Consumer Confidence Report

January 1, 2022 - December 31, 2022

Incirlik Air Base, Turkey

Is my water safe?

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies. Drinking water quality is monitored in accordance with the U.S. Department of Defense Final Governing Standards for Turkey (FGS-T). Last year, Bioenvironmental Engineering conducted tests for over 80 contaminants. We only detected 8 of those contaminants and a table of detected contaminants is listed below. As we informed you at the time, our water temporarily exceeded drinking water standards. (For more information see the section labeled Violations at the end of the report.)

Where does my water come from?

There is one distinct Public Water System at Incirlik AB serving a population of approximately 5,000 people. Incirlik AB's water source is derived from five wells that are located on the installation. Before the groundwater is used for human consumption, it is treated and purified at the Water Treatment Plant (WTP) by mechanical filtration, reverse osmosis water purification, with chlorine for disinfection, and hydrofluorocilic acid for dental health. Water is then pumped to several storage tanks that feed and maintain pressure in the water distribution system. In order to ensure that Incirlik AB's water is safe to drink, the FGS-T requires monitoring of the water system and places limits on the concentration of contaminants in the water.

Source water assessment and its availability

The source of drinking water here at Incirlik AB is an aquifer that feeds into five different wells. They are all individual wells, but feed into the Water Treatment Plant where it is filtered. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- Radioactive contaminants: which can be naturally occurring or be the result of oil and gas production and mining activities.
- 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 stormwater 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 stormwater runoff, and residential uses.
- Organic chemical contaminants: including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

Drinking water may reasonably be expected to contain at least small amounts of some contaminants. These contaminants are monitored on a quarterly basis by BE, and daily by Civil Engineering (CE) to make sure they are compliant with FGS-T standards. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline.

Description of Water Treatment Process

Your water is treated by filtration and disinfection. Filtration, specifically reverse osmosis filtration, removes particles suspended in the source water. Particles typically include clays and silts, natural organic matter, iron and manganese, micro-plastics, and microorganisms. Your water is also treated by disinfection. Disinfection involves the addition of chlorine or other disinfectants to kill bacteria and other microorganisms (viruses, cysts, etc.) that may be in the water.

Water Conservation Tips

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference - try one today and soon it will become second nature.

- Take short showers - a 5-minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month.
- Use a water-efficient showerhead. They're inexpensive, easy to install, and can save you up to 750 gallons a month.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Water plants only when necessary.
- Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- Visit www.epa.gov/watersense for more information.

Information on Nitrates

Incirlik AB is surrounded in large part by agricultural land, therefore the nitrate levels in the drinking water are closely monitored. Nitrate levels may be affected by rainfall or agricultural activity. Nitrate concentrations in drinking water above 10 mg/L is a health risk for infants and small children. The nitrate concentrations during the CY2022 were below 10 mg/L.

Additional Information for Lead

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with

service lines and home plumbing. Incirlik Air Base is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

Water Quality Data Table

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. The table below lists all the drinking water contaminants that we detected during the calendar year of this report.

Contaminants	Max Goal	Max Level	Average	Range		Sample Date	Violation	Typical Source
				Low	High			
Disinfectants & Disinfection By-Products								
(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants)								
Chlorine (as Cl2) (mg/L)	4	4	1.8	0.15	1.8	2022	No	Disinfectant to control microbiological contaminants
Haloacetic Acids (HAA5) (mg/L)	NA	0.060	0.006*	0.004	0.006	2022	No	By-product of drinking water chlorination
TTHMs [Total Trihalomethanes] (mg/L)	NA	0.080	0.021*	0.004	0.021	2022	No	By-product of drinking water disinfection
Inorganic Contaminants								
Fluoride (mg/L)	1.5	4.0	0.96	0.1	1.7	2022	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Lead - source water (mg/L)	NA	0.010	0.0052	<0.005	0.0079	2022	No	Corrosion of household plumbing systems; Erosion of natural deposits
Nitrate [measured as Nitrogen] (mg/L)	10	10	5.99	2.98	9.21	2022	**Yes**	Runoff from fertilizer use; Leaching from septic tanks,

Contaminants	Max Goal	Max Level	Average	Range		Sample Date	Violation	Typical Source
				Low	High			
								sewage; Erosion of natural deposits
Nitrite [measured as Nitrogen] (mg/L)	0.5	0.5	0.01	0	<0.01	2022	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Microbiological Contaminants								
Total Coliform (RTCR)	NA	TT	NA	NA	NA	2022	No	Naturally present in the environment
Volatile Organic Contaminants								
Trichloroethylene (mg/L)	0	5	0.71	NA	.71	2022	No	Discharge from metal degreasing sites and other factories. This contaminant is being reported based on previous plume modeling.

Note:
*Compliance is determined by the sample location with the highest annual average

Violations and Exceedances
Nitrate [measured as Nitrogen] Incirlik AB is surrounded in large part by agricultural land, therefore the nitrate levels in the drinking water are closely monitored. Nitrate levels may be affected by rainfall, elevated temperatures, and/or agricultural activity. The system was flushed, and sampling was reconducted at all locations with elevated results. Resampled results were all below the MCL.

Undetected Contaminants

The following contaminants were monitored for, but not detected, in your water.

Contaminants	Max Contaminant Goal	Max Contaminant Level	Your Water	Violation	Typical Source
Tetrachloroethylene (mg/L)	0	5	ND	No	Discharge from factories and dry cleaners. This contaminant is being reported based on previous plume modeling.

Unit Descriptions	
Term	**Definition**
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or micrograms per liter (µg/L)
% Positive samples/month	% Positive samples/month: Percent of samples taken monthly that were positive
NA	NA: not applicable
ND	ND: Not detected
NR	NR: Monitoring not required but recommended.

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