

DC Water  
**HOUSEHOLD  
WATER  
QUALITY  
GUIDE**





Ensuring quality tap water is a shared responsibility of DC Water and individual residents. When water flows from the treatment plant to your tap, many factors in the distribution system and household plumbing can affect your water quality.

The US Army Corps of Engineers Washington Aqueduct is responsible for drinking water treatment in the District. DC Water purchases water from the Washington Aqueduct and delivers it to households and businesses in the District.

## **DC Water Contact Numbers**

Customer Service: **202-354-3600**

24-Hour Command Center: **202-612-3400**

Drinking Water Division: **202-612-3440**

Si usted necesita la versión en español de este panfleto por favor llamar al: **202-354-3600.**

... see page 13 for additional contacts and valuable resources >

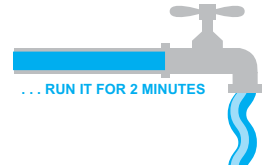
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## HOUSEHOLD WATER QUALITY TIPS

### Flush cold taps when household water is not used for several hours

Run cold water taps for two minutes before using water for drinking and cooking. When water sits in your pipes for long periods of time, water quality can decline.



### Do not use hot tap water for drinking and cooking

Hot water dissolves contaminants and may contain metals, sediment and bacteria that build up in the water heater. If you have household lead sources, hot water can cause lead to release in your drinking water.



### Routinely replace filter cartridges

Bacteria and metals can build up in filter cartridges. Be sure to follow the manufacturer's instructions for filter replacement.



### Replace old household plumbing and potential lead sources

Replace galvanized plumbing with copper pipes and install "lead-free" plumbing fixtures that contain 0.25 percent lead or less. After installation, flush cold water taps for five minutes once a day for three days.



### Routinely clean faucet strainers

Sediment and metals can collect in the aerator screen located at the tip of your faucets. Replace aerators that are in poor condition. These are available at local hardware stores.

*... see page 4 on how to clean faucet aerators >*

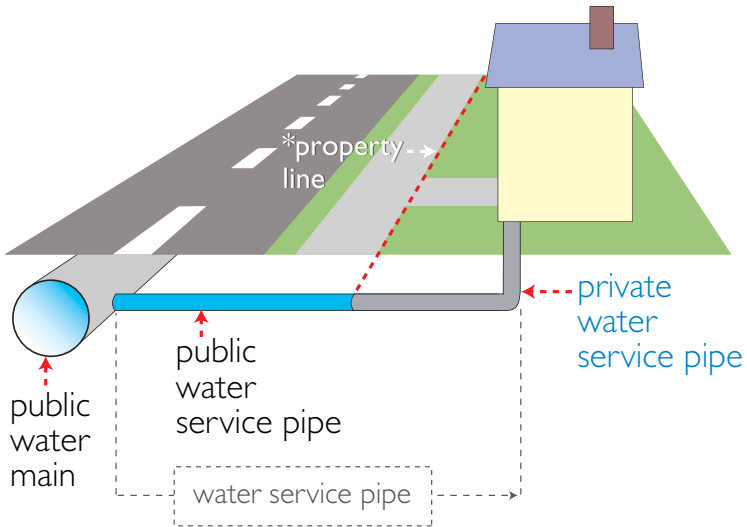
### Drain your water heater annually

Sediment, bacteria and metals can build up in the water heater tank. This can impact household water quality and water pressure.

*... see page 5 on how to drain your water heater >*

## HOUSEHOLD PLUMBING

### Your water service pipe



The water service pipe connects the water main to your household plumbing. The water service pipe is owned by the property owner. However, under certain conditions, DC Water is authorized to repair, maintain or renew the portion of the service pipe in public space. Maintenance of household plumbing and the portion of the service pipe on private property is the exclusive responsibility of the property owner.

The material of water service pipes vary from home to home in the District. A water service pipe may not be the same material on public and private property. DC Water maintains records of water service pipes in public space. This historical data may be incomplete

and may not include information about the service pipe material on private property.

Some District households still have lead service pipes and pipe replacement is strongly encouraged. Property owners who voluntarily choose to replace their lead service pipe can participate in DC Water's voluntary lead service pipe replacement program. DC Water will coordinate the replacement of the lead service pipe in public space when a property owner replaces the service pipe on private property.

For information about your water service pipe or lead pipe replacement, contact DC Water Customer Service at 202-354-3600.

## Types of water pipes

Follow the guidance below or contact a licensed plumber to determine the material of your water pipes. To identify the material of your service pipe material on private property, check your household water service connection, typically located in the basement.

Homeowners should identify and replace old household pipes, particularly galvanized plumbing and sources of lead. The type of household plumbing can vary throughout your household.

### Galvanized

A dull, silver-gray color. Use a magnet - strong magnets will typically cling to galvanized pipes.



### Copper

The color of a copper penny.



### Plastic

White, rigid pipe that is joined to water supply piping with a clamp.



### Lead

A dull, silver-gray color that is easily scratched with a coin. Use a magnet - strong magnets will not cling to lead pipes.



## Galvanized Plumbing & Impacts on Water Quality

Galvanized pipes are old, iron pipes that were installed in many homes built before the 1960s. Over many years, old, corrosion scales build up inside the walls of galvanized pipes.



These pipes can cause discolored water and pressure issues. Galvanized pipes can also release lead in water if you have, or ever had, a lead service pipe. When lead is released from a lead service pipe and passes through galvanized plumbing (particularly over decades of use), lead can accumulate on the inside, corroded walls of this plumbing. Lead release from galvanized pipes can vary from home to home and can continue to occur even after a lead service pipe is replaced.

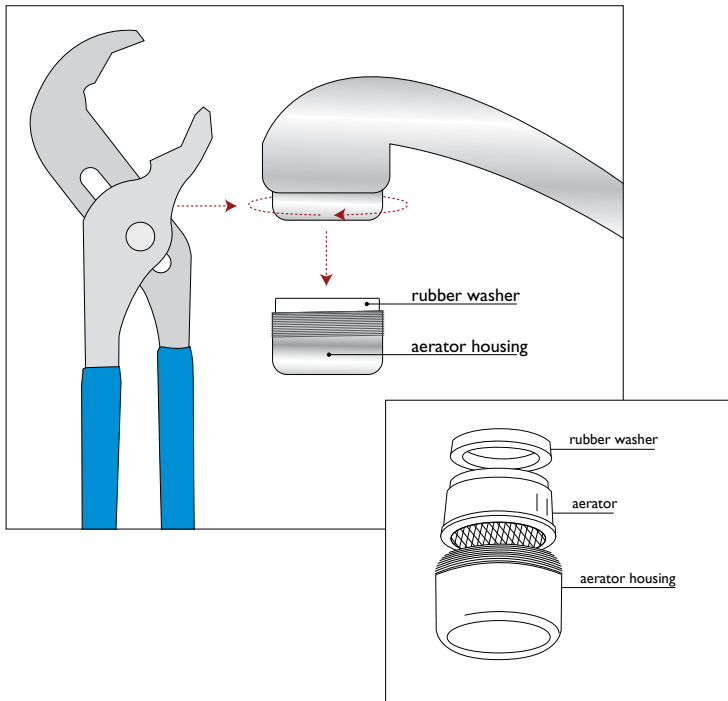


## HOW TO CLEAN FAUCET AERATORS

Aerators are located at the tip of household faucets and have a screen to collect particles and sediment. Remove and clean aerators monthly and replace annually - aerators are available at your local hardware store.

1. Unscrew the aerator. You may need a wrench.
2. Separate the individual parts.
3. Remove any sediment (mineral or rust build up) on the screen and other parts. If necessary, soak the parts in white vinegar for a few minutes and scrub with a brush.
4. If the aerator is in poor condition or the rubber washer is disintegrated, install a new aerator.
5. Reassemble the aerator parts and screw on faucet.
6. Repeat process for all household faucets. All faucets should have an aerator installed unless you have a faucet-mount filter installed at the tap.

### Faucet and Aerator



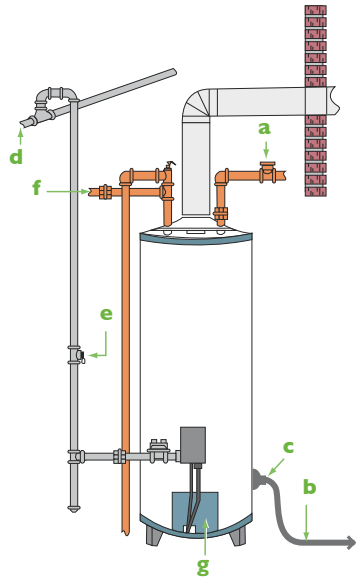
## HOW TO DRAIN YOUR WATER HEATER

Drain your water heater annually.

Follow the steps below or contact a licensed plumber.

1. Turn "off" the water heater by following instructions in the user manual (instructions typically printed on hot water tank). Wait two hours to allow the heater to cool down. **Caution: Be sure the pilot light or burner is extinguished on gas heaters and the heating coils are off on electric heaters.**
2. Close cold water supply valve (a).
3. Connect a hose (b) to the drain valve (c) and place the hose discharge end into an area where water may flow freely.
4. Open any household hot water faucet.
5. Open the drain valve (c) and allow the tank to completely drain. **Caution: Hot water may be released from the drain hose - keep away from children and pets.** Note: If the drain valve clogs, slowly open the cold water supply valve (a). Close the valve when the clog is removed. If the problem persists, contact a licensed plumber.
6. Close the household hot water faucet that was opened in Step 4.
7. Slowly reopen the cold water supply valve (a) and wait at least five minutes or until no sediment is observed at the hose discharge end.
8. Close the drain valve (c).
9. Remove hose (b).
10. Open the household hot water faucet that was closed in Step 6. When the water begins flowing, close hot water faucet.
11. Turn "on" the water heater by following instructions in the user manual (instructions typically printed on hot water tank).
12. Set the water heater temperature at 60°C (140°F) to minimize bacterial growth and maximize energy efficiency. Refer to user manual for adjusting heat settings. The heat adjustment dial for most heaters is located on the gas or electric supply line near the bottom of the water heater.

Diagram of a gas water heater. Electric water heater will vary slightly.



- a Cold water supply valve
- b Drain hose
- c Drain valve
- d Gas supply
- e Gas supply shut off valve
- f Hot water outlet
- g Removable door for access to burner and pilot light

## IDENTIFYING WATER QUALITY ISSUES

	ISSUE	POTENTIAL CAUSES	WHAT-TO-DO
COLOR	Brown Red Orange Yellow	<ul style="list-style-type: none"> <li>Sediment or rust from old household pipes or water mains, particularly iron or galvanized pipes.</li> <li>Temporary changes in flow (hydrant flushing) or pipe disturbances (construction or a water main break) can disrupt older pipes and cause discoloration.</li> </ul>	<ul style="list-style-type: none"> <li>Iron in water is not a health risk.</li> <li>Flush cold water taps for 15 minutes.</li> <li>Do not use hot water until water clears. If you experience discolored water from your hot water tap for several hours, flush your water heater.</li> <li>Do not do laundry. If discoloration occurs during laundry, do not dry clothes. Rewash clothes to avoid stains.</li> <li>Replace old household plumbing, particularly galvanized pipes.</li> </ul>
	Cloudy Milky	<ul style="list-style-type: none"> <li>Air bubbles in household pipes from changes in water temperature or construction. In cold weather, water travels from water mains into warmer household pipes, causing air bubbles to form and release at the tap. Construction can also allow air to enter the pipes.</li> <li>Minerals in water - calcium or phosphate.</li> </ul>	<ul style="list-style-type: none"> <li>Air bubbles and minerals in water are not a health risk.</li> <li>Fill a glass with water, if the cloudiness disappears from bottom to top in a few minutes, it is air bubbles.</li> <li>If cloudiness settles to the bottom or does not clear, it is likely calcium or phosphate.</li> </ul>
	Green Blue	<ul style="list-style-type: none"> <li>Copper plumbing corrosion.</li> <li>Newly installed plumbing can release metals in water.</li> </ul>	<ul style="list-style-type: none"> <li>Copper in water is not a health risk.</li> <li>After installing new household pipes or fixtures, flush cold water taps for five minutes at a high flow rate once a day for three days or until water clears.</li> <li>Replace old copper plumbing.</li> </ul>
PARTICLES	White Particles	<ul style="list-style-type: none"> <li>Calcium build up in the water heater can collect in faucet aerators and appear in tap water. White particles can be visible in ice cubes made with tap water.</li> <li>Water heater - dip tube is made of a nontoxic plastic material that can break apart, collect in faucet aerators and appear in tap water.</li> </ul>	<ul style="list-style-type: none"> <li>Calcium in water is not a health risk.</li> <li>Place the white material in a small amount of distilled vinegar. Calcium particles will bubble or dissolve within 24 hours. Plastic particles will not dissolve.</li> <li>Clean aerators.</li> <li>Flush water heater - contact the manufacturer if plastic particles continue to appear in water.</li> </ul>
	Black Particles	<ul style="list-style-type: none"> <li>Rubber materials from plumbing gaskets or O-rings.</li> <li>Carbon water filter cartridges.</li> <li>Iron or manganese can release from old pipes after construction or a water main break.</li> </ul>	<ul style="list-style-type: none"> <li>Replace gaskets and O-rings with chloramine-resistant materials.</li> <li>Routinely replace filter cartridges.</li> <li>Clean aerators.</li> <li>Flush water heater - contact the manufacturer if plastic particles continue to appear in water.</li> </ul>
TASTE / ODOR	Sulfur Sewer	<ul style="list-style-type: none"> <li>Bacteria growth in the sink drain or water heater. Debris can build up in the u-shaped plumbing beneath the sink and create an odor at the tap.</li> </ul>	<ul style="list-style-type: none"> <li>Fill a glass halfway with tap water and smell the water in a different room. If the odor is no longer present, the odor is likely from the sink drain, not the tap water.</li> <li>Pour 1/2 cup of bleach or disinfection product down the drain to remove debris and odor. Repeat if necessary.</li> <li>If odor is from the hot tap water, flush water heater.</li> </ul>
	Chlorine	<ul style="list-style-type: none"> <li>Chlorine and chloramine (chlorine + ammonia) are used to disinfect drinking water.</li> <li>When chlorine interacts with debris and bacteria in pipes, it may cause a stronger odor.</li> </ul>	<ul style="list-style-type: none"> <li>Chlorine in water is not a health risk and is routinely monitored to ensure levels meet drinking water standards. However, at times you may notice an increase in chlorine taste and odor.</li> <li>Flush cold water tap for two minutes.</li> <li>Refrigerate a pitcher of cold tap water to allow the chlorine odor to dissipate.</li> <li>Use a pitcher-style or faucet-mount filter to remove chlorine taste and odor.</li> </ul>
	Metallic	<ul style="list-style-type: none"> <li>Metal release in water - newly installed or old plumbing can release metals in water.</li> </ul>	<ul style="list-style-type: none"> <li>Flush cold water taps after installing new household pipes or fixtures.</li> <li>After installing new household pipes or fixtures, flush cold water taps for five minutes once a day for three days or until water clears.</li> </ul>
OTHER	White Residue	<ul style="list-style-type: none"> <li>Commonly appears in showers and kitchenware from dissolved minerals in water (water hardness), such as calcium and phosphate. Typically, water hardness is higher during warmer months.</li> <li>Calcium and phosphate can build up in the water heater and on household surfaces.</li> </ul>	<ul style="list-style-type: none"> <li>Calcium in water is not a health risk.</li> <li>Commercial products are available to remove white residue.</li> <li>Flush water heater.</li> </ul>
	Pink Stains	<ul style="list-style-type: none"> <li>Biofilm (non-harmful bacteria) that is airborne and spreads easily in warm, moist environments. Can appear as pink, orange or yellow.</li> <li>Bacteria can grow in water heaters and contribute to biofilm growth on wet surfaces. If the water heater temperature is not maintained at 60°C (140°F), bacteria can grow.</li> </ul>	<ul style="list-style-type: none"> <li>Pink biofilm is not a health risk for healthy individuals. Immune compromised individuals should seek advice from a physician.</li> <li>Disinfect and scrub affected areas. Keep surfaces dry. The presence of biofilm is difficult to permanently remove. During warmer months, routine cleaning may be necessary.</li> <li>Fix dripping faucets and showerheads.</li> <li>Check the temperature of your water heater.</li> </ul>



## HOUSEHOLD FILTERS

### Water Filters

Various styles and types of water treatment devices are certified for household use. These devices can remove a broad range of contaminants from water and minimize taste and odor issues. You should choose the type of filter that best fits your needs.

#### Certified Filters

- Any type of water treatment device that you choose should meet National Sanitation Foundation (NSF) standards.\*

#### Types of Water Filters

- Various types of water treatment technologies are available, including filtration, reverse osmosis, ultraviolet treatment and softeners.
- Various styles of devices are available, including point-of-entry (POE) and point-of-use (POU).
- We recommend point-of-use filters, such as faucet mounts and pitcher-style.

#### Water Filter Maintenance

- It is important to routinely replace filter cartridges according to the manufacturer's instructions. Over time, a filter can accumulate metals and bacteria.
- Water filters and cartridges can vary in their longevity (length of use) and replacement costs.



#### \*National Sanitation Foundation (NSF) Standards

NSF certifies water treatment technologies. When purchasing a treatment device, be sure the packaging lists 1) NSF-certification and 2) the specific contaminant(s) you wish to minimize in your water. A device may meet NSF standards, but this does not mean the filter is certified to remove or reduce every contaminant. For example, a filter may be certified to meet NSF 53 for reducing turbidity, but may not be certified to remove lead.

##### NSF Standard 53

– *Health Effects*

Includes lead, asbestos, chemical, turbidity and cyst reductions.

##### NSF Standard 42

– *Aesthetic Effects*

Includes taste, odor, chlorine and particulate reductions.

##### NSF Resources

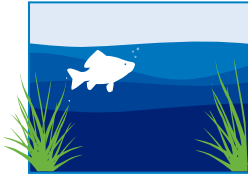
- General Info [nsf.org](https://www.nsf.org) or 1-800-673-8010
- Contaminant Guide & Home Water Treatment Devices Guide [nsf.org/consumer/drinking\\_water](https://www.nsf.org/consumer/drinking_water)
- Drinking Water Treatment Product Database [nsf.org/Certified/DWTU](https://www.nsf.org/Certified/DWTU)

# DRINKING WATER AND LEAD

## Our Drinking Water

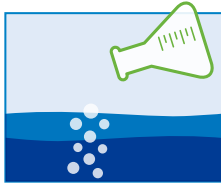
ESSENTIALLY  
NO LEAD  
FOUND

### 1. Where does drinking water come from?



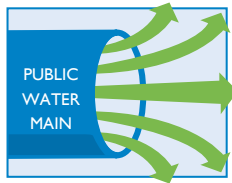
Our drinking water is drawn from the Potomac River by the Washington Aqueduct.

### 2. Who treats drinking water?



The Washington Aqueduct is responsible for water treatment.

### 3. Who distributes drinking water?



DC Water distributes the water to homes and businesses.

POSSIBLE  
LEAD

### 4. Where can lead be found?



Lead can enter your water if you have a lead service pipe or household plumbing with lead.

*Drinking Water and Lead continued p.10*

### Sources of Lead in Water

#### A lead service pipe

- This pipe connects the water main in the street to your household plumbing. The material of water service pipes can vary and some households still have lead service pipes. Lead service pipes were installed until the mid-1950s.

#### Lead solder

- Connects pipes in household plumbing. Lead solder was used in plumbing prior to 1987.

#### Brass faucets, valves or fittings

- Almost all faucets, valves and fittings have brass components that contain lead. Until 2014, brass faucets and fittings sold in the United States that are labeled “lead-free” can contain up to eight percent lead.

#### Galvanized iron pipes

- Old, corroded pipes that can release lead in water if you have, or once had, a lead service pipe. Galvanized pipes were installed in many homes prior to the 1960s.

### Minimizing Lead in Drinking Water

#### Test your water for lead

- DC Water offers lead testing to help residents identify potential household lead sources.
- To request a test kit, contact Customer Service at 202-354-3600.

#### Remove lead sources

- Replace a lead service pipe with copper pipe. For information about DC Water’s Voluntary Lead Service Pipe Replacement Program contact Customer Service at 202-354-3600.
- Replace household galvanized plumbing.
- Install lead-free plumbing fixtures that contain 0.25 percent or less lead.

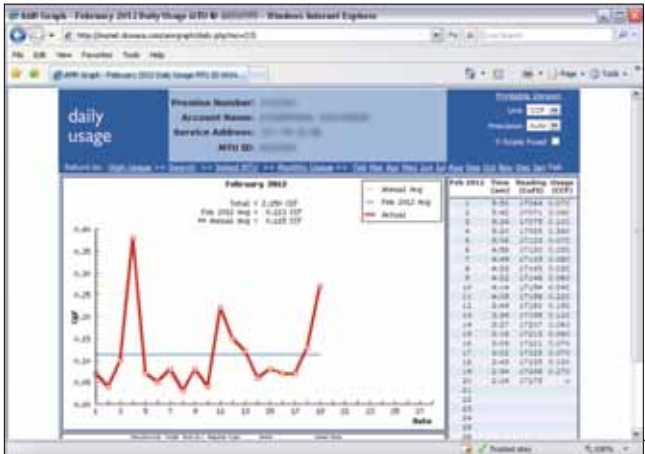
#### Use filtered tap water

- Pregnant women and children under age six should use filtered tap water for drinking and cooking until all sources of lead in drinking water have been removed. This includes using filtered water for preparing infant formula, beverages and ice.
- Be sure to select a filter certified to meet NSF Standard 53 for lead removal. The filter package should specifically list the device as certified for removing the contaminant “lead.”

## High Usage Notification Alerts (HUNA)

Track your daily water usage online and receive free notifications when your household water usage spikes. High Usage Notification Alerts (HUNA) can alert customers of household leaks or other plumbing problems, including running toilets and ruptured washing machine hoses, and may help you avoid a high monthly water bill.

DC Water customers are automatically enrolled in the HUNA program if an account has a valid telephone number or email address. You can modify notification settings to include telephone, email and text messaging. Manage HUNA preferences by accessing your account at [dcwater.com](http://dcwater.com) and selecting "water usage history." Customers can also contact Customer Service at 202-354-3600 or [custserv@dcwater.com](mailto:custserv@dcwater.com).



- Home Account
- Load Device Information
- File Bill
- Payment History
- Water Usage Alerts
- Clean Water Charge
- Water Account
- High Bill Alert
- See Other Accounts
- Add New Account
- Update My Profile
- CONTACT US
- Log out and close window

### Water Usage History

Account Number: 00000000000000000000  
Account Name: 00000000000000000000000000  
Service Address: 000 000000000000000000000000  
Washington DC 20000

DC Water's Automated Meter Reading (AMR) system offers you monthly and daily information on your water usage. Click the [Water Usage History](#) button to view up to 12 months of meter readings and usage history in an industry first application. Non-AMR customers will not have access to this data until the AMR metering technology is installed and activated so please call us for an appointment. The [Water Usage History](#) table below the [Water Usage History](#) button shows your monthly billed usage up to 24 months.

[Water Usage History](#)

Year	2012												
	Month	Feb	Jan	Dec	Nov	Oct	Sep	Aug	Jul	Jun	May	Apr	Mar
Usage [CCF]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
No. Days	29	31	31	30	31	30	31	31	30	31	30	31	31
Year	2011												
	Month	Feb	Jan	Dec	Nov	Oct	Sep	Aug	Jul	Jun	May	Apr	Mar
Usage [CCF]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
No. Days	29	31	31	30	31	30	31	31	30	31	30	31	31

## WATER CONSERVATION TIPS

### Toilets

- Check for leaks by simply adding food coloring to the toilet tank. If color appears in the toilet bowl within 15 minutes, you have a leak. Be sure to flush immediately to avoid staining.
- Toilet flappers are common sources of leaks. Replacements flappers are available at local hardware stores.
- Install high-efficiency WaterSense toilets - [www.epa.gov/watersense](http://www.epa.gov/watersense).

### Faucets and showerheads

- Repair dripping faucets and showerheads and save more than 3,000 gallons per year.
- Install low-flow aerators on all household faucets.
- Install high-efficiency WaterSense showerheads and faucets.
- Take a five-minute shower (10-25 gallons) instead of a bath (70 gallons).
- Turn off the water while brushing your teeth and save three gallons per minute.

### Laundry machines and dishwashers

- Install high-efficiency, ENERGY STAR units that use 50 percent less water and electricity.
- Wash only full loads of dishes and clothes or lower the water settings for smaller loads.



### TAP WATER AND YOUR PET FISH

Chloramine (chlorine + ammonia) is a common drinking water disinfectant used to treat District tap water. Disinfection is an important step in ensuring tap water is safe for humans.

- Chloramine is safe for humans, but can be harmful to fish.
- Aquatic pet owners should remove disinfectants before adding tap water to an aquarium.
- To discuss appropriate chemical additives and water treatment options for fish tanks or ponds, contact your local pet store.

## CONTACTS AND VALUABLE RESOURCES



**Customer Service / Billing** 202-354-3600

**Drinking Water** 202-612-3440

**External Affairs** 202-787-2200

**24-Hour Emergency Hotline** 202-612-3400

[drinkingwater@dcwater.com](mailto:drinkingwater@dcwater.com)

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DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

5000 Overlook Avenue, SW  
Washington, DC 20032

[dcwater.com](http://dcwater.com)

fpo. please place the FSC  
logo here (PMS 369 if  
possible) and space with  
others evenly. thanks

