JOINT BASE ELMENDORF-RICHARDSON

Providing Utility Services to Alaska's Military

2025

WATER QUALITY REPORT

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JOINT BASE ELMENDORF-RICHARDSON (JBER)

The U.S. Environmental Protection Agency (EPA) and the Alaska Department of Environmental Conservation (ADEC) have given us an opportunity to tell our story in the form of this annual water quality report or Consumer Confidence Report (CCR). Doyon Utilities (DU) is pleased to prepare this comprehensive report for those who work and reside on JBER. Our goal is to provide you with a complete picture of the water quality program.

This annual water quality report provides information on the source of our water, includes the results of the water quality tests that were conducted, and contains the educational information about the potential health effects for drinking water that contains contaminants. DU will notify you immediately if there is any reason for concern about your water.

We are proud to report that the water provided by DU and the 773d Civil Engineer Squadron (CES) meets or exceeds established state and federal water quality standards. The JBER drinking water program is in compliance with national primary drinking water regulations and has met all testing and monitoring requirements. The EPA has determined that your water is safe to drink at the tested and monitored levels.

Doyon Utilities operates and provides utility services for the U.S. Army in Alaska at Fort Wainwright, Fort Greely and JBER (Joint Base Elmendorf -Richardson).

A MESSAGE FROM THE DIRECTOR

Dear Consumer,

Doyon Utilities (DU) owns, operates, and monitors utilities located on the Richardson side of JBER (JBER-R). The 773d Civil Engineer Squadron (CES) manages the water distribution lines on the Elmendorf side of JBER (JBER-E). Additionally, the 673d Medical Group (Bioenvironmental Engineering (BE)) conducts water quality monitoring on JBER-E. DU provides water to the point of demarcation between the Richardson and Elmendorf side, at which point 773d CES and BE takes over operations. While there are two Public Water Systems on JBER, one for each side of the base, the two systems are connected and in essence operate as a continuous system from the water treatment plant to the consumer, no matter where you are on base. The commonality of the two systems allows us to efficiently operate as a team to serve the Soldiers, Airmen, families, and civilian employees assigned to the joint installation.

DU, 773d CES, and BE work tirelessly to ensure the best service and product is delivered. After all, our reputation is only as good as the quality of water we produce, and we value that reputation! We are proud to be partners in the preparation and publication of this annual Consumer Confidence Report (CCR).

As always, we encourage you, our consumer, to conserve water. Conservation of any resource is important, and we ask you to do your part in this effort. At the same time, regular circulation of water at buildings can help reduce the risk of freezing lateral water lines; if water does not regularly flow through an area or section of pipe, freezing may occur. During periods of inactivity at your building, running the water is a simple solution to reduce the risk of freezing, and helps avoid the time and resource intensive repairs from burst pipes.

Rich Holladay
JBER Director of Utilities

If you encounter a facility with a sink or faucet that is running this may be intentional to prevent freezing. Please do not turn off the water but contact the facility manager to confirm whether this is intentional or not.

DU looks forward to continuing to provide you with exceptional quality service and drinking water. We welcome and appreciate your comments on how we are doing and can use this information to improve consumer satisfaction. Please don't hesitate to reach out to us; our door is always open. If you have questions or would like more information, please contact our offices anytime at (907) 428-5381 or email us at duinfo@doyonutilities.com.

Sincerely,

Rich Holladay
JBER Director of Utilities

The results from our 2024 water quality tests indicate that your water meets or exceeds the state and federal drinking water requirements.

WHERE DOES OUR WATER COME FROM?

Drinking water at JBER is obtained from the Ship Creek Surface Water Reservoir and three local groundwater wells on JBER-R. As the water enters the treatment plant it undergoes several conventional water treatment processes. Each well is equipped with its own in-line chlorination equipment to ensure that water enters the distribution system free from any microbial contamination. During 2024, DU produced over 1 billion gallons of water, making us one of the largest water producers in the state.

All of our treatment processes are controlled and monitored. The finished water is tested several times a day to ensure that pH, chlorine residuals, and fluoride are at appropriate levels. The water is closely monitored for contaminants in accordance with the EPA Safe Drinking Water Act (SDWA).

We are proud to report the results of our water quality tests and allow you to have complete confidence in the water you consume.

SOURCE WATER ASSESSMENT

A Source Water Assessment is a study and report, unique to each water system, which provides basic information about the area that provides water to your drinking water source.

The report summarizes the vulnerabilities for the JBER groundwater supply Wells 1, 2, and 3. The vulnerabilities for these wells are examined for three criteria; Wellhead Intake Susceptibility, Aquifer Susceptibility, and Contaminants which include; Bacteria & Viruses, Nitrates/Nitrites, Volatile Organic Chemicals, Inorganics/Heavy Metals, Synthetic Organic Chemicals, and Other Organic Chemicals. Wellhead intake and aquifer susceptibility refers to the type of soils located at both the top of the well casing and in the groundwater. Soils such as loose sand and gravel have the ability to allow pollution to move through the soil and enter the water supply. In addition, vulnerabilities are also linked to nearby industrial activities

The Wellhead Intake Susceptibility rating for Well 1 was “very high” and for Wells 2 and 3 “low”. The Aquifer Susceptibility rating for Well 1 was “not applicable” and Wells 2 and 3 “Medium”. Contaminant rating for Wells 1 and 3 was “Medium” and for Well 2 was “Low” for five of the six contaminant groups and a rating of “Medium” for Synthetic Organic Chemicals.

To mitigate these vulnerabilities for wells located with high well head and aquifer susceptibility, DU utilizes numerous operational strategies including frequent laboratory sampling, onsite testing, and operating procedures to ensure that the drinking water remains compliant. Despite these vulnerability assessments, Doyon Utilities drinking water quality remains stable and compliant with EPA and ADEC standards. The report data for JBER is available to review on the ADEC’s Drinking Water Watch web page. This online tool allows anyone to view data on active public water systems in Alaska. To access the JBER water system information go to: www.dec.alaska.gov/dww. The specific public water system IDs are AK2212039 for JBER-R, and AK2211423 for JBER-E.

Unregulated Contaminant Monitoring Rule 5 (UCMR5)

Every 5 years the EPA conducts a nationwide sampling and monitoring effort for unregulated contaminants (UCMR5). The 5th iteration of this rule began in 2023 and the JBER-R and JBER-E systems were designated as part of the monitoring program. The UCMR5 monitors for 29 Per - and polyfluoroalkyl substances (PFAS) chemicals and lithium in drinking water systems. The JBER systems completed sampling for this monitoring effort in 2023 (JBER-E) and 2024 (JBER-R) and all samples in the UCMR5 monitoring list were non-detect. This serves as the public notification requirement of notifying all system customers of UCMR5 results.

All UCMR5 results will ultimately be available to the public (updated quarterly) via EPA's UCMR Occurrence Data webpage at:

www.epa.gov/dwucmr/occurrence-data-unregulated-contaminant-monitoring-rule

This Consumer Confidence Report summarizes drinking water quality for the period between January 1, 2024 through December 31, 2024. In order to conserve natural resources and maximize distribution, this report is available to download at www.doyonutilities.com. Hardcopies are available by contacting Doyon Utilities Environmental at (907) 455-1500.

DRINKING WATER RESULTS

Drinking water, including bottled water, may reasonably be expected to contain at least 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 the EPA's, Safe Drinking Water Hotline at 1-800-426-4791. DU and BE routinely monitor for contaminants in your drinking water according to federal and state laws. The following tables show the results for substances detected for the period between 1 January to 31 December 2024 and lists the Regulated Contaminants required to be monitored by the EPA that were detected in your water.

All substances detected were well within the EPA guidelines for drinking water quality. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. For more details on water test results or how we conduct our testing program, please call DU at (907) 455-1500 or BE at (907) 384-3985.

"The results from our 2024 water quality tests indicate that your water meets or exceeds the state and federal drinking water requirements."

TERMS & ABBREVIATIONS USED

Action Level (AL): The concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.

Contaminant: Any physical, chemical, biological, or radiological substance or matter in water.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available technology.

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.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

Nephelometric Turbidity Units (NTU): The unit of measurement for turbidity samples.

Not Applicable (NA): When NA is used in the range column, only one sample was taken, therefore, no range exists.

Not Detectable (ND): The contaminant is below the detectable limits of the testing method.

pCi/L: Picocuries per Liter.

ppb: Parts per billion or micrograms per liter.

ppm: Parts per million or milligrams per liter.

JBER-Richardson Drinking Water Test Results *Public Water System ID# 2212039*

Substance	Sample Date	Violation Y/N	Detection Range	MCL	MCLG	Likely Source of Contamination
Microbiological Contaminants						
Coliform Bacteria (Revised Total Coliform Rule)	Monthly 2024 99.7% of Samples Negative[1]	N	NA	TT	NA	Naturally present in the environment
Turbidity	Daily 2024	N	Highest Single Measurement = 0.15 NTU	TT=1 NTU	NA	Soil Run-off
			100% of Samples <0.3 NTU	TT=95% of Samples <0.3 NTU		

[1]One positive sample collected at Building 297, follow up sampling was conducted according to DU's coliform sampling plan at Building 297, the supply well, and three nearby buildings. All follow up samples were negative for coliform bacteria.

Substance	Sample Date	Violation Y/N	Detection Range	MCL	MCLG	Likely Source of Contamination
Inorganic Contaminants						
Fluoride	Daily 2024	N	0.04 - 0.78 ppm	4 ppm	4 ppm	Chemical Additive
Nitrate	**Annually**	N	Average	10 ppm	NA	
Building 28011 (WTP)	January 22, 2024		0.42 ppm			
Building 35610 (Well 1)	January 22, 2024		0.48 ppm			
Building 35620 (Well 2)	January 22, 2024		0.47 ppm			
Building 35630 (Well 3)	January 22, 2024		0.55 ppm			
Barium	**Every 9 Years**	N	Average	2 ppm	2 ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Building 28011 (WTP)	January 27, 2020		0.0085 ppm			
Building 35610 (Well 1)	January 27, 2020		0.0039 ppm			
Building 35620 (Well 2)	January 27, 2020		0.0038 ppm			
Building 35630 (Well 3)	January 27, 2020		0.0040 ppm			
Free Residual Chlorine	Daily 2024	N	0.06 - 1.72 ppm	MRDL 4 ppm	MRDLG 4 ppm	Water additive used to control microbes
Lead[1]	**Every 3 Years** Last Sample: July & August 2024	N	90th Percentile <1.0 ppb Range ND - 0.79 ppb	AL= 15 ppb	0 ppb	Corrosion of household plumbing systems
Copper[1]	**Every 3 Years** Last Sample: July & August 2024	N	90th Percentile 0.055 ppm Range ND - 0.1 ppm	AL= 1.3 ppm	1.3 ppm	Corrosion of household plumbing systems

[1]Samples were obtained from numerous locations. The 90th percentile for lead and copper were below EPA actions levels (AL). For a complete list of sites contact Doyon Utilities Environmental at 907-455-1500.

JBER-Richardson Drinking Water Test Results *Public Water System ID# 2212039*

Substance	Sample Date	Violation Y/N	Detection Range	MCL	MCLG	Likely Source of Contamination
Organic Contaminants						
Total Organic Carbon	Quarterly 2024	N	Raw Water Range 0.659 – 5.03 ppm Treated Water Range <0.50 – 2.22 ppm	TT	TT	Naturally present in the environment
Total Trihalomethanes Building 560 (AAFES Gas) Building 986	January, April, July, and October 2024	N	Range: 5.0 - 22.2 ppb Reportable Level 22.2 ppb	80 ppb	NA	By-product of drinking water chlorination
Haloacetic Acids Building 560 (AAFES Gas) Building 986	January, April, July, and October 2024	N	Range: 7.8 - 26.2 ppb Reportable Level 26.2 ppb	60 ppb	NA	By-product of drinking water chlorination
Toluene	Quarterly 2024	N	ND - 0.00063 ppm	1 ppm	1 ppm	Discharge from petroleum factories
Radionuclides						
Gross Alpha Building 28004 (WTP) Building 35610 (Well 1) Building 35620 (Well 2) Building 35630 (Well 3)	Every 9 Years January 22, 2018 January 22, 2018 January 22, 2018 January 22, 2018	N	Highest Level Reported 1.3 ± 0.6 pCi/L 1.5 ± 0.7 pCi/L 2.5 ± 0.9 pCi/L 1.2 ± 0.7 pCi/L	15 pCi/L	0	Erosion of natural deposits
Combined Radium (226, 228) Building 28004 (WTP) Building 35610 (Well 1) Building 35620 (Well 2) Building 35630 (Well 3)	Every 9 Years January 22, 2018 January 22, 2018 January 22, 2018 January 22, 2018	N	Highest Level Reported 2.68 ± 0.67 pCi/L 2.66 ± 0.75 pCi/L 1.50 ± 0.80 pCi/L 3.80 ± 0.81 pCi/L	5 pCi/L	0	Erosion of natural deposits

Substance	Sample Date	Detection Range	MCL	Source
Unregulated Contaminants, UCMR 5				
Per- and PolyFluoroalkyl Substance (PFAS)	October 2023 January 2024 April 2024 July 2024	ND	Varies	Fire and water-resistant products
Lithium	October 2023 January 2024 April 2024 July 2024	ND	NA	Naturally present in the environment

JBER-Elmendorf Drinking Water Test Results *Public Water System ID# 2211423*

Substance	Sample Date	Violation Y/N	Detection Range	MCL	MCLG	Likely Source of Contamination
Microbiological Contaminants						
Coliform Bacteria (Revised Total Coliform Rule)	Monthly 2024	N	NA	TT	NA	Naturally present in the environment
Inorganic Contaminants						
Free Residual Chlorine	Weekly 2024	N	0.07 - 1.66 ppm	MRDL 4 ppm	MRDLG 4 ppm	Water additive used to control microbes
Lead[1]	Every 3 Years Last Sample: June 2022	N	90th Percentile 1.0 ppb Range ND - 19 ppb	AL=15 ppb	0 ppb	Corrosion of household plumbing systems
Copper[1]	Every 3 Years Last Sample: June 2022	N	90th Percentile 0.226 ppm Range ND - 0.567 ppm	AL=1.3 ppm	1.3 ppm	Corrosion of household plumbing systems

[1] Samples were obtained from numerous locations. The 90th percentile for lead and copper were below EPA action levels (AL). For a complete list of sites contact Bioenvironmental Engineering at 907-384-3985.

Substance	Sample Date	Violation Y/N	Detection Range	MCL	MCLG	Likely Source of Contamination
Organic Contaminants						
Total Trihalomethanes Building 21309 (3 ASOS) Building 5327 (773 CES)	February, May, August, and November 2024	N	Range: 1.8 - 18.2 ppb Reportable Level 18.2 ppb	80 ppb	NA	By-product of drinking water chlorination
Haloacetic Acids Building 21309 (3 ASOS) Building 5327 (773 CES)	February, May, August, and November 2024	N	Range: ND - 24.5 ppb Reportable Level 24.5 ppb	60 ppb	NA	By-product of drinking water chlorination
Unregulated Contaminants, UCMR 5						
Per- and PolyFluoroalkyl Substance (PFAS)	Quarterly 2023		ND		NA	Fire and water-resistant products
Lithium	Quarterly 2023		ND		NA	Naturally present in the environment

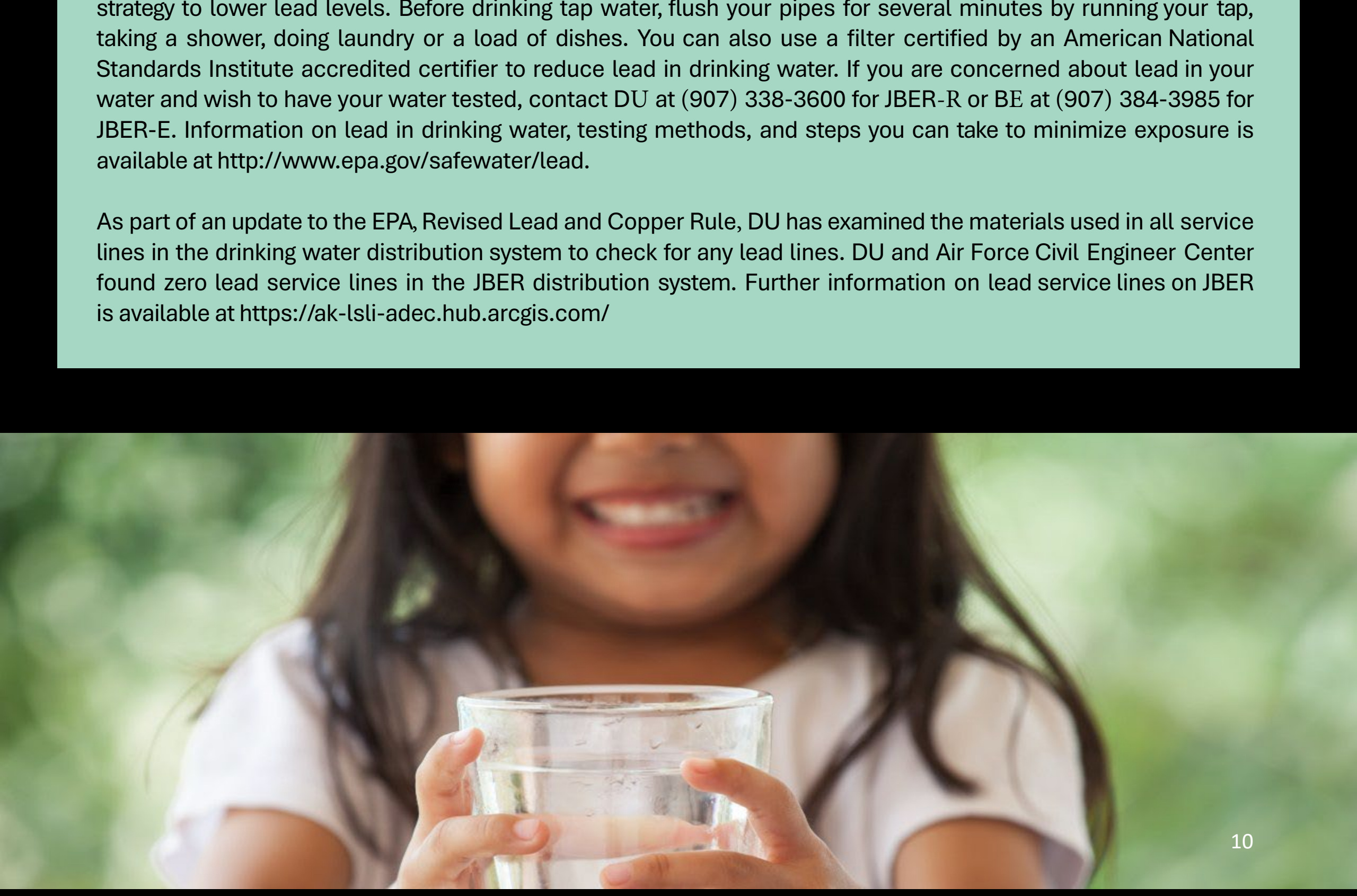
LEAD & COPPER IN DRINKING WATER

The EPA Safe Drinking Water Act requires public water systems to test water samples from its customers to determine lead and copper levels. Lead and Copper samples were collected at numerous locations on JBER in 2022 and 2024.

During the sampling events the lead and copper concentrations were within the primary drinking water standards. There is nothing in the treatment process that would introduce lead in the water; therefore, the water is tested at the individual service locations. If abnormal levels of Lead or Copper were to be detected in the water supply, residents will be notified, and the appropriate agency will initiate the corrective action.

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. DU and BE are responsible for providing high quality drinking water and removing lead pipes (none have been found) in the distribution system but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying any lead materials within your home plumbing and contacting housing maintenance to repair or remove them. Flushing water through home plumbing systems is an effective strategy to lower lead levels. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact DU at (907) 338-3600 for JBER-R or BE at (907) 384-3985 for JBER-E. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at http://www.epa.gov/safewater/lead.

As part of an update to the EPA, Revised Lead and Copper Rule, DU has examined the materials used in all service lines in the drinking water distribution system to check for any lead lines. DU and Air Force Civil Engineer Center found zero lead service lines in the JBER distribution system. Further information on lead service lines on JBER is available at https://ak-lsli-adec.hub.arcgis.com/



WATER SYSTEM CONDITIONS & MAINTENANCE

Be assured that DU makes every effort to ensure the water provided to JBER-R is safe for consumption and the installation is notified should water quality deteriorate. The 773d CES provides the same level of effort in their maintenance and operation of the JBER-E system. Furthermore, BE has a team of highly trained technicians to accomplish all required sampling events.

A common occurrence that residents may experience is white cloudy water. This is typically caused by air bubbles in the water system. Any cloudy water that does not clear up after sitting for a couple minutes should be reported to housing maintenance. Some residents may also experience brown or rusty water coming from their faucets, more often in older housing and buildings. This is usually caused by a higher concentration of minerals in the water after flushing or maintenance. This does not mean that the water is not safe. This may also occur during hydrant maintenance activities that DU and 773d CES conducts regularly to provide proper water flow rate and functionality of the fire protection system. During these hydrant maintenance and flow testing events the water may appear hazy or have a slight color at the consumer tap. Likewise, earthquakes, rapid changes in water velocity, and firefighting activities may also cause discolored water events. If you notice changes in water color, run several faucets until the water is clear. If any of these conditions persist for several minutes after flushing, it should be reported to housing maintenance or the facility manager.

Water Testing & Your Health

The sources of drinking water (both tap and bottled) include rivers, lakes, ponds, reservoirs, springs and wells. As water travels over the surface of the land or underground, it can dissolve naturally occurring minerals. In some cases, water can pick up radioactive material, or substances resulting from the presence of animals or human activity.

Although our water supply may contain some of these contaminants, it is important for you to know that these substances are either removed completely or reduced to a safe level before it arrives at your water tap.

Contaminants that may be present in source water include:

• **Microbial Contaminants**, such as viruses and bacteria, which may come from sewage treatment facilities, septic systems, agricultural livestock operations and wildlife.

• **Inorganic Contaminants**, such as salts and metals, which may naturally occur or result from urban stormwater runoff, industrial or domestic wastewater discharge, oil and gas production or farming.

• **Pesticides and Herbicides**, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

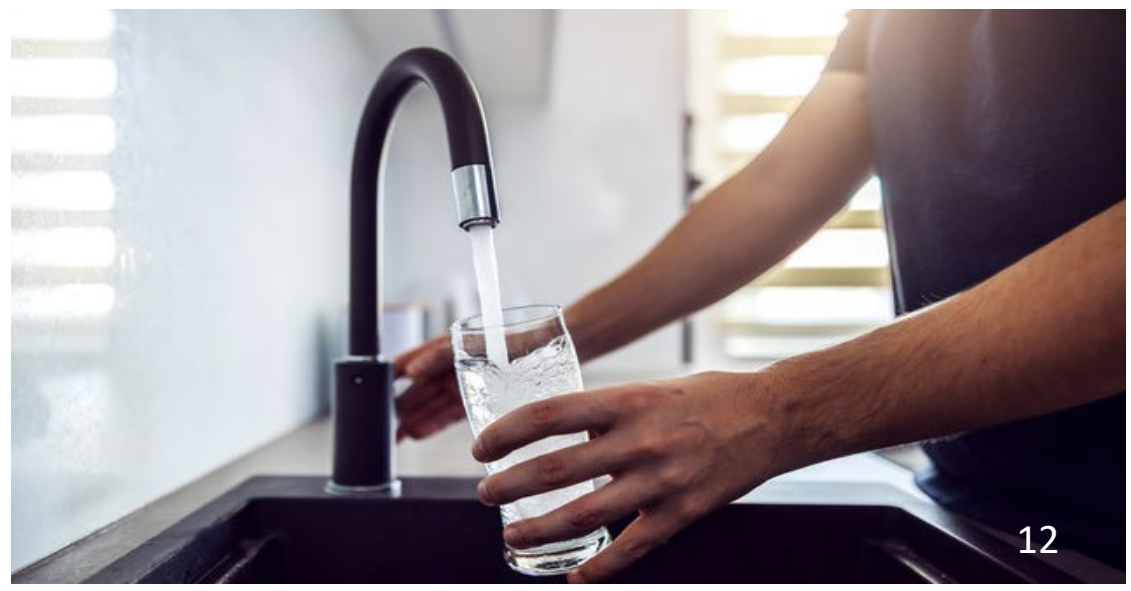
• **Organic Contaminants**, including synthetic and volatile organic compounds, which are by-products of industrial processes and petroleum production, and may also come from gas stations, urban stormwater runoff and septic systems.

• **Radioactive Contaminants**, which may occur naturally or result from oil and gas production and mining activities.

In order to ensure tap water is safe to drink, the EPA prescribes regulations, which 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, which must provide the same protection for public health. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at 1-800-426-4791.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer 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 infections. This population should seek advice about drinking water from their health care providers. EPA / Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Water Drinking Hotline at 800-426-4791.

Our DU Team or BE is happy to answer any questions you may have about our water quality. For general information or for water quality questions call the Doyon Utilities JBER office at (907) 338-3600 or the BE office at (907) 384-3985.



EXCELLENCE IN WATER QUALITY

Since 2008, Doyon Utilities and its employees have been producing and delivering high quality drinking water to our partners at Fort Wainwright, JBER, and Fort Greely. Our company proudly serves over 55,000 service members, families, and Department of Defense civilians across these three military installations.

The ADEC recognizes water systems each year for outstanding performance achieving compliance with the Drinking Water and Operator Certification regulations. The Water System Excellence Award is a concerted effort between ADEC's Drinking Water Program and Operator Certification Program to evaluate and recognize drinking water systems who in the award year met the following parameters for the Ursa Major and Ursa Minor awards.

Ursa Major Excellence Award

- Maintained 4 quarters of Operator Certification compliance
- No open, unresolved, or incurred Drinking Water violations during the award year

Ursa Minor Excellence Award

- Maintained 4 quarters of Operator Certification compliance
- No more than one open, unresolved, or incurred Drinking Water violation during the award year

OR

- Maintained 3 quarters of Operator Certification compliance
- No open, unresolved, or incurred Drinking Water violations during the award year

Ursa Major Awardees:

Fort Wainwright: 2018-2023
Fort Greely AAAF: 2018-2023
Fort Richardson: 2018-2023
Fort Greely: 2019-2023
Fort Wainwright DRMO: 2021-2023

Ursa Minor Awardees:

Fort Richardson: 2020

ENVIRONMENTAL COMPLIANCE

DOYON UTILITIES

Providing Utility Services to Alaska's Military

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