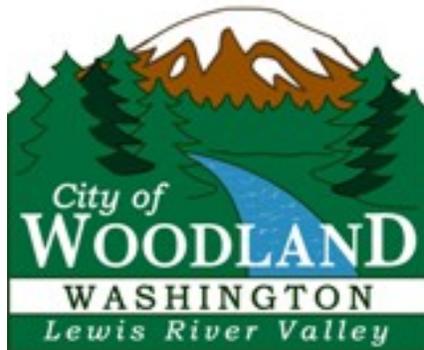




APPENDIX F



Water Quality Monitoring Schedule

RECEIVED
MAR 26 2012
CITY OF WOODLAND



STATE OF WASHINGTON
DEPARTMENT OF HEALTH
OFFICE OF DRINKING WATER
PO BOX 47822 • Olympia, Washington 98504-7822
TDD Relay Service: 1-800-833-6388

March 2012

Subject: WATER QUALITY MONITORING REPORT FOR 2012

Dear Water System Manager/Purveyor:

Enclosed is the 2012 Water Quality Monitoring Report (WQMR) for your water system and an information sheet that explains some details about monitoring requirements. We developed the WQMR to help you keep track of the source-specific water quality monitoring requirements for your water system.

New this year: We have changed the way we are granting organic waivers for the 2011-2013 monitoring period. This is the first time we've updated our waiver model since we first introduced it in 1994. We developed the new model using our water quality data, data from Department of Agriculture, and source susceptibility information to waive source monitoring requirements to the maximum extent possible while still protecting public health. Insecticides are now included as a State waiver. **We have already applied monitoring waivers to all eligible sources.** Part 4 will show your monitoring frequency with any applicable waivers. **You will not be invoiced for any of the waivers already granted on the WQMR.**

Please review your WQMR carefully. If you notice anything that doesn't look correct to you, please call your regional office to have your records updated or corrected. Most problems can be resolved with a phone call, and we can send you a revised WQMR.

You can find a complete list of laboratories accredited for drinking water analyses at the Washington State Department of Ecology's website: <http://www.ecy.wa.gov/programs/eap/labs/search.html> Because radionuclide analyses are conducted by a limited number of labs, that list is included on the back of this letter.

For questions about your 2012 WQMR, please contact the appropriate Department of Health regional office staff listed below.

Eastern Regional Office	Bryony Stasney	(509) 329-2132
Northwest Regional Office	Steve Hulsman	(253) 395-6777
Southwest Regional Office	Sophia Petro	(360) 236-3046

Sincerely,

Mike Means
Manager, Water Quality Section
Office of Drinking Water
Enclosures



Laboratories accredited to perform radionuclides for Washington State drinking water systems

Radionuclides:

Energy Laboratories, Inc.
PO Box 3258
Casper, WY 82602
James Judge (888) 235-0515
jjudge@energylab.com

ACZ Laboratories, Inc.
2773 Downhill Drive
Steamboat Springs, CO 80487
Matt Sowards (970) 879-6590
matts@acz.com

Benchmark Analytics, Inc.
4777 Saucon Creek Road
Center Valley, PA 18034
Theresa Fenstermaker (610) 974-8100
t.fenstermaker@benchmarkanalytics.com

Eberline Analytical Corp. - Richmond Lab
2030 Wright Ave
Richmond, CA 94804-3849
Katsumi Yamamoto (510) 235-2633
kyamamoto@eberlineservices.com

GEL Laboratories, LLC
PO Box 30712
Charleston, SC 29417
Nancy Mattem (843) 556-8171
nancy.mattem@gel.com

MWH Laboratories – Div. of MWH Americas, Inc.
750 Royal Oaks Drive, Suite 100
Monrovia, CA 91016
Nilda Cox (626) 386-1170
Nilda.Cox@mwhglobal.com

TestAmerica Richland
2800 George Washington Way
Richland, WA 99354-1613
Sarah Nagel (509) 375-3131
tim.armstrong@testamericainc.com

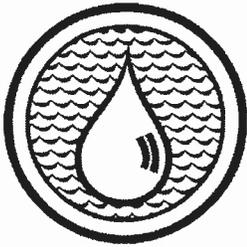
Pace Analytical Services, Inc. - Pittsburgh
1638 Roseytown Rd, STE 2, 3, 4
Greenburg, PA 15601
Randal Hill (724) 850-5600
randal.hill@pacelabs.com

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Marti Ward (314) 298-8566
marti.ward@testamericainc.com

Underwriters Laboratories Inc.
110 South Hill Street
South Bend, IN 46617
Dale Piechocki (574) 233-4777
dale.r.piechocki@us.ul.com

Summit Environmental Technologies Inc
3310 Win St
Cuyahooga Falls, OH 44223
RonGibas (330) 253-8211
rgibas@settek.com

* Laboratories accredited as of January 4, 2012 on Washington State Department of Ecology's website.



Information About Your 2012 Water Quality Monitoring Report (WQMR)

March 2012

The Department of Health (DOH) developed the Water Quality Monitoring Report (WQMR) to help you track your system's annual water quality monitoring requirements. Information in your WQMR is specific to your system and its individual sources. The WQMR summarizes most of the microbiological and chemical sampling requirements that apply to each source (at the source, after treatment) and to the distribution system (at the tap). DOH uses the WQMR schedules for compliance and enforcement purposes, so please read it carefully.

Your system may have other monitoring requirements not listed on the WQMR. Other monitoring may be required for special investigations, complex treatment systems, or special operation and maintenance situations. Your 2012 WQMR focuses on the Safe Drinking Water Act monitoring requirements that are linked to your source's water quality, history, compliance, and waiver status.

The 2012 WQMR has five parts:

1. List of active sources
2. Sample collection information and calendars for 2012
3. Information on waivers
4. Summary of sampling requirements and waivers for 2011-2013 or current compliance interval
5. Special notices and regional office staff contacts

Part 1: Sources with Water Quality Monitoring Requirements

Part 1 lists your water system's active seasonal and permanent sources. This table does not list emergency, inter-tie, purchased water sources, or individual wells that make up a well field. These types of sources rarely have source-specific water quality monitoring requirements.

The table lists sources by key source information from your recent Water Facilities Inventory (WFI). The table also shows the susceptibility to contamination for each source based on the susceptibility assessment on file with the department, water quality data, and information from your WFI. *All active sources require a*

susceptibility assessment rating as part of the wellhead and watershed protection programs. DOH will not grant chemical monitoring waivers for sources that do not have a susceptibility assessment rating.

Part 2: Monitoring Schedule for 2012

Part 2 shows your system's sampling schedule for 2012. DOH assigns requirements to a particular month to help you stay on track and in compliance. Sampling months are assigned based in part on your past sampling dates, and also to even out the workload for laboratories. The monthly scheduling format can help you budget for monitoring expenses. If you miss collecting a sample in a particular month, collect it as soon as possible.

In general, there are three sample types: distribution samples, finished water source samples, and raw water source samples. Most coliform, lead and copper, asbestos, and DBP samples are collected from the distribution system. Most chemical samples (IOCs, VOCs, SOCs, and radionuclides) are collected from the finished water source sample tap (collected at the entry point to the distribution system). Raw water samples come from the tap closest to the source prior to all treatment. The raw water taps may be considered for chemical samples when a source has no treatment and are used for Groundwater Rule triggered source monitoring following a positive coliform distribution sample.

Coliform Monitoring: The coliform monitoring portion of this section lists the number of routine coliform samples required each month. This is the same as you would see on your WFI. We include it on the WQMR as a convenience. Coliform samples are usually collected from a cold water household tap within the distribution system.

If the population of your system changes during the year, your coliform monitoring requirement could change. When that happens, you will receive an updated WFI with a new coliform sampling schedule. Note: the coliform monitoring schedule on your most recent WFI provides the most accurate information.

Lead and Copper Monitoring: These samples must be collected from indoor kitchen or bathroom cold water faucets after the water has sat unused in the pipes for at

least 6 hours but no more than 12 hours. Any faucets that will be used for lead and copper samples should be flushed with cold water the *evening before* taking the sample.

Disinfection By-Product (DBP) Monitoring: DBPs are scheduled on the monthly calendar for systems (except most large surface water systems) which have continuous chlorination or ozonation. These requirements will also show in part 4 for most systems. Systems starting Stage 2 DBP monitoring in 2012 should follow their DBP monitoring plan.

Chemical Monitoring: This section lists source sampling requirements for organic and inorganic chemicals by month, source, and DOH test panel. It doesn't list test method because more than one method may be used for any given test panel. **Collect all chemical source samples as close to the source of water as possible, but after all treatment and before entering the distribution system.**

Part 3: Water Quality Monitoring Waivers

Part 3 provides general information about chemical monitoring waivers. Monitoring waivers can reduce or eliminate some monitoring requirements for systems with a waiver.

There are three categories of waivers:

1) **Organic waivers** reduce the monitoring requirements for volatile organic chemicals (VOCs) and synthetic organic chemicals (SOCs). **Organic waivers require a susceptibility assessment rating.**

2) **Inorganic waivers** reduce the monitoring requirements for inorganic chemicals (IOCs). **Many sources may still need to sample for individual IOC compounds (for example, arsenic) as a condition of their IOC waiver.** Any inorganic sampling requirements you have for 2012 will be listed in Part 2 of the WQMR. Eligibility for an IOC waiver depends on source-specific water quality history and susceptibility rating.

The annual sampling requirement for nitrate is never waived.

3) **Statewide waivers** reduce or eliminate the monitoring requirements for some test panels (as listed in Part 4). We have included insecticides as a state waiver. DOH grants statewide waivers when applicable. These waivers are granted based on water quality information gathered from across the state.

Part 4: Water Quality Monitoring Summary

Part 4 is useful for planning and budgeting for all your monitoring requirements. Part 4 provides an overview of the scope and frequency of water quality monitoring requirements for each of your sources for the 2011-2013 compliance period. The table identifies where and how often a sample must be collected and if any waivers have been granted. Information in Part 4 relates directly to the schedule in Part 2. Sample collection frequencies are listed according to test panel (for example, IOC, VOC, Herbicide). This section identifies the specific "test panel" and sample location required. If you have received a waiver for a specific test panel, it will show here.

Part 5: DOH Staff Contacts and Special Notes

Part 5 lists the name and phone number of your DOH regional office source monitoring and DBP staff. If you have questions about your 2012 WQMR or notice any inaccuracies, call your regional office to have your records updated. In most cases, errors are resolved with a phone call and a revised WQMR will be mailed to you.

IMPORTANT NOTE:

We have changed the way we are granting organic waivers for the 2011-2013 monitoring period. This is the first time we've updated our waiver model since we first introduced it in 1994. Many conditions have changed in the state, and our waiver model needed an update. We developed the new model using our water quality data, data from Department of Agriculture, and source susceptibility information to waive source monitoring requirements to the maximum extent possible while still protecting public health.

DOH is no longer charging a waiver fee for most monitoring waivers, including organic and inorganic waivers. We will no longer send water systems a waiver options form. We have granted all the waivers for which your sources currently qualify.

Part 5 also contains *Special Notes* specific to your water system or individual sources. Please look for these *Special Notes*!

Water Quality Monitoring Report for the Year 2012

System: WOODLAND, CITY OF

PWSID: 98200 2

Report Date: 03/15/2012

Contact: ROBERT P. CHOATE

Group: A - Comm County: COWLITZ

Region: SOUTHWEST

Part 1: List of Active Sources with Water Quality Monitoring Requirements

DOH Source#	Name	Type	Use	Susceptibility Rating
S01	LEWIS RIVER	Ranney Infiltration G	Permanent	High

Part 2: Sampling Schedule for the Year 2012

Coliform Sampling (Routine)	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
	10	10	10	10	10	10	7	7	10	10	10	10

* Indicates the requirement is an exception from WAC 246-290.

- If the coliform (bacteriological) sampling schedule listed at the bottom of the current Water Facilities Inventory (WFI) form for your system is different from the schedule listed above, follow the schedule on the current WFI.
- Samples **must** be collected from representative points throughout the distribution system.
- Repeat samples are required following an unsatisfactory sample. In addition, collect a sample from each operating groundwater source.
- A minimum of 5 routine samples are required the month following one or more unsatisfactory samples in accordance with your system's Coliform Monitoring Plan

Lead and Copper Distribution Sampling

- Lead and copper samples must be collected from indoor faucets within the distribution system after the water has sat unused in the pipes for at least 6 hours but no more than 12 hours.
- Sample faucets should be flushed with cold water the evening prior to collecting the sample.
- Part 2 indicates the month in which samples should be collected. Part 4 indicates the total number of sample required.
- If you are required to sample annually or once every 3 years, samples must be collected between June and September.

Chlorine Residual Sampling

- Systems that use continuous chlorination must take chlorine residual measurements daily (or at a reduced frequency approved by the department), and at the same time and location as routine and repeat coliform samples.

Disinfection Byproducts Sampling

Stage 1

- Systems that use continuous chlorination treatment must collect samples for total trihalomethanes (TTHM) and for haloacetic acids (HAA5) for each chlorination treatment facility identified in your individual disinfection byproducts (DBP) monitoring plan. Collect the samples from the distribution system at the frequency and locations identified in your DBP monitoring plan.

Chemical Sampling Requirements

- Source water chemical samples must be taken from a location as near to the source as possible, but after all treatment, and before entering the distribution system.
- Nitrate, nitrite and arsenic are included as part of a complete IOC.

Month	Source	Monitoring Requirement	Test Panel
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Water Quality Monitoring Report for the Year 2012

Month	Source	Monitoring Requirement	Test Panel
January		<i>No source chemical sampling required this month</i>	
February		<i>No source chemical sampling required this month</i>	
March		HAA5	
March		TRIHALOMETHANES	THM
April		<i>No source chemical sampling required this month</i>	
May		HAA5	
May		TRIHALOMETHANES	THM
June		LEAD / COPPER	LCR
July		<i>No source chemical sampling required this month</i>	
August		HAA5	
August		TRIHALOMETHANES	THM
September		<i>No source chemical sampling required this month</i>	
October	S01	NITRATE	NITRATE
October	S01	VOLATILE ORGANIC CONTAMINANTS	VOC1
November		HAA5	
November		TRIHALOMETHANES	THM
December		<i>No source chemical sampling required this month</i>	

Part 3: Waivers

- Automatically granted to all sources based on DOH assessment of source specific information, and regional and state conditions.
- Current susceptibility assessment is required for all sources to obtain a waiver. No waiver application, or fee required.
- State waivers granted for the 2011 - 2013 compliance period are listed in Part 4.

Part 4: Water Quality Monitoring Frequency

- Although waivers may be granted for your system, there may be some monitoring required as a condition of the waiver your system was granted.

Monitoring Group	Test Panel	Sample Location	Schedule/Status
Asbestos	ASB	Distribution	Collect 1 Asbestos sample in 2013
Bacteriological	Coli	Distribution	See routine sample schedule in part 2
Dioxin	Dioxin	All sources	State Waiver Thru Dec 2013
Endothall	Endo	All sources	State Waiver Thru Dec 2013
PB and other soil fumigants	Fumigant	S01	State Waiver Thru Dec 2013
Glyphosphate	Glyphs	All sources	State Waiver Thru Dec 2013

Water Quality Monitoring Report for the Year 2012

Monitoring Group	Test Panel	Sample Location	Schedule/Status
Halo-Acetic Acids	HAA5		1 sample per treatment plant every 3 months
Herbicides	Herbs	S01	1 sample between Jan 2011 - Dec 2013
Insecticides	Insect	S01	Waiver granted - No sampling required thru Dec 2013
Inorganic Contaminants **	IOC	S01	1 complete IOC sample between Jan 2011 - Dec 2019
Lead/Copper *	LCR	Distribution	LCR 1 Set of 20 samples between Jan 2010 - Dec 2012
Nitrate *	NIT	S01	Collect 1 sample(s) every 1 year
General Pesticides	Pest1	S01	Waiver granted - No sampling required thru Dec 2013
Diquat	Diquat	All sources	State Waiver Thru Dec 2013
Total Trihalomethane	THM		1 sample per treatment plant every 3 months
Volatile Organic Contaminants	VOC	S01	1 sample between Jan 2011 - Dec 2013

* These contaminant monitoring groups do not have waiver options under the SDWA.

** Your IOC waiver also requires that you sample more frequently for some analytes. You are required to collect a sample for these analytes **ONLY** when they are scheduled in Part 2.

Water Quality Monitoring Report for the Year 2012

Part 5: Regional Water Quality Monitoring Contact

Southwest Regional Office

For further information call the Southwest Regional Office Sophia Petro

Phone: (360) 236-3046

For questions regarding Disinfection ByProducts (DBP) monitoring, contact: Regina Grimm, p.e. (360) 236-3035

Special Note

For Group A Community Systems Only: Your Consumer Confidence Report, summarizing the results of your 2011 water quality monitoring requirements is due before July 1, 2012. For further information visit www.doh.wa.gov/ehp/dw/Our_Main_Pages/consumer.htm or contact the CCR Coordinator at your Regional Office.

ROBERT P. CHOATE
WOODLAND, CITY OF
PO BOX 9
WOODLAND WA 98674



STATE OF WASHINGTON
 DEPARTMENT OF HEALTH
 SOUTHWEST DRINKING WATER REGIONAL OPERATIONS
 PO Box 47823, Olympia, Washington 98504-7823
 TDD Relay 1-800-833-6388

December 7, 2011

RECEIVED

DEC 13 2011

CITY OF WOODLAND

Steve Branz
 City of Woodland
 Post Office Box 9
 Woodland, Washington 98674

Subject: City of Woodland, ID #98200, Cowlitz County; Stage 2 Disinfection Byproducts Rule IDSE Report Approval Notification

Dear Steve Branz:

Thank you for submitting the Initial Distribution Evaluation (IDSE) Report as required under the Stage 2 Disinfection Byproduct Rule (Stage 2 DBPR), received on May 13, 2010. The purpose of this letter is to inform you that the IDSE report was approved and that this system is considered in compliance with the IDSE reporting requirement.

However, this system has not received approval for a Stage 2 Disinfection Byproduct (DBP) Rule Compliance Monitoring Plan. The IDSE report did not include all of the required elements to qualify as an approval, specifically the compliance calculation procedure.

A Stage 2 DBP Compliance Monitoring Plan must be completed and sent to the Office of Drinking Water (ODW) prior to the start date for beginning Stage 2 Compliance Monitoring. As a surface water system with a population between 3,301 and 9,999, the compliance monitoring requirement and deadline are as follows:

<i>Required Samples</i>	<i>Frequency</i>	<i>Beginning of Compliance Monitoring</i>
Two dual sample sets (paired TTHM and HAA5 at two sites) (Locations to be specified in CMP)	Per Quarter	4 th Quarter 2013



Steve Branz
December 7, 2011
Page 2

ODW is currently developing an electronic monitoring plan template that will be available for water systems to use. Also, when the compliance deadline gets closer we will be sending you more information regarding completing the Compliance Monitoring Plan.

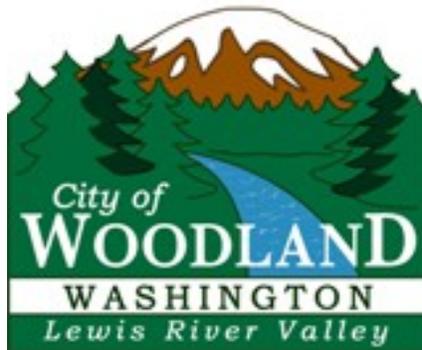
If you have any questions about complying with the DBP requirements, please contact me at (360) 236-3035.

Sincerely,

A handwritten signature in cursive script that reads "Regina N. Grimm".

Regina N. Grimm, P.E.
Office of Drinking Water, Disinfection Byproducts Lead

cc: Cowlitz County Health Department
Teresa Walker, ODW
Ethan Moseng, ODW



Consumer Confidence Report



2011 WATER QUALITY REPORT

Water quality reports are to inform you, the consumer, about water quality, characteristics, and treatment procedures of the City of Woodland's drinking water. This annual publication complies with Federal law requiring all water utilities to provide water quality information to customers each year and is provided in addition to other notices required by law.

This report includes mandatory information regulated by State Department of Health (DOH) as well as the Environmental Protection Agency (EPA), and also facts and details unique to the City of Woodland's water system. We support the consumer's right to know the results of our water quality monitoring and encourage public participation in decisions which affect your drinking water. More extensive information of water quality testing results is available at the Public Works Department Office at 300 East Scott Avenue.

The State-regulating agency is the Department of Health (DOH) and the Federal agency is the Environmental Protection Agency (EPA). Our water is monitored and tested daily by certified water treatment personnel and also regularly tested through certified laboratories. DOH and EPA regulators routinely monitor our compliance and testing procedures to *ensure* safe delivery of water to our customers.

Woodland's water meets or exceeds EPA water quality requirements!

Security and emergency response are essential in proper management of our drinking water system. We have complied with the required system vulnerability assessment and have submitted an emergency water system response plan to the Environmental Protection Agency (EPA).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune systems disorders, and some elderly and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA and Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* are available from the Safe Drinking Water Hotline at (800) 426-4791 or on the web at <http://www.epa.gov/safewater>.

SOURCE AND TREATMENT OF WOODLAND'S WATER

The source of Woodland's water supply is the aquifer beneath the North Fork of the Lewis River. The water collection system, called a *Ranney well*, is located below the river bottom and is relatively safe from any potential contamination or flooding damage which may take place in the river. The Lewis River watershed is fed by glacier melt from Mt. Adams and smaller tributaries such as Cedar Creek. The Lewis River is one of the cleanest and most pristine rivers in the region; however, the source is naturally high in iron.

The City of Woodland Water Filtration Plant began operation in late May of 1999. The filtration plant uses chlorine for disinfection and to remove iron. Soda ash is also used in the iron removal process, as well as for corrosion control in the distribution system. Fluoride is added for strengthening and enhancement of teeth. Filter aid coagulants and positive charge polymers are also used in the treatment process for coagulation (the process causes smaller particles to attract to one another to form larger particles, which are then trapped on the filter surface). The treatment plant is designed for a 24-hour peak flow of 3,000,000 gallons per day (3 MGD). In addition to iron removal, the treatment process also reduces turbidity, color, and disinfects potential contaminants which may include the following:

- Microbial contaminants, such as viruses, bacteria, giardia, and cryptosporidium, which may come from wildlife.
- Inorganic contaminants, such as salts and metals, which can occur in nature.
- Pesticides and herbicides, which may come from a variety of sources such as farming, home or business use, and storm water runoff.
- Radioactive contaminants which can occur naturally.
- Organic chemical contaminants, including synthetic and volatile organic chemicals which are by-products of industrial processes, solvents, petroleum production, or from gas stations, storm water runoff and septic systems.

WATER USE EFFICIENCY RULE

Municipal water systems have recently become subject to the "Water Use Efficiency Rule", effective January 22, 2007. Along with several other requirements, this rule requires distribution system leakage be reduced to 10% or less. The City of Woodland estimates that their amount of lost and unaccounted for water for the last 6 months of 2011 was 6.9%. The City staff continues to keep unaccounted for water as small as possible. Additionally, we request the public's assistance in reporting to the Public Works office, (360)-225-7999, any known leaks or other un-metered losses from our drinking water system.

WATER QUALITY MONITORING RESULTS

The EPA requires that public water systems report on contaminants detected in their water supply. Woodland monitors over 150 of these. In addition, the City also collects samples from consumer taps to monitor for chlorine, coliform, lead and copper. We also collect samples at our reservoirs, distribution system, and at the source. All detected contaminants were below Environmental Protection Agency (EPA) maximum contaminant levels (MCL).

Parameter	Year of Test	Result	MCL	In Compliance	Comments
Nitrate	2011	0.22 mg/L	10 mg/L	YES	
Lead	2009	.006 mg/L	.015 mg/L	YES	90th percentile values.
Copper	2009	1.0 mg/L	1.3 mg/L	YES	90th percentile values.
HAA5	2011	8.5 ug/L	60 ug/L	YES	Average of quarterly test results.
THM	2011	15.8 ug/L	80 ug/L	YES	Average of quarterly test results.
Radium 228	2010	0.8 pCi/L	5 pCi/L	YES	

- All 95 coliform bacteria tests in 2011 met EPA standards.
- No VOC's were detected in 2008, from 57 tested.
- No SOC's were detected in 2009, from 24-tested.
- 15 inorganic chemicals were tested and not detected in 2007.

Definitions & Abbreviations

Synthetic Organic Compounds (SOCS): A class of man-made contaminants including herbicides, pesticides, and other chemicals that come from agriculture, urban storm water runoff, or industrial activities.

Volatile Organic Compounds (VOCS): Chemical solvents or cleaners (and their byproducts) that are derived from petroleum products; man-made contaminants from industrial processes.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water.

mg/L (Milligrams per liter): Approximately equal to parts per million (PPM) or 1 milliliter per 1,000 liters of water.

ug/L (Micrograms per liter): Approximately equal to parts per billion (PPB) or 1 milliliter per 1,000,000 liters of water.

pCi/L (Picocuries per liter): A measure of radioactivity.

Disinfection Byproducts (DBP, THM, & HAA5)

The disinfection of drinking water is one of the major public health advances of the past century. One hundred years ago typhoid and cholera epidemics were common throughout American cities. Disinfection was a major factor in reducing epidemics, and it is an essential part of drinking water treatment. However, disinfectants themselves can react with naturally occurring materials in the water to form unintended organic and inorganic byproducts which may pose health risks. A major challenge for water suppliers is how to balance the risks from microbial pathogens and disinfection byproducts. It is important to provide protection from these microbial pathogens while insuring decreasing health risks to the population from disinfection byproducts (DBP's). The most common DBP's formed when chlorine is used are trihalomethanes (THM's), and haloacetic acids (HAA5's).

CROSS-CONNECTION / BACKFLOW PREVENTION

What is a cross-connection? A cross-connection, as defined by the Washington Administration Code, is "any actual or potential physical connection between a public water system or the consumer's water system and any source of non-potable liquid, solid, or gas that could contaminate the potable (drinking) water supply by backflow."

What is my responsibility as a consumer? As property and business owners, it is your responsibility to eliminate cross-connections that pose a potential health hazard by ensuring proper installation of a backflow prevention assembly.

What is a Backflow Prevention Assembly? A backflow prevention is a device that is installed somewhere in the consumer's water system that prevents contamination from entering the potable water supply. These devices are normally required and found on fire suppression systems and in-ground irrigation systems.

WATER CONSERVATION

It's only a small drip....

Slow drips of water can add up quickly. A toilet that "keeps running" after you flush or a sink that drips after it is turned off can waste thousands of gallons of water a year. If the drip is hot water, you are paying for wasted energy too.

Leaky Faucets

A faucet is frequently the result of a bad washer. The washer on a sink is typically located under the handle and relatively easy to replace. It does require that you shut off the water under the faucet. Check with local hardware store or home centers. If you don't feel comfortable making the repair yourself, a plumber may be your best option. Remember, even if you have to pay a plumber to fix the leak, you will end up saving money in the long run.



Toilet Leaks

Toilet leaks can range from small to large, constant to random. Many are even silent. Even a small, silent leak can easily cost \$100 per year in water and sewer costs. Fortunately, most toilet leaks are relatively easy to fix. If you have a leak there are a number of possible causes. Toilet repair kits with instructions are available at hardware stores and home centers.

QUESTIONS? Contact Woodland Public Works at (360) 225-7999.