



**WATER DOCTORS**  
WATER TREATMENT COMPANY est. 1984

## Common Odor Problems in Water

### Identifying and treating common odor problems in your drinking water



Odors can and do occur in water, and these smells are the biggest cause for complaint from most people even though the worst contaminants and water-borne illness will not have any odor at all. Here are a few common examples of foul-smelling water, the causes and possible solutions - *always consult with a local water quality expert before treating any water condition.*

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### Fishy, Earthy, or Woody Smells

These smells are generally from harmless, naturally occurring, organic matter that is often found in surface water sources. Another cause for this type of odor is the presence of Chloramines, which are traces of chlorine and ammonia compounds used in the treatment and disinfection of municipal water. Typical treatment is the use of an [activated carbon-type filter](#), which can be used in [whole house](#) or [point of use](#) units.

Another cause of a fishy type of odor is the presence of Barium and/or Cadmium in the water. The naturally occurring metal, Barium, is a lustrous metal which exists in nature only in ores containing mixtures of elements. The EPA regulates this contaminant, so your water supplier is required to take steps to reduce the amount of barium so that it is consistently below the approved level. The EPA has approved the following treatment methods for removing Barium: [Ion Exchange](#), [Reverse Osmosis](#), Lime Softening, and/or Electro dialysis, which are often used by water suppliers.

Cadmium is a metal found in natural deposits, and most commonly makes its way into water supplies through deteriorating galvanized plumbing, industrial waste, or fertilizer contamination. The EPA has approved the following treatment methods for removing Cadmium: Coagulation/Filtration, Ion Exchange, Lime Softening, and/or Reverse Osmosis.

While these elements should be treated and removed by your water supplier, there is the possibility that these elements can still be present in your water. In this case, a local water treatment specialist should be consulted to determine the best method of treatment. The most commonly used treatments are through a standard [water softener](#) ion exchange, reverse osmosis or distillation.

## Chlorine (Bleach) Smell

Chlorine smell is typically due to the excessive chlorination in public or private well source water as it is used for disinfection and treatment. Over-exposure to chlorine in water does have adverse health effects and should be addressed as quickly as possible. The most common form of exposure to chlorine is in the shower, through inhalation. When the chlorine vapors are inhaled through the steam in the shower, the user is exposed to far greater levels of chlorine than if they were to drink several glasses of water with high amounts of chlorine. This is because the lungs provide immediate circulation to the blood system, so any contaminants that are inhaled can travel through your body faster than if ingested. The treatment method for this is the use of activated carbon filters, which are available for use in whole house units, [shower filters](#) and [point of use](#) filtration systems.

## Rotten Egg Smell

A rotten egg or "sulfur water" odor can be caused from various water quality issues, some of which can also tarnish silverware. This type of water can yellow or leave black stains on bathroom fixtures, discolor coffee, tea, and other beverages, as well as distort the taste of foods.

One cause of the rotten egg smell is from dissolved hydrogen sulfides in the raw water (H<sub>2</sub>S). This is often found in waters with high iron content and a low PH. The methods for treatment vary based on the PH. Treatments vary from using a manganese greensand filter, to chlorination (followed by dechlorination) and then open aeration (followed by an oxidizing catalyst filter). It is best to consult a water quality professional for assistance with this issue.

Another cause is sulfate-reducing bacteria found in water that feeds on sulfates, creating trace H<sub>2</sub>S quantities and is generally found on the hot water side of your water. Treatment is to disinfect all plumbing with household bleach and pre-treat the water supply with chlorination to eliminate the bacteria, then to remove the chlorine smells, you'd use an activated carbon filter.

There are those cases where the magnesium [anode rod](#) will react in hot water and soft water. This is the case where you'll remove the anode rod. Some experts recommend that you use an alternate anode rod such as the [combo anode rod](#) we offer, or the [aluminum anode rod](#).

## Detergent Smell & Foamy Water

There is also the detergent odor, where water can foam when drawn or it could have a slight septic odor. This is when you have either seepage of the septic system into your underground water source or a detergent was accidentally put in the water supply, both of which cause health concerns as bacteria is likely to be present. Treatment for these conditions are to heavily chlorinate (of course after finding the source, taking action to correct it and preventing it from happening again). Activated carbon will adsorb only limited amounts of detergent. In either case we recommend that you hire a water quality specialist to help with this as chlorination can be very dangerous.

## Gasoline or Oil Smells

Gasoline or oily smells usually indicate a gas or oil leak that has seeped into the aquifer or water supply somehow. Some possible reasons for gas or oil contamination of the water supply are from storage tank leaks, dumping, or improper disposal. You will need to find and eliminate the source of seepage. Immediately stop use of the water until it can be properly treated by a water quality professional. Stick to using bottled water for drinking and food use. A high quality, solid block activated carbon filter may adsorb hydrocarbons on a short-term basis, but this drastically varies by the amount of hydrocarbon contaminants in your water. Treatment will generally use a bed of carbon media versus the smaller cartridge-type filters, but for treating this contaminant it is necessary to call in some professional help to remedy this (life-threatening) hazard.

## Methane Smell

Methane gas smell or cloudy water is typically caused by decaying organics in oil well fields, or housing areas built above old city dump sites where the decaying organics have penetrated the water source / aquifer. This is corrected with an open-aeration system (that provides proper venting of this methane gas to prevent explosion) which is then re-pumped up to proper pressure levels. In this case do not use water until it can be properly treated by a water quality professional.

## Stay healthy!

The quality of your water is of the utmost importance to the health of you and your family. Always consult a water quality expert in your area, as they will be the most knowledgeable regarding any specific problems in your neighborhood and how to properly treat them. If you suspect you have any of the above water quality issues, please consult a water quality expert before attempting to treat the problem yourself. Ask around, maybe your neighbors are experiencing or have experienced a similar problem and may be able to offer you a suggestion on who to contact in your area.

Water is commonly known as the universal solvent, and as such there are numerous conditions that are apparent in our water supplies. On this page we have tried to outline a few possible causes for odor in the water supply, and their potential treatment methods, but as there are too many causes for the various water conditions throughout the USA (and the world) we recommend that you contact a local water quality expert. This expert would be well versed in the local region's water conditions and can specify proper treatment. We have no way of identifying whether you have a "common" water odor as it does require the testing of water samples and our list of "common" odors is not exhaustive. Nor does this page take into account various types of contaminants and pollution, which will greatly affect water conditions and effective treatment methods.

**Water Doctors** Water Treatment Company is a division of **HMI Water Specialists**. We are an industry leader that specializes in custom built and engineered water-conditioning equipment. Water Doctors has been in business since 1984 and is a **Water Quality Association** member. All products are UL approved and NSF & WQA certified. We design and install systems ranging from simple inline filters, water softeners, drinking system all the way up to heavy commercial water purification for factories and large-scale corporations.

Each year, one Builder, one Remodeler and one Trade Partner of the Builders Association of the Twin Cities earns these most prestigious awards that recognize trust, communication, loyalty and ethics in business dealings. **Water Doctors Water Treatment Company was honored with this prestigious award.** This is testimony to Water Doctors commitment to excellence in products and services to our Home Building partners and their clients.



Through our vast network of homebuilders and dealers Water Doctors has become one of the most widely distributed water treatment companies in **Minnesota & Wisconsin** markets. We provide these areas with the most knowledgeable water treatment sales staff and most advanced water-conditioning methods on the market.

Water Doctors employs a full staff of installation technicians, design engineers and service professionals. With over 350 years of combined service experience we are capable of performing the most complicated installations and solve the most challenging problems. After sales service is also a very important part of our business model. Whether you are in need of water treatment engineering advice, filter service or softener salt delivery, there is a service department waiting to assist you.

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