

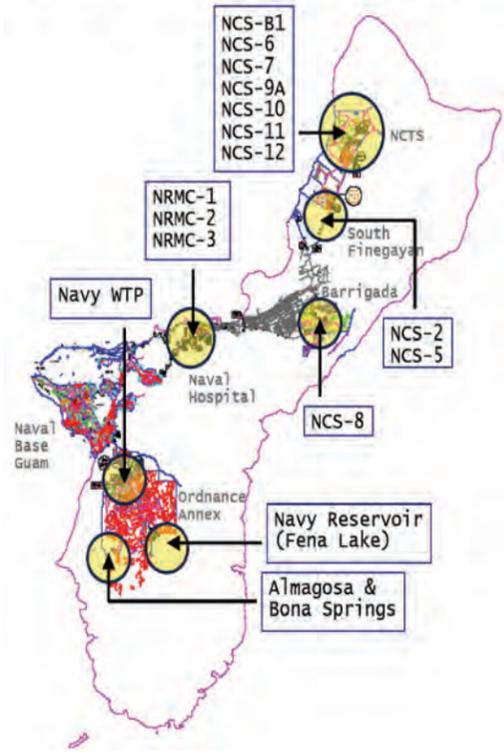
ment at (671) 333-1321. Additionally, Guam EPA Safe Drinking Water Program may be reached at (671) 300-4796.

How Can You Report a Water Quality Complaint?

Should you notice that your water is discolored, or if you have any concerns about your drinking water, we strongly encourage you to call our Service Support Center Trouble Desk at (671) 333-2011. Arrangements can be made to have your water sampled and analyzed to ensure that it is safe to



U.S. Navy Water System



Please contact Naval Hospital Preventative Medicine at (671) 344-9787 for health concerns related to this report. For information about the U.S. Navy Water System, please contact the Naval Facilities Engineering Command Marianas Utilities Department.

How Can You Obtain Additional Information?

The *National Primary Drinking Water Regulations* sets limits for contaminants in drinking water and standards for water treatment that primarily safeguard health. These regulations also require us to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards.

The primary source of water for the U.S. Navy Water System is the Navy (Fena) Reservoir. It is supplemented by Almagosa Springs and Bona Springs, and is processed at the Navy Water Treatment Plant prior to distribution to Naval Base Guam and surrounding areas. Groundwater wells at NCTS, Finegayan, Barrigada, and Naval Hospital further augment our water system supplying these areas and supplementing the surface water-fed areas.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in untreated water include:

Drinking water, including bottled water, may reasonably be expected to contain small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling Environmental Protection Agency's (EPA) Safe Drinking Water Hotline at 1-800-426-4791.

In order to ensure that tap water is safe to drink, the EPA created regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

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Health Precautions

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as cancer patients undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly and infants can be particularly at risk from drinking water. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

During the third quarter of 2014, the volatile organic compounds (VOC) sampling could not be conducted due to the problem at the underground electrical power system supplying the well. Therefore the reporting deadline for the VOC report was not met and the VOC levels are unknown at that time. The well has been secured and is not contributing to the drinking water source.

Monitoring, Reporting and Violations

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Drinking Water Regulations

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- **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- **Inorganic contaminants**, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- **Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum products, and can also come from gas stations, urban storm water runoff and septic systems.

2014 U.S. NAVY WATER SYSTEM WATER QUALITY REPORT



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Why are contaminants found in my water ?

The primary source of water for the U.S. Navy Water System is the Navy (Fena) Reservoir. It is supplemented by Almagosa Springs and Bona Springs, and is processed at the Navy Water Treatment Plant prior to distribution to Naval Base Guam and surrounding areas. Groundwater wells at NCTS, Finegayan, Barrigada, and Naval Hospital further augment our water system supplying these areas and supplementing the surface water-fed areas.

The U.S. Navy Water System

This annual report contains information about the quality of the water supplied by the U.S. Navy Water System during the period of January 1 to December 31, 2014. Included as part of this report is the "2014 U.S. Navy Water Quality Data" table detailing the water quality of our system. This report will help you, our customer, understand the relationship between the contaminants found in drinking water, activities that may contaminate the water supply, and their associated health effects.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example people in apartments, nursing homes, schools or businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

DEPARTMENT OF THE NAVY
U.S. Naval Base Guam
Navy Housing Office
PSC 455, Box 50
FPO AP 96540-0051

2014 U.S. Navy Water Quality Data

The table below presents the 2014 water quality monitoring results of each detected contaminant in comparison with the established drinking water standards. The table also summarizes the monitoring times, the range of detections, whether or not the drinking water standards were met, the major sources of the contaminant, and the locations detected.

DEFINITIONS:

1. Action Level (AL) - The concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.
2. Maximum Contaminant Level (MCL) - The highest level of a contaminant allowed in drinking water; MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
3. Maximum Contaminant Level Goal (MCLG) - The level of a contaminant in drinking water below which there is no known or expected risk to health; MCLGs allow for a margin of safety.
4. Maximum Residual Disinfectant Level (MRDL) - The level of a disinfectant that may not be exceeded at the consumer's tap without an unacceptable possibility of adverse health effects.
5. Maximum Residual Disinfectant Level Goal (MRDLG) - The maximum level of a disinfectant added for water treatment at which no known or anticipated adverse health effect will occur; MRDLGs allow for a margin of safety.
6. Treatment Technique (TT) - A required process intended to reduce the level of a contaminant in drinking water.
7. Secondary Maximum Contaminant Level (SMCL) - Levels established by the National Secondary Drinking Water Regulations which control contaminants primarily affecting the aesthetic qualities relating to the public acceptance of drinking water.

ABBREVIATIONS:

NTU - Nephelometric Turbidity Units
n/a - not applicable
nd - not detected

ppb - parts per billion or micrograms per liter
ppm - parts per million or milligrams per liter
pCi/L - picocuries per liter

ARA - annual running average
WTP - water treatment plant

I. PRIMARY STANDARDS, Mandatory, Health-Related Standards, established by GEPA/USEPA

CONTAMINANT	Sample Date	MCLG	MCL	Your Sample	Range		Violation	Major Sources of Contaminant	Locations Detected
					Low	High			
Synthetic Organic Compounds									
Picloram (ppb)	12/31/2014	500	500	0.26	nd	0.26	No	Herbicide runoff	Well NCS-8 (Radio Barrigada)
Chlordane (ppb)	9/30/2014	0	2	0.23	0.15	0.23	No	Residue of banned termiticide	Well NCS-B1
Inorganic Compounds									
Barium (ppm)	2/25/2014	2	2	0.0018	nd	0.0018	No	Discharge of drilling wastes; discharge from metal refineries; and erosion of natural deposits	Navy WTP Clearwell, NRM-1, NRM-2
Chromium (ppb)	2/25/2014	100	100	2.93	nd	2.93	No	Discharge from steel and pulp mills; erosion of natural deposits	Wells NCS-B1, NCS-6, NCS-7, NCS-8, NCS-9A, NCS-10, NCS-11, NCS-12, NRM-1
Fluoride (ppm)	2/11/2014	4	4	0.53	nd	0.53	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories	Navy WTP Clearwell
Nitrate (ppm)	2/11/2014	10	10	2.7	0.068	2.7	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	Navy WTP Clearwell, Wells NCS-B1, NCS-6, NCS-7, NCS-8, NCS-9A, NCS-10, NCS-11, NCS-12, NRM-1, NRM-2
Radionuclides									
Gross Alpha Activity (pCi/L)	5/6/2014	0	15	5.3	4.0	5.3	No	Erosion of natural deposits.	Well NCS-8 (Radio Barrigada)
Disinfectant and Disinfection Byproduct (DBPs)									
HAA5 [Five Haloacetic Acids] (ppb)	2014	n/a Note 2	60	15	7.38	19.5	No	Byproduct of drinking water chlorination	Distribution system
TTHMs [Total Trihalomethanes] (ppb)	2014	n/a Note 2	80	53	29	65	No		
Chlorine (ppm)	2014	4 (MRDLG)	4 (MRDL)	3.42	nd	3.42	No	Water additive used to control microbes	Distribution system
Control of DBP Precursors [Total Organic Carbon, TOC] (%removal ratio ARA)	2014	n/a	TT ≥ 1.0 Note 4	2.3	1.6	2.3	No	Naturally present in the environment	Navy WTP
Special Monitoring for Sodium									
Sodium (ppm)	2/25/2014	n/a	n/a	82.0	15.6	82.0	No	Salt water intrusion from aquifer/salt water interface; sodium hydroxide reaction for pH control in water treatment	Navy WTP Clearwell, Wells NCS-B1, NCS-6, NCS-7, NCS-8, NCS-9A, NCS-10, NCS-11, NCS-12, NRM-1, NRM-2
CONTAMINANT (Units)	Sample Year	AL	MCLG	Your Water	Number of Samples Exceeding AL		Violation	Major Source of Contamination	Locations Detected
Lead and Copper									
Copper (ppm)	2014	1.3 Note 3	1.3	0.54	None		No	Corrosion of household plumbing system, erosion of natural deposits	Distribution system
Lead (ppb)	2014	15 Note 3	0	4.3	None		No	Corrosion of household plumbing system, erosion of natural deposits	Distribution system
CONTAMINANT (Units)	Sample Date	MCLG	MCL	Reporting Value	Violation	Major Sources of Contaminant	Locations Detected		
Microbiological Contaminants									
Total Coliform [TC] (% positive per month)	2014	0	5%	3.9%	No	Naturally present in the environment	Navy WTP, Building 50, Radio Barrigada		
CONTAMINANT (Units)	Sample Date	MCLG	MCL	Your Water	Violation	Major Sources of Contaminant	Locations Detected		
Turbidity as an Indicator of Filtration Performance									
Turbidity (NTU)	2014	n/a	TT ≤ 0.3 NTU for 95% of samples	100% Jan-Dec) except Nov (99.4%)	No	Soil runoff	Navy WTP		
	11/27/2014			0.490	No				

II. SUMMARY OF REQUIRED MONITORING AND REPORTING

CONTAMINANT	Period	Date(s) Sampled	Violation	Remarks
VOC	3rd QTR	9/16/2014	Yes	Reporting deadline for monitoring of an active well during the 3rd quarter of 2014 was not met due to the problem at the underground electrical power system supplying the well.

NOTES:

1. The MCL for beta particles is 4 mrem/year dose equivalents to bone marrow. EPA considers 50 pCi/L as the level of concern for beta particles.
2. Although there is no collective MCLG for this group, there are individual MCLGs for some of the individual contaminants. **HAA**: monochloroacetic acid (70 ppb), dichloroacetic acid (zero), trichloroacetic acid (20 ppb) **THM**: bromodichloromethane (zero), bromoform (zero), chloroform (70 ppb), dibromochloromethane (60 ppb).
3. The AL is exceeded if the concentration of more than 10 percent of tap water samples collected (the "90th percentile" level) is greater than 1.3 ppm for copper and 15 ppb lead.
4. MCL = a routine sample and repeat sample from the same location are TC positive, or any routine or repeat sample is FC positive.