



WHATS IN YOUR WATER? ARE YOU PREPARED?

Suburban Water Testing Labs

Nationally recognized independent laboratory will give you the answer



YOUR GUIDE TO WATER TESTING (Free brochure available upon request)

WHY TEST YOUR WATER?

Although the testing approach may seem bothersome, it is like a good routine physical by a health-care specialist. Avoiding this step is to assume that "what you don't know won't hurt you." Sorry, but it will! Avoiding the truth may result in health problems and costly repairs to your plumbing system and other fluid fed equipment (**protect your investment**).

Water contamination can have a negative affect on water-fed equipment and on the health of your family. The affects may be immediate or long term and include everything from ruined equipment, stomach aches to serious long-term health problems.

A US Geological survey found that 70% of private wells were contaminated. The United States Environment Protection agency (USEPA) recommends that you test for a minimum of coliform bacteria, nitrate and lead, even if you have public water.

Periodically (yearly or as otherwise needed) **Re-test and Evaluate Performance**

Simply owning a water treatment system does not guarantee that your water will be safe forever. In addition to monitoring your system and providing for replacement of products and/or parts, you also need to periodically test and re-evaluate the quality of the water coming into and going out of your system to determine if changes and/or upgrades are needed. The ultimate responsibility is yours (**know whats happening in your neighborhood**).

Selecting a Treatment System for Your Needs (Residential, Commercial, Industrial).

A comprehensive approach to selecting a fluid treatment system includes:

- Testing your water or fluid to determine the specific problems in it and in your area
- Selecting the system and/or components of a system that will solve these problems
- Installing and monitoring your system (**retrofit or new**)
- Periodically re-testing to insure that you are maintaining the treatment system correctly and that your old problems are being treated and controlled, and that new problems have not developed.

TRIANGULAR WAVE TECHNOLOGIES, INC. RECOMMENDED TESTING PROCEDURE

Water testing can be a complicated process. However, working with Suburban Water Testing labs they make it simple. they start by testing your water for most common indicators of contamination. If they find any indicators, they can recommend further testing to help identify a specific problem.

Once the problem is identified, they recommend a way to fix the problem. (They do not sell water treatment or endorse one brand over another, they simply give you information so you can make an educated purchase)

Contact Suburban Water Testing Labs **(1-800-433-6595 or www.h2otest.com)**

1. Mention "TWT010" to receive discount pricing
2. Discuss your water testing needs
3. Order Health Guard kit(s)
4. Kit(s) come complete with easy to follow instructions, including sample bottles
5. Take water samples following the easy to use instructions
6. Put the samples in the enclosed return shipping pack
7. When samples are received, at Suburban Water Testing Labs (SWTL) they analyze the samples and send you the report
8. A copy of the report will be sent to TWT, Inc. TWT engineering staff will review the report, TWT or your distributor will contact you to discuss the appropriate treatment products, systems and installation for your specific needs



Why use Suburban Water Testing labs

Suburban Water Testing Labs is a nationally recognized, independent lab specializing in water testing since 1963. While other labs are mainly interested in large accounts, they take the time to help individual customers as well. The sampling packages are designed to be as easy to use as possible. The reports are designed to be understandable and they offer technical assistance to ALL of their customers.

Accurate Results– Their rigorous Quality Control Program ensures accurate results.

Reliability– Well trained laboratory technicians perform the analysis and verify the results. Inhome or facility testing cannot begin to provide results with a level of accuracy and reliability comparable to laboratory testing.

Safety– While certain inhome or facility testing procedures exist, Water testing is best done in a laboratory. Suburban water testing labs have the proper facility, expertise, and equipment to perform these analysis in a safe manner.

What Should You Test For?

Water analysis must be done in steps; you have to determine what you want to test for, then test for it. As a starting point USEPA recommends that everyone, even people using public water test for a minimum of: **Coliform Bacteria, Nitrate & Lead**. The Health Guard 2 package includes these contaminants as well as several other commonly found contaminants. If you are concerned about the safety of your water, you may want to test for more contaminants. If you have a specific problem or concern call the technical assistance line at 610-929-2920 and a laboratory technician will be pleased to work closely with you to determine the optimal Health Guard Kit for your specific needs.

Catalog

Packages:

Health Guard 1

Test for coliform bacteria, nitrate, nitrite, fluoride, chloride and sulfate.

Health Guard 2

Adds lead to the Health Guard 1 (satisfies the USEPA's minimum recommendations)

Health Guard 3

Adds 25 VOC's to the Health Guard 2

Health Guard Advanced

Tests for coliform bacteria, nitrate, nitrite, fluoride, chloride, sulfate, lead, 25VOC's, 10 Trace Metals, 24 chlorinated pesticides and 7 PCB's

Health Guard Lead

Simply tests for lead. Includes first draw and flushed line samples.

Add on Testing

Corrosion and Pretreatment

Tests for pH, hardness, iron, manganese, double copper.

Trace Metals

Tests for 10 toxic metals that the USEPA considers harmful.

Chlorinated Pesticides

Test for 24 chlorinated pesticides and 7 PCB's

Testing for pesticides is extremely complex and costly so they have included some of the more common contaminants. Please contact technical assistance if you have concerns about a specific pesticide or herbicide

Fecal Coliform and Fecal Streptococcus

Bacterial testing that helps identify sources of contamination

Other Health Guard kits, including MTBE testing are available upon request



Why use water treatment, filtration, disinfection, purification, products and systems provided by Triangular Wave Technologies, Inc. (TWT)

TWT is America's leading fluid/water treatment company based on its patented triangular waveform technology. TWT's chemical-free fluid treatment and management methods have been accepted for use around the world by governments, industry, and individuals, who all enjoy the increased safety, extended equipment life cycle, and decreased operating costs that the TWT systems deliver.

TWT products and systems provide technologically advanced methods for water and fluid management that are both efficient and cost-effective. Components and subsystems chosen from across the range of treatment methods can be combined in different configurations to provide custom solutions specific to any industry, site or application. TWT systems work to consistently deliver high quality water, reduce scale and bio-fouling in plumbing systems, and to increase efficiency of both once-through and re-circulating HVAC, process cooling, agriculture, industrial processing, wastewater and other fluid based systems. Each product line offers a variety of both standalone and comprehensive treatment solutions for end-to-end fluid management, for all types of applications.

Triangular Wave Deposit Control Systems offer all the positive effects of soft water, and clean up existing deposits, without the use of traditional salts and chemicals.

To learn more about Triangular Wave Technologies, Inc. visit our website at www.triangularwave.com

Contaminant Glossary (Partial List)



SWTL Certifications and Affiliations: • PADEP certificate#06208 • Member PaAAEL • Member AWWA

Chloride– Chloride may make your water taste salty and indicates contamination from an outside source such as salt storage, seawater, or septic waste.

Chlorinated Pesticides– Commonly used agricultural pesticides. Some people who drink water contaminated with these compounds could experience problems or damage to the eyes, liver, kidneys, or spleen and may have an increased risk of getting cancer.

Endosulfan Sulfate	Atrazine
Endrin	Alpha-BHC
Endrin Aldehyde	Beta-BHC
Endrin Ketone	Delta-BHC
Heptachlor	Chlordane
Heptachlor Epoxide	p,p-DDD
Hexachlorobenzene	p,p-DDE
Hexachlorocyclopentadiene	p,p-DDT
Lindane (gamma-BHC)	Dieldrin
Methoxychlor	Endosulfan 1
Toxaphene	Endosulfan 2
Arachlor	
Aldrin	

Coliform Bacteria–Indicates contamination from an unsanitary condition such as septic waste or surface water entering the water supply. Health effects include gastrointestinal illness, cryptosporidium and giardia lamblia.

Copper– Usually associated with the corrosion of copper pipes. can cause stomach or gastrointestinal illness, liver and kidney damage and anemia.

Fluoride– added to many municipal water supplies, also found naturally. Excessive levels may damage teeth.

Hardness– calcium and magnesium are the main hardness materials. Although hardness is not a health threat, excessive levels may be harmful to plumbing fixtures and pipes. While deposits around faucet's and on dishware are often caused by excessive hardness.

Iron– Usually comes from a natural source. High levels of iron may cause a bad taste in the water and cause severe staining of laundry and plumbing fixtures. Excessive iron can be a health risk to people with medical condition known as hemochromatosis.

Lead–Usually comes from corrosion of pipes and plumbing fixtures. causes numerous health disorders and reduced IQ scores. Our packages contain a double lead sample that includes a "first draw" and a "flushed line" sample. This helps to determine where the lead is coming from.

Nitrate – Comes from natural decay of organic matter and agricultural runoff. Nitrate causes decreased oxygen carrying capacity in infants and some adults. This can lead to methemoglobinemia (blue baby syndrome). Elevated levels of nitrate indicate possible contamination from agriculture and suggest the need for pesticide testing.

Nitrite– Similar to nitrate, however nitrite can cause decreased oxygen carrying capacity in anyone.

PCB's– Environmentally persistent compound that were used in electronic compounds and some pumps. They can cause an increased cancer risk.

Aroclor 1016	Aroclor 1221	Aroclor1232
Aroclor 1242	Aroclor 1248	Aroclor 1254
Aroclor1260		

pH– Indicates weather water is acidic or basic. Acidic water can cause corrosion of plumbing and fixtures, which leads to elevated levels of metals such as lead and copper. High pH can cause scaling of the plumbing system.

Sulfate– Naturally occurring but can indicate contamination of the water supply. causes gastrointestinal discomfort in individuals who are not accustomed to drinking the water.

Trace Metals– Trace metals may come from industrial contamination or natural deposits.They can cause increased cancer risk, damage to organs and changes in blood chemistry.

Antimony	Chromium
Arsenic	Mercury
Barium	Nickel
Beryllium	selenium
Cadmium	Thallium

VOC's– Compounds which are found in many household products, paints, petroleum products and industrial solvents. People who drink water containing these compounds in excess of the MCL could experience damage to liver, kidneys, spleen, or circulatory system, or changes in the blood. There is also an increased risk of cancer associated with most of these compounds.

Benzene	Ethylbenzene
Carbon tetrachloride	Styrene
Chlorobenzene	Tetrachloroethylene
O-Dichlorobenzene	1,2,4,-trichlorobenzene
P-Dichlorobenzene	1,1,1-Trichloroethane
1,2-Dichloroethane	1,1,2-Trichloroethane
1,1-Dichloroethylene	Trichloroethylene
Cis-1,1-Dichloroethylene	Toluene
Trans-1,2-Dichloroethylene	Vinyl Chloride
Dichloromethane	Xylenes
1,2-Dichloropropane	Total Trihalomethanes

Suburban Water Testing Labs HealthGuard™

 **TRIANGULAR WAVE**
TECHNOLOGIES, INC.
FLUID MANAGEMENT SOLUTIONS
www.triangularwave.com

WHAT IS IN OUR WATER?

Over 500 billion pounds of hazardous chemical waste are improperly disposed of every year.

Every day, 50 billion gallons of liquid hazardous waste are disposed at 26,000 disposal sites, 85% are located above aquifer. Some chemicals, such as TCE are too toxic, a single gallon can contaminate a years worth of drinking water for 3800 people.

"More than 1 in 5 Americans unknowingly drink tap water polluted with fecal, radiation or other contamination...nearly 1,000 deaths each year and at least 400,000 cases of waterborne illness may be attributed to contaminated water"
The New York Times

Environmental Protection Agency head Christie Whitman called water quantity & quality "the biggest environmental issue that we face in the 21st century"
U.S News & World Report, August 12th 2002

Of the 700 chemicals that have already been found in drinking water, most water companies test for less than 30.

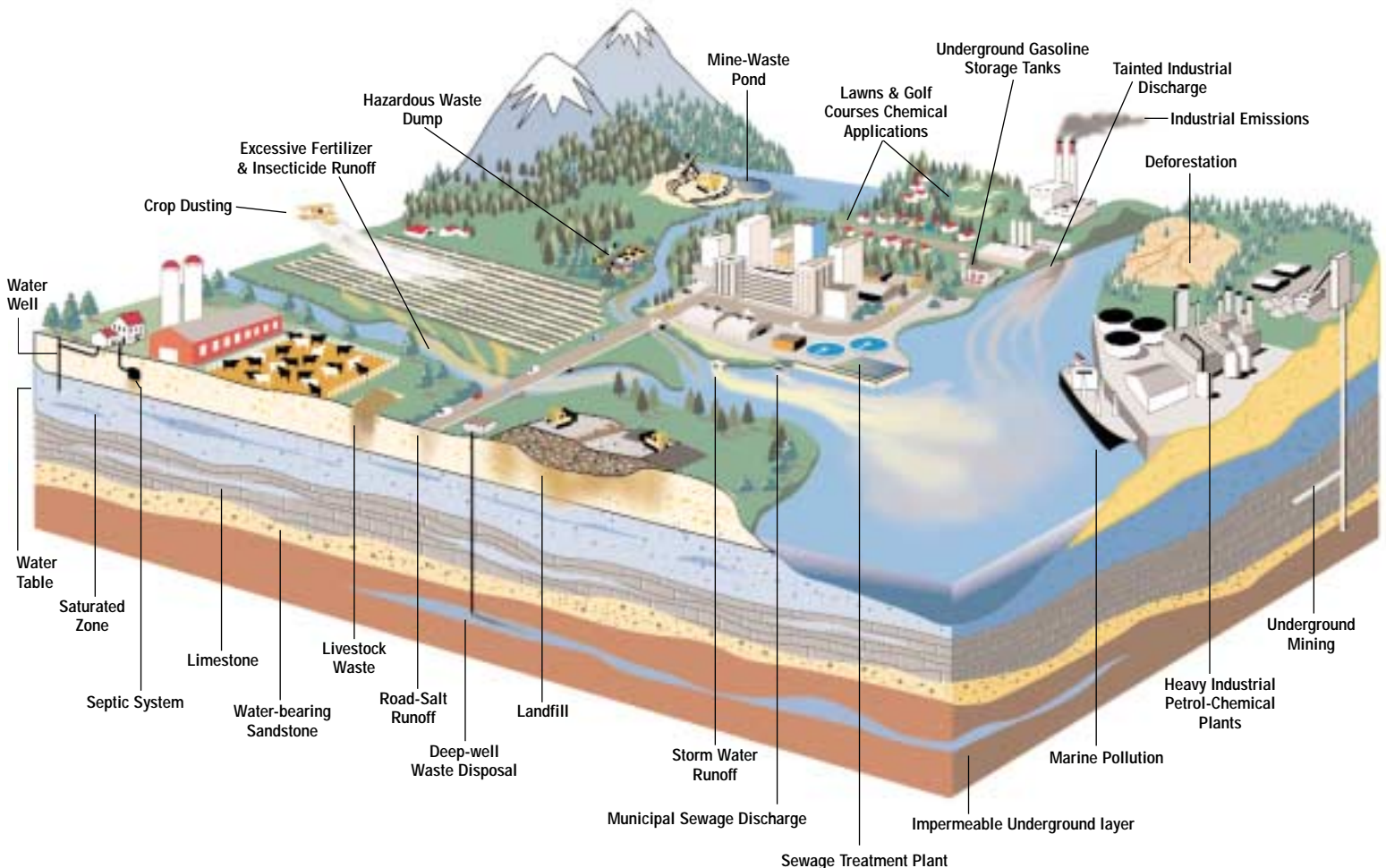
"Parasites in water are widespread... can be dangerous, even fatal, to people with weakened immune systems"
USA Today

"Several million Americans are drinking water that is potentially hazardous due to chemical or bacterial contamination"
Newsweek

Of the 1,000 EPA Priority waste sites in the U.S., less than 20 have been cleaned up since the EPA's inception.

Every year, 100 billion gallons of liquid hazardous waste are absorbed into groundwater supplies.

This much we know... If we put toxic chemicals into or on the ground, they will eventually end up in the groundwater we drink.



Federal, State, and Local authorities will do their best to bring us the best water possible. But, they cannot undo all damage to our water sources that has taken decades of ignorance and abuse to inflict

At our manufacturing facility, we have pioneered the advanced design of fluid management products to meet the needs of residential, commercial, and industrial applications. Triangular Wave manufacturing expertise is reflected in our efficient engineering design team. Our technical test department is meeting the ever changing requirements of the fluid management environment. Our unique

capabilities and design expertise have successfully solved a wide variety of problems for a wide variety of customers. The TWT fluid management systems and filtration media provide a bacteriostatic environment, and are designed to remove chlorine, lead, volatile organic chemicals, hydrogen sulfide and sulphur, herbicides, pesticides, chemical fertilizer residues, trihalomethane, and many other pollutants. These filters remove odor and restore the taste and clarity of municipally treated water.

