Nakamura, Kaneohe

Dry - Chapped Skin: "The family has found that ... skin feels different. Skin not dry and chapped as before."

-Mr. & Mrs. Mark, Pearl City (*Pacific Palisades*)

Dry - Peeling Skin: "I wash lots of dishes constantly - having 4 kids and baby-sitting, and I've found that my hands aren't dried and peeling like they used to - and that's without using any hand creams." -Sergeant DuBoyce (HPD-Retired) & Mrs. DuBoyce, Pearl City

Itchy - Dry Skin: "Our *Whole House Water System* has reduced our skin's itchiness and dryness after baths."

-Saul & Cindy Nakayama, Millilani (*Mauka*)

Itchy Skin: "Skin is much softer. Does not have itchy feeling." -Robert & Lily Edwards, Kapolei (*Kapolei Knolls*)

Dry - Itchy Skin: "[Before having the System] The skin used to itch after bathing. Skin was dry. [After installing the System] No itching after bath and not necessary to put oil on skin."

-Mr. & Mrs. Sato, Kailua (*Keolu Hills*)

Itchy Skin: "Skin feels much better. In fact, whenever we forget and leave [the system turned off], I can tell the difference and my skin itches [without the System's Soft water]."

-Dr. Kenneth & Karen Nakamura, Millilani (*Mauka*)



BENIFIT: *Providing Smoother Softer Skin,
Reducing the Need for Oils, Lotions & Moisturizers,
& Helping To Solve Skin Problems:*

**ACNE—ECZEMA-PSORIASIS
RASHES-DANDRUFF
DRY-ITCHY-SCALY IRRITATED
SENSITIVE-SKIN**

Skin Rash: "Our son had a persistent skin rash and after 1 week of using our system and the [free] ULTRA products it disappeared."-Mr. & Mrs. Gerner, Kailua

Skin Rash - Irritation: "Our teenager, who also happens to be the official dishwasher, has really noticed a difference in her hands - no more irritating rashes."-Mr. & Mrs. Wakamatsu, Kailua (Keolu Hills)

Skin Rash: "Since using [the System] our eldest teenage son's skin rash problems has shown remarkable improvements."-Mr. Nakamura, Mililani

Skin Rash: "I had a rash on my hand and nothing helped. When changing over to [the System], it cleared up and my skin feels even softer."-Mrs. Nogami, Mililani

Skin Rash: "My girlfriend had a rash problem that wouldn't react to medication. After 3 weeks of daily washing the rash has reduced and hopefully with repeated application of [the System's] treated water the rash will disappear."-Mr. Kurata, Alea (Alea Heights)

Skin Rash: "My grandson 20 months old has had a rash since he was born. But since we got the unit [the System] his rash has disappeared. [The System] sure purifies the water."
-Mr. & Mrs. Konno, Alea (Alea Heights)

Skin Rash: "We found that skin gets smoother and softer. No rash breakouts."
-Mr. Fujishige, Honolulu, 96817 (Nuuanu)

Skin Rash - Itchy Skin: "My husband & daughter don't have the itching of the skin that they used to, no more rashes which is great!"-Mr. & Mrs. Kaneshiro, Waipahu (Crestview)

Skin Rash - Dry Skin: "My husband used to suffer from skin rash on his arm & my skin was always dry; now all those problems are history."-Mrs. Crawford, Waianae

ACNE: "Skin is softer and cleaner. Less Acne issues with face."
-Ronald & Emasoila Norbrey, Ewa Beach (Ocean Point)

ACNE: "I've noticed a great change in my complexion. Not as many Acne problems with [the System's] water."-Mr. & Mrs. Silva, Mililani

ACNE: "My daughter has Acne problems and found that after using [the free] soaps her face showed great improvement and made her skin a lot nicer."-Mrs. Kalai, Waipahu

PIMPLES: "Skin feels cleaner with less pimples on children's faces. It cleans it up faster."-Mr. & Mrs. Yamamura, Pearl City (Pacific Palisades)



BENIFIT: *Providing Smoother Softer Skin,
Reducing the Need for Oils, Lotions & Moisturizers,
& Helping To Solve Skin Problems:*

**ACNE—ECZEMA-PSORIASIS
RASHES-DANDRUFF
DRY-ITCHY-SCALY IRRITATED
SENSITIVE-SKIN**

Dry Skin: "Not only does the soft water leave your skin feeling soft and clean, but it has also helped our youngest daughter's dry skin problems to the point that she no longer requires her special skin soaps."-Dr. & Mrs. Kuwabara, Mililani

Dry Skin: "Skin feels softer. Skin doesn't feel dried and tight' after washing."-Mr. & Mrs. Nanbu, Wahiawa

Dry Skin: "I have found that my dry, hands have become softer and not as dry."-Mr. Kihara, Mililani

Dry Skin: "Since installing our unit [System], we have no dry skin problems."-Mr. & Mrs. Oliveira, Mililani



Dry Scaly Skin: "Our entire family has experienced softer skin. No more scaly dry skin since using [the System]." -Mr. & Mrs. Kim Han, Waipahu

Dry - Rough Skin: "My hands were rough and dry before we put in the system; now, they feel soft as if I had used hand lotion."-Mr. & Mrs. Shimabuku, Mililani

Rough Skin: "Thanks to [the] Water Treatment System. Our family is very glad to have [the System's] water. It's been only a month but [the] Water Treatment System really shows the effects in many ways in our home. When we didn't have the Water Treatment System, after the shower we felt our body skin was rough, but today with our [System's] water used with [the free] Pure Soap, our skin feels smooth, soft and so clean."-Mr. & Mrs. Shiroma, Mililani

Skin Irritation: "Our ... body feels smoother and cleaner and our youngest child has not experienced anymore skin irritation."-Mr. & Mrs. Ching, Mililani

Skin Irritation: "[The System's] water leaves your skin feeling softer and smoother. It has helped greatly in clearing up our daughter's skin irritation."
-Mr. & Mrs. Matsuda, Mililani



Sensitive - Itchy Skin: "Having soft water has helped our sensitive skin problems. No more itchy skin after bathing!"-Mr. & Mrs. Kawamata, Wahiawa

Sensitive Skin: "Our twins have very sensitive skin. Since we've been using [the free] soap products, their skin problem has almost been eliminated."-Mr. & Mrs. Lovell, Mililani

Skin Difficulties: "At least 2 of the 5 people in the house have noticed considerable reduction in skin ... difficulties."-Sister Enomoto, Honolulu, 96821 (Aina Haina)

BENIFIT: *Providing Smoother Softer Skin,
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**ACNE—ECZEMA-PSORIASIS
RASHES-DANDRUFF
DRY-ITCHY-SCALY IRRITATED
SENSITIVE-SKIN**



ECZEMA - Rashes: "Noticed difference on children's skin. Especially those that have ECZEMA. Three of our children had skin problem (ECZEMA), where they couldn't stay in the water very long, because it would aggravate their condition. Since we have [the System's] water, there has been a great improvement in their skin condition. We have also noticed that when we switched to [the free] Soap, their skin rashes caused by the other soaps we used were just about eliminated."

-Mrs. Clemente, Milliani

Dry Skin Problem: "[The System] has helped my son's skin problem a lot. It has made his skin softer and he is able to enjoy his bath by staying in the water longer without drying his skin." -Mr. & Mrs. Bugarin, Milliani

ECZEMA - Dry - Chaffed Skin: "Our skin is noticeably soft & smooth. No more dry chaffed skin. ECZEMA on my finger has been greatly retarded. Hair and skin smooth & soft without lotions or conditioners." -Mr. & Mrs. Luna, Waianae

SKIN-ECZEMA: "My kids skin clearer (from Eczema). Less breakouts." -John & Wendy Ledesma, Ewa Beach (Ocean Point)



Skin Difficulties: "At least 2 of the 5 people in the house have noticed considerable reduction in skin ... difficulties."

-Sister Enomoto, Honolulu, 96821 (Aina Haina)

Skin Ailments: "What a beautiful feeling bathing in [the System's] water. Skin ailments which used to appear often, are seemingly disappearing." -Mrs. Mendiola, Honolulu, 96821 (Waialae Nui)

Sensitive Skin: "Since we have eight in our household, [the System] has done wonders. Our skin feels softer and looks good, also it helps two of our children who have sensitive skin. Thank YOU." -Mr. & Mrs. Kamakele, Waianae (Makaha)



BENIFIT: Doctors Have Written Prescriptions For Water Softener Systems, To Help Solve Skin Problems:

Rain Soft
1007 Gould Drive
Bldg. 2, Suite 3
Bossier City, LA 71111

560 North Park
Bossier City, LA 71111
July 11, 1988

Attention: Angel Garcia

Dear Angel:

[Water Softener System]

I am writing you this letter in regards to the Rain Soft water treatment system Gary and I have recently purchased from you. As you know, before we got the system I had been to two different Doctors concerning the skin problem of cracking and drying I had with my hand. My family Doctor prescribed a medicated ointment to apply to affected area three times daily. My Dermatologist on two separate occasions gave me an injection of cortisone. Neither seemed to help. It got to the point where at night I would put the ointment on and cover my fingers with band-aids. Everytime I would put my hand under water, it would burn as if someone was pouring acid on it. Within five days of having our system put in, my hands were clearing up.

[Water Softener System]

Sincerely,

Janet Griffith

Janet Griffith

JAMES F. PARK, M.D. 3305 MAIN ST. VANCOUVER, WA 98663 - PHONE 804-7529

FOR: Mr. Buford Johnson DATE: 8/4/88

ADDRESS: Vancouver

R - 1 Rainsoft Aquello Classic water treatment system.
- for treatment of severe chronic generalized pruritis

[Water Softener System]

LABEL
REFILL _____ TIMES
N R _____


_____ M.D. James Park M.D.

SUBSTITUTION PERMITTED

DISPENSE AS WRITTEN
U.S. REG. NO. APO 007403

BENIFIT: Doctors Have Written Prescriptions For Water Softener Systems, To Help Solve Skin Problems:

Patient's Name CANDY GRUNDOD Age 11/29/81
 Address ONE RAINSOFT WATER TREATMENT SYSTEM AND WATER PURIFIER FOR PSORIASIS F R N Date 11/29/81

 ONE RAINSOFT WATER TREATMENT SYSTEM AND WATER PURIFIER FOR PSORIASIS F R N

[Water Softener System]

Rep. 0-1-2-3
 P.R.N.
 Label

Full Name N. J. [Signature] M.D.
 Office Address 31

DEA No.

Form # 148643

DEA # _____

FAMILY PRACTICE CLINIC
 ALLEN L. COX, M.D.
 J. MARK WILSON, M.D.
 TED B. WARREN, M.D.
 CARTER BOYD, M.D.

1501 DOCTORS DRIVE BOSSIER CITY, LA 71111 1400 HWY 80 EAST HAUGHTON, LA 71037

NAME Mrs Janet Griffith
 ADDRESS _____ DATE 7/1/88

R ONE RAINSOFT WATER TREATMENT SYSTEM AND WATER PURIFIER FOR PSORIASIS

[Water Softener System]

Label

Pres _____ Imgs _____ PPN _____ NR _____

[Signature] M.D.
 Dispense As Written

0210880047

STANDARDS???? [Click Here >](#)

POINT 1: The Federal and State governments have established “**Safe Drinking Water STANDARDS**”.

POINT 2: According to current **STANDARDS**, the state Department of Health and Board of Water Supply has represented that the water meets these **STANDARDS** and therefore, based on those **STANDARDS**, is safe to drink.

POINT 3: There are **TWO STANDARDS** — non-enforceable and enforceable.

POINT 4: How have these **STANDARDS** been established and what are they based on?

POINT 5: Some **STANDARDS** are established taking into account technological and economic limitations of the public water supplier.

POINT 6: Are the government **STANDARDS** that are considered “safe” today going to be considered “safe” tomorrow?

POINT 7: The Federal government has established **HEALTH EFFECTS & HEALTH RISKS** for exposure to certain water contaminants.

POINT 8: Are today’s government established **HEALTH EFFECTS & HEALTH RISKS** for exposure to certain water contaminants going to change and/or increase in the future?

POINT 9: Water, containing certain pesticides, herbicides, insecticides and other Volatile Organic Compounds (**VOCs**), **is just as much a health concern when you bathe in it as when you drink it.**

POINT 10: What it really comes down to is: **STANDARDS. STANDARDS. STANDARDS.**

Question: Are you willing to accept current government **STANDARDS**?

Question: Or, do you want your water to have better **STANDARDS** — the **STANDARDS** you set?

Question: Do you realize that you actually have a choice?

Question: Do you realize that you can choose better **STANDARDS** — your own **STANDARDS**?

Everything comes down to standards. The big question is: Are these **standards** which are used today “the **standards**” that you want for you and your family. **Standards** are constantly changing and the **standards** they use today for determining the safety of your water may not be applicable in the future. Just as the **standards** change continually so does the assessment of the health risks from contaminants. Unfortunately, the health risk assessments take a long time to ascertain because of the studies required to prove the risk. So, until the risk is proved **we (the general public) are basically used as test subjects... “Guinea Pigs”**, so to speak. So, which **standards** would you like to use? Yours (the **standards** that you set), or the governments (the **standards** someone else sets for you that they constantly change)? **We believe that once you have ALL THE FACTS, the evidence will lead you to choose a better STANDARD — YOURS!**

Erring on the Side of Caution

— Not Risk —

When it Comes to Your Health & Water Quality

(Or, You DO NOT Have to Settle
for the Quality of Water Provided by the City)

**The Choice for Safer, Healthier,
Quality Water,
is YOURS!**

Everything comes down to standards.

The big question is: Are these **standards** which are used today “the **standards**” that you want for you and your family? **Standards** are constantly changing and the **standards** they use today for determining the safety of your water may not be applicable in the future. Just as the **standards** change continually so does the assessment of the health risks from contaminants. Unfortunately, the health risk assessments take a long time to ascertain because of the studies required to prove the risk. So, until the risk is proved **we (the general public) are basically used as test subjects — Guinea pigs, so to speak.**

So, For your family’s “Peace-of-Mind”

Which standard would you prefer?

- (A) Yours (the **standards** that you set)?; *Or*,
- (B) The government’s (the **standards** someone else sets for you, that they constantly change)?

*We believe, now that you have ALL THE FACTS,
the evidence will lead you to choose a better STANDARD — YOURS!*

From: State of Hawai'i Department of Health 6/29/88
Honolulu Advertiser Advertisement
To: To the Hawai'i Community
Subject: **Hawai'i Environmental Health Bulletin**

“... Not all contaminants can be removed from drinking water using the same treatment process. In some instances, contaminated groundwater may have to be passed through several treatment systems to remove chemical mixtures before it is safe to drink.”

-JOHN C. LEWIN, M. D., Director of Health
State of Hawai'i Department of Health

“... Volatile organic compounds may have a variety of harmful health effects. ... Drinking water containing one or more VOCs at levels above standards should not be consumed. In addition, because little is known about the additive effects of these chemicals, special attention should be paid to detecting and eliminating VOC sources if two or more chemicals are found in water. In any case, sources of VOC contamination should be eliminated if possible.

... Keep in mind, however, that VOCs may also enter the body through skin absorption or through inhalation of water vapor.

... POE treatment systems are recommended for VOC removal to ensure that all water used for drinking, cooking, cleaning, and bathing is free of contamination.³”

³[Prepared by: Gregory D. Jennings and Ronald E. Sneed *Extension Specialists, Biological & Agricultural Engineering, Mary Beth St. Clair, Extension Specialist, Toxicology.* Published by: North Carolina Cooperative Extension Service]