

WHITE MOUNTAIN APACHE TRIBE

WATER QUALITY REPORT

CARRIZO WATER SYSTEM

PUBLIC WATER SYSTEM# 090400244

CIBECUE WATER SYSTEM

PUBLIC WATER SYSTEM# 090400243

HONDAH/MCNARY WATER SYSTEM

PUBLIC WATER SYSTEM# 090400076

MINER FLAT WATER SYSTEM

PUBLIC WATER SYSTEM# 090400693

This report is a snapshot of your water quality. Included are details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. We are committed to providing you with information because informed customers are our best allies.

Do I need to take special precautions?

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. These people should seek advice about drinking water from their health care providers. The Environmental Protection Agency (EPA) and 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 (800-426-4791).

Why are there contaminants in my drinking water?

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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

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, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity including:

microbial contaminants, such as viruses and bacteria, that 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 by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems; and radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

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

WATER QUALITY REPORT

CARRIZO WATER SYSTEM

PUBLIC WATER SYSTEM#

090400244

1 GROUNDWATER SOURCE

| Contaminants | MCLG | MCL | Your Water | Range | Sample Date | Violation | Typical Source |
|-------------------------------|--------------|-------------|------------|----------|-------------|-----------|---|
| DISINFECTANTS | | | | | | | |
| | MRDLG | MRDL | | | | | |
| Chlorine (ppm) | 4 | 4 | 0.0508 | 0.01-0.1 | 2021 | N | Drinking water additive used for Disinfection |
| INORGANIC CONTAMINANTS | | | | | | | |
| Barium | 2 | 2 | 0.034 | NA | 2019 | N | Discharge of oil drilling wastes and from metal |

| | | | | | | | |
|--|-----------------------|--------------------|-----------------------|---------------------------|-----------------------|---------------|---|
| (ppm) | | | | | | | refineries; erosion of natural deposits |
| Fluoride (ppm) | 4 | 4 | 0.33 | NA | 2019 | N | Erosion of natural deposits; water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories |
| Sodium (ppm) | NA | NA | 27 | NA | 2020 | N | Erosion of natural deposits; salt water intrusion |
| LEAD AND COPPER RULE | | | | | | | |
| | | Action level | | | | A.L. Exceeded | |
| Copper (ppm) 90 th Percentile | 1.3 | 1.3 | 0.32 | 0 sites over Action Level | 2019 | N | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives |
| MICROBIOLOGICAL TESTING | | | | | | | |
| CALENDAR YEAR | SAMPLING REQUIREMENTS | SAMPLING CONDUCTED | TOTAL E-COLI POSITIVE | ASSESSMENT TRIGGERS | ASSESSMENTS CONDUCTED | | |
| 2021 | 1 SAMPLE DUE MONTHLY | 12 OUT OF 12 | 0 | 0 | 0 | | |

Significant Deficiencies

Significant deficiencies are defects in a water system's infrastructure, design, operation, maintenance, or management that cause, or may cause interruptions to the "multiple barrier" protection system and adversely affect the system's ability to produce safe and reliable drinking water in adequate quantities

The following is a list of significant deficiencies that have yet to be corrected. Your public water system is still working to correct these deficiencies and interim milestones are shown, as applicable.

Deficiency Title: Tank Overflow Protection

Date identified: 5/26/202

Overall Due Date: 11/30/2021

Deficiency description: The storage tank's overflow has a flap gate that tends to get stuck in the open position because of buildup of sediment from regular overflows. This makes the stored water vulnerable to contamination.

Corrective Action Plan: To prevent insects, birds, and animals from entering the tank, fit the end of the overflow pipe with either a weighted flap gate that seals tightly, and insect screen, or both. The screen may be installed to come off if it becomes clogged in an overflow event. Corrective Action Plan: To prevent insects, birds, and animals from entering the tank, fit the end of the overflow pipe with either a weighted flap gate that seals tightly, an insect screen, or both. The screen may be installed to come off if it becomes clogged in an overflow event. The overflow must terminate above ground (i.e. not in an area that could be flooded) or have an adequate air gap. Due to the recurring problem of the flap gate not fully closing, an option is to add a noncorrodible screen or replace the flap gate with a noncorrodible screen. A larger mesh size, such as 12 mesh, should be considered as the risk of clogging is increased for this tank because it is operated on a timer and regularly overflows, and over time, the concrete flume fills with sediment. Flumes should be monitored and cleaned if sediment accumulates.

Deficiency Title: Lack of Source Redundancy

Date Identified: 5/26/2020 Overall Due Date: 11/30/2022

Deficiency Description: The system has only one active source. Should this source fail, the system is in danger of using all stored water and becoming dewatered. Dewatering of the distribution system will create a partial vacuum in the distribution piping that will draw contaminants into the mains. Well 1 and Well 2 were drilled in 1990 and 1993 respectively, approximately 500 feet apart. Investigations in 2016 indicated Well 1 has holes in the casing and sediment filled the well from 50 feet to 20 feet depths. Well 1 is no longer usable, leaving Well 2 as the only well for the water system. Since both wells were drilled at similar times in similar aquifers, Well 2 may develop similar problems as Well 1.

Corrective Action Plan: A second source should be developed and put online

WATER QUALITY REPORT

CIBECUE WATER SYSTEM

PUBLIC WATER SYSTEM#

090400243

3 GROUNDWATER SOURCES

| Contaminants | MCLG | MCL | Your Water | Range | Sample Date | Violation | Typical Source |
|--|--------------|---------------------|------------|---------------------------|-------------|----------------------|--|
| DISINFECTANTS | | | | | | | |
| | MRDLG | MRDL | | | | | |
| Chlorine (ppm) | 4 | 4 | 0.4352 | 0.01-2.1 | 2021 | N | Drinking water additive used for Disinfection |
| DISINFECTION BY-PRODUCTS | | | | | | | |
| | MCLG | MCL | | | | | |
| Total Trihalomethanes TTHMs (ppb) | NA | 80 | 3.6 | NA | 2021 | N | By-product of drinking water chlorination |
| INORGANIC CONTAMINANTS | | | | | | | |
| Barium (ppm) | 2 | 2 | 0.055 | NA | 2019 | N | Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits |
| Sodium (ppm) | NA | NA | 9.8 | 8-9.8 | 2019 | N | Erosion of natural deposits; salt water intrusion |
| LEAD AND COPPER RULE | | | | | | | |
| | | Action level | | | | A.L. Exceeded | |
| Copper (ppm) 90 th Percentile | 1.3 | 1.3 | 0.32 | 0 sites over Action Level | 2019 | N | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives |

| | | | | | | | |
|--|------------------------------|---------------------------|------------------------------|----------------------------------|------------------------------|----------|---|
| | | | | | | | |
| Lead (ppb) 90th Percentile | 0 | 15 | 1.3 | 0 sites over Action Level | 2019 | N | Corrosion of household plumbing systems; discharges from industrial manufacturers; erosion of natural deposits |
| MICROBIOLOGICAL TESTING | | | | | | | |
| CALENDAR YEAR | SAMPLING REQUIREMENTS | SAMPLING CONDUCTED | TOTAL E-COLI POSITIVE | ASSESSMENT TRIGGERS | ASSESSMENTS CONDUCTED | | |
| 2021 | 3 SAMPLES DUE MONTHLY | 12 OUT OF 12 | 0 | 0 | 0 | | |

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. PWS system 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 at 1-800-426-4791 or at <http://www.epa.gov/your-drinking-water/basic-information-about-lead-drinking-water>.

Significant Deficiencies

Significant deficiencies are defects in a water system’s infrastructure, design, operation, maintenance, or management that cause, or may cause interruptions to the “multiple barrier” protection system and adversely affect the system’s ability to produce safe and reliable drinking water in adequate quantities

The following is a list of significant deficiencies that have yet to be corrected. Your public water system is still working to correct these deficiencies and interim milestones are shown, as applicable.

Deficiency Title: Lack of Seals for Hatch Covers

Date Identified: 5/26/2020 Overall Due Date: 11/30/2021

Deficiency Description: The hatch cover for West Storage Tank (ST003) has a broken hinge that keeps it from closing tightly and expanding the gasket. The instrument hatch for East (Green) Storage Tank (ST004) does not have a gasket. This makes the water stored in the tanks vulnerable to contamination.

Corrective Action Plan: To protect stored water from contamination, gaskets should be installed on all water storage tank hatch covers. The gasket should provide an airtight seal to prevent the entry of dust and insects into the storage tank. The gasket material should be suitable for contact with potable water (e.g. NSF Standard 61 certified material, food grade). For more information on the NSF Standard 61 certification, please consult the following website:

<http://www.nsf.org/services/by-industry/water-wastewater/municipal-water-treatment/nsf-ansi-standard-61>

The hinge on ST003's hatch cover should be repaired so it will close tightly and seal all openings. A gasket should be provided for ST004's instrument hatch.

WATER QUALITY REPORT

HONDAH/MCNARY WATER SYSTEM

PUBLIC WATER SYSTEM#

090400076

3 GROUNDWATER SOURCES

| Contaminants | MCLG | MCL | Your Water | Range | Sample Date | Violation | Typical Source |
|-----------------------------------|--------------|-------------|------------|-----------|-------------|-----------|--|
| DISINFECTANTS | | | | | | | |
| | MRDLG | MRDL | | | | | |
| Chlorine (ppm) | 4 | 4 | 0.2716 | 0.01-1.99 | 2021 | N | Drinking water additive used for Disinfection |
| DISINFECTION BY-PRODUCTS | | | | | | | |
| | MCLG | MCL | | | | | |
| Five Haloacetic Acids HAA5 (ppb) | NA | 60 | 19.4 | NA | 2021 | N | By-product of drinking water chlorination |
| Total Trihalomethanes TTHMs (ppb) | NA | 80 | 2.1 | NA | 2021 | N | By-product of drinking water chlorination |
| INORGANIC CONTAMINANTS | | | | | | | |
| Barium (ppm) | 2 | 2 | 0.034 | NA | 2019 | N | Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits |
| Arsenic | 10 | 2.6 | NA | NA | 2019 | N | Erosion of natural deposits; runoff from orchards; glass and electronics production wastes |
| Sodium (ppm) | NA | NA | 12 | 6.2-12 | 2019 | N | Erosion of natural deposits; salt water intrusion |

| | | | | | | | |
|--|-----------------------|--------------------|-----------------------|---------------------------|-----------------------|---------------|--|
| Chromium (ppb) | 100 | 100 | 1.1 | NA | 2017 | N | Discharge from steel and pulp mills and chrome plating; erosion of natural deposits |
| Nitrate -reported as Nitrogen- (ppm) | 10 | 10 | 0.5 | 0.31-0.5 | 2021 | N | Runoff and leaching from fertilizer use; leaching from septic tanks, sewage |
| LEAD AND COPPER RULE | | | | | | | |
| | | Action level | | | | A.L. Exceeded | |
| Copper (ppm) 90 th Percentile | 1.3 | 1.3 | 0.32 | 0 sites over Action Level | 2019 | N | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives |
| Lead (ppb) 90 th Percentile | 0 | 15 | 0.58 | 0 sites over Action Level | 2019 | N | Corrosion of household plumbing systems; discharges from industrial manufacturers; erosion of natural deposits |
| MICROBIOLOGICAL TESTING | | | | | | | |
| CALENDAR YEAR | SAMPLING REQUIREMENTS | SAMPLING CONDUCTED | TOTAL E-COLI POSITIVE | ASSESSMENT TRIGGERS | ASSESSMENTS CONDUCTED | | |
| 2021 | 3 SAMPLES DUE MONTHLY | 12 OUT OF 12 | 0 | 0 | 0 | | |

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. PWS system 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 at 1-800-426-4791 or at <http://www.epa.gov/your-drinking-water/basic-information-about-lead-drinking-water>.

Significant Deficiencies

Significant deficiencies are defects in a water system's infrastructure, design, operation, maintenance, or management that cause, or may cause interruptions to the "multiple barrier" protection system and adversely affect the system's ability to produce safe and reliable drinking water in adequate quantities

The following is a list of significant deficiencies that have yet to be corrected. Your public water system is still working to correct these deficiencies and interim milestones are shown, as applicable.

Deficiency Title: Cross-connection Control Program

Date Identified: 5/26/2020 Overall Due Date: 6/1/2022

Deficiency Description: WMATAT does not have a cross connection control program implemented. Several high risk facilities do not have adequate cross connection protection.

| Health-based Violations | | | | | | |
|---|---|-----------------------|---|----------------------|-------------|--------------------------------------|
| The table below lists the health-based violations the water system incurred during the last calendar year. While you should have received notification of the violation at an earlier date, we are required to list them in this report | | | | | | |
| Contaminant | Violation | Begin/End Date | Steps taken to correct the violation | Return to Compliance | Return Date | Action/Comments |
| Revised Total Coliform Rule (RTCR) | Sampled 2 of 3 routine monitoring locations | 06/01/2021-06/30/2021 | Reported samples in the following month | Yes | 08/09/2021 | Full set of results received in July |
| <p>What should I do as a consumer? There is nothing you need to do at this time</p> <p>What is being done by the Utility? We will work with our regulatory official to complete all required contaminant monitoring as directed</p> | | | | | | |

| | | | | | | | |
|----------------|----|----|-----|--------|------|---|---|
| Sodium (ppm) | NA | NA | 12 | 7.4-12 | 2020 | N | Erosion of natural deposits; salt water intrusion |
| Antimony (ppb) | 6 | 6 | 1.7 | NA | 2020 | N | Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder |

LEAD AND COPPER RULE

| | | | | | | | |
|--|-----|--------------|------|---------------------------|------|---------------|--|
| | | Action level | | | | A.L. Exceeded | |
| Copper (ppm) 90 th Percentile | 1.3 | 1.3 | 0.21 | 0 sites over Action Level | 2019 | N | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives |
| Lead (ppb) 90 th Percentile | 0 | 15 | 1.5 | 0 sites over Action Level | 2019 | N | Corrosion of household plumbing systems; discharges from industrial manufacturers; erosion of natural deposits |

SURFACE WATER TREATMENT PLANT

| | | | | | | | |
|--|-------------------------------------|---------------|------------|-------|-------------|---------------|-------------|
| | Process Limit | Process Value | Your Water | Range | Sample Date | A.L. Exceeded | |
| Highest 5% of Turbidity results Above 0.3 NTU Limit (% Reported) | Less than 5% Results exceed 0.3 NTU | 5 | 11 | NA | 2021 | YES | Soil Runoff |
| Maximum Turbidity Reported (NTU) | No results Exceed 1 NTU | 1 | 0.68 | NA | 2021 | NO | Soil Runoff |

MICROBIOLOGICAL TESTING

| | | | | | |
|---------------|-----------------------|--------------------|-----------------------|---------------------|-----------------------|
| CALENDAR YEAR | SAMPLING REQUIREMENTS | SAMPLING CONDUCTED | TOTAL E-COLI POSITIVE | ASSESSMENT TRIGGERS | ASSESSMENTS CONDUCTED |
|---------------|-----------------------|--------------------|-----------------------|---------------------|-----------------------|

| | | | | | |
|-------------|-----------------------------------|---------------------|----------|----------|----------|
| 2021 | 15 SAMPLES DUE MONTHLY | 12 OUT OF 12 | 0 | 0 | 0 |
|-------------|-----------------------------------|---------------------|----------|----------|----------|

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. PWS system 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 at 1-800-426-4791 or at <http://www.epa.gov/your-drinking-water/basic-information-about-lead-drinking-water>.

Additional Information for Arsenic

While your drinking water meets the EPA standard for arsenic, it does contain low levels of arsenic. The EPA standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The EPA continues to research the health effects of low levels of arsenic which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Additional Information for Turbidity

Turbidity is a measure of the clarity of water. We monitor this as an indicator of the effectiveness of our filtration system.

Health-Based Violations in 2021

WMATUA Miner Flat surface water treatment plant violated the Surface Water Treatment Rule when a series of elevated turbidity readings. Turbidity is a measure of cloudiness of the water and an indicator removal of contamination. Turbidity readings at the surface water treatment plant exceeded a level of 0.3 units over 6 days in July, 2021, we are required to meet this turbidity level 95% of the time, but the plant met this level only 79% of the time. The normal operation of the treatment was disrupted during power surges. During the event, we maintained the required level of disinfection with chlorine. The surface water treatment plant has met turbidity standards since the July event.

As a consumer of the water, there is nothing you need to do at this time.

Significant Deficiencies

Significant deficiencies are defects in a water system's infrastructure, design, operation, maintenance, or management that cause, or may cause interruptions to the "multiple barrier" protection system and adversely affect the system's ability to produce safe and reliable drinking water in adequate quantities

The following is a list of significant deficiencies that have yet to be corrected. Your public water system is still working to correct these deficiencies and interim milestones are shown, as applicable.

Deficiency Title: Tank Vent Protection Screen

Date Identified: 5/26/2020 Overall Due Date: 11/30/2021

Deficiency Description: All the Miner Flat PWS storage tank vents have been fitted with screens. However, the tanks listed above either have only large-mesh screens that will not deter insects or have insect screens that have tears or corrosion problems.. (ST050 Chlorine Contact Tank, ST008 Over-the-Rainbow, ST010 Tan, ST015 Upper East Fork, ST020 Cedar Creek (Coyote), ST022 Seven-up) (Photos 35, 73, 80, 90, 99 and 10.

Corrective Action Plan: Inspect and replace the vent screens at the storage tanks listed above. Vent screen should fit properly, be made of non-corrodible material and be of fine enough mesh to prohibit the entry of insects and birds (16-24 mesh). Special vent designs may be necessary to prevent vents from clogging or freezing over. If the operator suspects that the tank vent tends to become clogged or frozen over, the problem should be addressed by an engineer familiar with water tank vent design

Deficiency Title: Tank Overflows

Date Identified: 5/26/2020 Overall Due Date: 11/30/2021

Deficiency Description: The end of the overflow pipes of storage tanks do not have adequate protection to keep insects and vermin from gaining access to the stored water. All the tanks' overflow pipes have been fitted with screens or flap gates, however, many of the flap gates no longer close properly due to rust or wear. Some of the screens are torn. (ST001, ST023 Miner Flat; ST008 Over-the-Rainbow; ST009 Rainbow City; ST010 Tan; ST012 Seven Mile; ST016, ST017 Canyon Day; ST021 Cedar Creek (Coyote)) (Photos 50, 73, 79, 82, 92, and 101)

Corrective Action Plan: Fit the end of the overflow pipe with a weighted flap gate that seals tightly, an insect screen or both. The screen may be installed to come off in the event that it becomes clogged in an overflow event. The overflow must terminate above ground (i.e. not in an area that could be flooded) or have an adequate air gap.

It is recommended that WMATUA consider installation of noncorrodible screens with a mesh size of 12-mesh or smaller. Due to the obvious problems with flap gates that fail to close properly, SGEC recommends replacing flap gates with noncorrodible screens. It seems likely that the screens will require less maintenance time for the operators

Deficiency Title: Sealing of Tank Access Hatch

Date Identified: 5/26/2020 Overall Due Date: 11/30/2021

Deficiency Description: All the Miner Flat PWS tank access hatch openings have been fitted with sealing gaskets. A few of the gaskets need to be replaced or repaired and ST005's hatch cover has a broken hinge that will prevent proper sealing. (ST050 Chlorine Contact, ST004 Powerline, ST005 Cradleboard, ST008 Over-the-Rainbow, ST020 Cedar Creek (Coyote and ST022 Seven-up) (35, 61, 64, 73, 99 and 104)

Corrective Action Plan: To protect stored water from contamination, gaskets should be installed on all water storage tank hatch covers. The gasket should provide an airtight seal to prevent the entry of dust and insects into the storage tank. The gasket material should be suitable for contact with potable water (e.g. NSF Standard 61 certified material, food grade). For more information on the NSF Standard 61 certification, please consult the following website: <http://www.nsf.org/services/by-industry/water-wastewater/municipal-water-treatment/nsf-ansi-standard-61>

ST005's hatch cover hinge needs to be repaired to prevent unauthorized entry and ensure sealing of its gasket.

Deficiency Title: Direct Opening into Tank – Instrument Hatch

Date Identified: 5/26/2020 Overall Due Date: 11/30/2021

Deficiency Description: ST008's instrument hatch's raised sill has an oversized hole to accommodate a conduit. The openings around the conduit offer opportunities for runoff, insects and other contaminants to gain entry to the tank's interior. (ST008 Over-the-Rainbow) (Photo 74)

Corrective Action Plan: The opening should be sealed with caulk or some other flexible and weather resistant material. The seal should be waterproof and will likely require on-going maintenance.

Deficiency Title: Direct Opening into Tank - Targets

Date Identified: 5/26/2020 Overall Due Date: 11/30/2021

Deficiency Description: ST007 (Diamond Creek) and ST013 (Upper East Fork) have targets that do not have sealed housings for their cables. Thus, the cables penetrate the tanks' roofs through a small opening that is vulnerable to insects and runoff. (Photos 70 and 86)

Corrective Action Plan: The openings should be sealed. It is likely that the target assemblies will need to be replaced with cable assemblies that have sealed and protected housings as found on the other WMATUA tanks.

Deficiency Title: Lack of Cross-Connection Control Program

Date Identified: 5/26/2020 Overall Due Date: 8/6/2022

Deficiency Description: WMATAT does not have a cross connection control program implemented. Several high risk facilities do not have adequate cross connection protection. Lack of cross connection/backflow prevention program

Deficiency Title: Undersized Tank Vents

Date Identified: 5/26/2020 Overall Due Date: 9/30/2022

Deficiency Description: The tanks' vents are too small provide adequate transfer of air. (ST013, ST014 Upper East Fork) (Photos 85 and 88)

Corrective Action Plan: The existing under-sized vents should be replaced with properly designed vents that are large enough to provide adequate transfer of air as the water levels rise and fall in the tank. The vents should be downward-turned and screened to prevent the entry of insects and provide protection against windblown dust. The vent screen should fit properly, be made of non-corrodible material and be of fine enough mesh to prohibit the entry of insects and birds (16-24 mesh). Special vent designs may be necessary to prevent vents from clogging or freezing over. If the operator suspects that the tank vent tends to become clogged or frozen over, the problem should be addressed by an engineer familiar with water tank vent design.

Deficiency Title: Lack of a Tank Vent

Date Identified: 5/26/2020 Overall Due Date: 9/30/2022

Deficiency Description: ST007 (Diamond Creek) does not have a dedicated vent. Therefore, as air moves in and out of the tank, it must vent through the overflow and/or opening in the roof for its target cable. If the overflow were to plug or freeze, venting would likely be inadequate, and a line break could cause structural damage to the tank. (Photo 69)

Corrective Action Plan: The pipe at the top of the tank's roof should be converted to a dedicated vent. The vent should be downward-turned and screened to prevent the entry of insects. Vent screen should fit properly, be made of non-corrodible material and be of fine enough mesh to prohibit the entry of insects and birds (16-24 mesh). Special vent designs may be necessary to prevent vents from clogging or freezing over. If the operator suspects that the tank vent tends to become clogged or frozen over, the problem should be addressed by an engineer familiar with water tank vent design.

Deficiency Title: Pumping Facility Lack of Redundancy - Major

Date Identified: 5/26/2020 Overall Due Date: 11/30/2022

Deficiency Description: The four booster stations are designed as duplex pumping stations. However, for a variety of reasons, each of the booster stations has only one pump that is operational. Many of these pumping stations have been operating with only one pump for years. This leaves the PWS vulnerable to water delivery failure if the operational pump fails and could result in the dewatering of the distribution system downgradient from the pumping facility. Dewatering of the distribution system will lead to a backsiphonage situation, producing a significant public health risk. (PF003 Canyon Day, PF004 East Fork) (Photos 110-112)

Corrective Action Plan: Rehabilitate, repair, or replace the second pump at each station.

Health-Based Violations in 2021

WMATUA Miner Flat surface water treatment plant violated the Surface Water Treatment Rule when a series of elevated turbidity readings. Turbidity is a measure of cloudiness of the water and an indicator removal of contamination. Turbidity readings at the surface water treatment plant exceeded a level of 0.3 units over 6 days in July, 2021, we are required to meet this turbidity level 95 % of the time, but the plant met this level only 79% of the time. The normal operation of the treatment was disrupted during power surges. During the event, we maintained the required level of disinfection with chlorine. The surface water treatment plant has met turbidity standards since the July event.

As a consumer of the water, there is nothing you need to do at this time.

DEFINITIONS

| | |
|-----------------------------|--|
| ppm | parts per million, or milligrams per liter (mg/l) |
| ppb | parts per billion, or microgram per liter (ug/l) |
| positive samples | the number of positive samples taken that year |
| %positive samples/mo. | % of samples taken monthly that were positive |
| ND | Not Detected |
| NA | Not Applicable |
| MCLG | Maximum Contaminant Level Goal: 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 |
| MCL | Maximum Contaminant Level: 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 treatment technology. |
| MRDL | Maximum Residual Disinfectant Level |
| MRDLG | Maximum Residual Disinfectant Level Goal |
| TT | Treatment Technique: a required process intended to reduce the level of a contaminant in drinking water |
| AL | Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. |
| 90 th Percentile | Statistical value used to determine if Action Level is exceeded. Determined by calculating the value at which 90% of the samples tested were below that value. |

How can I get involved?

Please feel free to contact the number below for more information or for

Translated copy of the report if you need it in another language.

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, and businesses). You can do this posting this notice in a public place or distributing copies by hand or mail.

FOR MORE INFORMATION PLEASE CONTACT:

Alfred Walker, Director

Thomas Pacheco, Regulatory Compliance Officer

P.O. Box 517 Whiteriver, Arizona 85941

Phone: (928) 338-4825

Fax: (928) 338-3945