

#### COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WATER STANDARDS AND FACILITY REGULATION

# Consumer Confidence Report (CCR) Template and Instructions (For Systems Using Only Groundwater Sources)

This document contains the following:

# PART 1: Instructions for completing the CCR Template

PART 2: Sample CCR

PART 3: Blank CCR Template

# PART 1: INSTRUCTIONS

# Title:

Add year of the report (always previous calendar year), your water supply PWSID #, and your water supply name.

# Water System Information:

- Enter the telephone number of the owner, operator or contact person.
- If you hold regular meetings, include the date, time and place of regularly scheduled board or Authority meetings.
- If you do not hold meetings, delete the text regarding the meeting information.

# Source(s) of Water:

- You must identify the **name**, **type**, and **location** of the source or sources supplying your system. Types include: groundwater, surface water, or interconnections with other supplies. The source section may also include information on treatment, number of customers and operators (optional).
- If a **source water assessment** has been completed, fill in the blanks and select choices within the brackets. Delete or revise any text that is not applicable to your system. If a source water assessment has not been completed, delete the entire text.

# Monitoring Your Water:

Enter the monitoring period in the spaces provided. The period the report covers is always the previous year.

# **Definitions and Abbreviations:**

In addition to the mandatory definitions, you may add any definitions you feel are appropriate.

# Detected Sample Results (also known as the Water Quality Table):

### Accessing your detected sample results:

To access your detected sample results, go to DEP's Consumer Confidence Report Data Web site at the following address: <u>http://www.drinkingwater.state.pa.us/ccr/index.html</u>

You may enter your PWSID and hit the "Go!" button or you may select a county and use the drop down box to locate your system.

If using the drop down box, you will need to access <u>2 different reports</u>:

- 1) Detects
- 2) Lead/Copper

After selecting a report, hit the "Run Report" button. (Note: To extract report information to your PC, highlight records of interest, copy and paste to a spread sheet or document.)

This detection data is updated in March with the previous year's monitoring results. In other words, the current year's results will not appear until the following March.

### General Notes regarding all tables:

- The most recent sample results for all contaminants must be included. If you did not monitor for a contaminant in this year, you must go back to your last sample result(s) for that contaminant and include them. Include the year monitored after the contaminant's name in the sampling results table. No data older than **5 years** need be included.
- Non-detected contaminants (or "0" results) should <u>not</u> be included in any of the detected contaminants tables. If desired, you can list or identify your non-detected contaminants elsewhere in the report.
- All sample results must be reported in the same units that are listed in the "Contaminants Column" found in TABLE 1: Detected Contaminants. MCLs must be reported in "CCR Units", not the traditional MCL units. Sample results may need to be converted to "CCR Units" as per the instructions in TABLE 1.
- The violation block must be marked Y or N for each detect.

### Chemical Contaminants Table (Inorganics, Organics, Radionuclides and Disinfection Byproducts):

- For annual samples (or samples taken less frequently), report the **highest detected level** and **range** (if applicable). Example: If more than one source is sampled or more than one sample is collected, report the highest detected level in the level detected column. Report lowest and highest sample results in the range column. This will enable you to report sample results from multiple sources without having to list them separately. You may list them separately if they serve different distribution areas.
- For contaminants where compliance is based on a running annual average, report the **highest annual average** and **range**. Example: TTHMs (First quarter average would be carried over from the last three quarters of the previous year.) In this example, the range would be the highest and lowest detected levels for the year.
- If no VOCs, IOCs, or SOCs were detected, insert the following statement: "We had no detections of Volatile Organic Compounds, Inorganic Compounds, or Synthetic Organic Compounds." in a separate area of your CCR.
- Include "Sources of Contamination" which can be found in the last column of TABLE 1: Detected Contaminants.

### Lead and Copper Table:

• Report the **90<sup>th</sup> percent value** of the most recent round of samples, and the **number of sites (of the total number) that exceeded the action level.** 

### Microbial Contaminants Table:

- If you collect fewer than 40 samples per month, report the **highest number of positive total coliform samples** in a month.
- If you collect 40 or more samples per month, report the **highest percent of positive total coliform samples** in a month.
- Report the total number of positive fecal coliform or *E. coli* samples in the year. If these contaminants

were not detected, delete the entire row.

# Health Effects:

- If there is an MCL, MRDL, or treatment technique violation, the "Violation Y/N" column in your table must be marked "Yes" and the corresponding health effects language for that contaminant must be included from Table 2: Health Effects Language.
- Include duration of violation and what you are doing to correct the situation.
- If no MCL's were exceeded, you may include the following statement: "NO MCL'S OR TREATMENT TECHNIQUES WERE EXCEEDED".

### Special Educational Statements for Arsenic, Nitrate and Lead:

Nitrate, lead and arsenic also require special educational language if your detected value is above certain levels, but below the MCL or AL. See TABLE 2: Health Effects Language, for more information about special educational statements.

# Other Violations:

- Include information about any monitoring, reporting, record keeping or treatment technique violations.
- Include an explanation of the violation, any potential health effects and the steps taken to correct the violation.

# **Educational Information:**

Include all mandatory educational information as written.

# Other Information:

Include any other pertinent information about your water system. Some examples would be: a brief statement about all the monitoring conducted where the results were 'none detected', any improvements made to the system, training and education of the operator(s), or reasons for occasional rate increases.

# **Distribution of CCRs:**

 You must deliver a copy of your Consumer Confidence Report to each of your customers and to DEP at the address below <u>on or before July 1<sup>st</sup></u>.

DEP Mailing Address: Department of Environmental Protection Bureau of Water Standards and Facility Regulation Division of Operations, Monitoring and Training RE: CCR P.O. Box 8467 Harrisburg, PA 17105-8467

• Additionally, you must make a good faith effort to get the report to non-bill-paying customers. Non-billpaying customers would include apartment building residents, nursing home residents, and possibly some mobile home park residents. You should encourage the owner to make the report available to the actual users. Copies of the report could be made or a copy posted in a central location such as a bulletin board.

# **Certification of CCR Content and Delivery Requirements:**

- You must certify that the annual CCR has been distributed to customers and that the information contained in the report is correct and consistent with the compliance monitoring data previously submitted to the Department. This certification must be delivered to the DEP address above <u>on or before October 1<sup>st</sup></u>.
- The CCR Certification Form may be found on DEP's Web site form number 3800-FM-WSFR0084 9/2005.

# TABLE 1: DETECTED CONTAMINANTS

# **Description of Columns:**

<u>Contaminant (units)</u> – This column identifies the contaminants and the required units of measurement. Water systems are required to report certain contaminants in small units of measurement (usually parts per billion) so that the level detected is a number greater than 1. Refer to the units for each contaminant to determine if you can report the value your lab provides "as is" or if you need to convert that value because the units are not the same.

Traditional MCL in mg/L – This column identifies an MCL in mg/L units since many contaminants have MCLs which are measured in mg/L.

<u>To Convert for CCR, multiply by</u> – This value is a conversion factor that is used when the required units of measurement (usually ppb) are not the typical units of measurement that your lab uses to report your detected value. If your detected value is reported in mg/L (same as parts per million), and you need to convert this value to ppb units, you would multiply your level detected by the conversion factor found in this column. For instance, the lab may report your level detected for antimony as 0.003 mg/L, but antimony is required to be reported in ppb units. The conversion factor for antimony is 1,000. To report antimony in ppb units, multiply 0.003 mg/L x 1000 = 3 ppb. A dash (-) in this column indicates that you do not need to convert any units. Report the detected value "as is."

<u>MCL in CCR Units</u> – This column converts the traditional MCL (mg/L) into the required units. For instance, the traditional MCL of antimony is 0.006 mg/L. By multiplying by 1,000, the MCL is converted to 6 ppb.

<u>MCLG</u> – This column converts the traditional MCLG (mg/L) into the required units. For instance, the traditional MCLG of antimony is 0.006 mg/L. By multiplying by 1,000, the MCLG is converted to 6 ppb. For certain contaminants, the MCLG is zero.

<u>Major Sources in Drinking Water</u> – This column identifies the major sources in drinking water. This information must be included for each detected contaminant.

# How to Use the Table:

- 1. Find the contaminant that you will report on your water quality table.
- 2. Review the required units (usually ppb or ppm) that are listed in the parentheses beside the contaminant name.
- 3. Compare the units listed in the parentheses to the units that are reported on your lab results.

If the units are the same, report the level detected "as is."

If the units are different, do the following:

- Refer to the "to convert for CCR, multiply by" column.
- Multiply the level detected by the value listed in the "to convert for CCR, multiply by" column. (Example: level detected for lead is 0.005 mg/L must be converted to ppb by multiplying 0.005 mg/L X 1,000 = 5 ppb.)
- 4. Copy and paste the information in the last column for each detected contaminant into your water quality table.

# If your level detected exceeds an MCL, MRDL, or TT, you must include the health effects language found in "Table 2: Health Effects Language" in your report.

Nitrate, lead and arsenic also require special educational language if your detected value is above certain levels but below the MCL or AL. Refer to TABLE 2: Health Effects Language for the levels and required educational language.

# **Regulated Contaminants:**

<u>Key</u>

MCL=Maximum Contaminant Level MFL=million fibers per liter MRDLG=Maximum Residual Disinfectant Level Goal N/A=Not Applicable pCi/I=picocuries per liter (a measure of radioactivity) ppb=parts per billion, or micrograms per liter (µg/l) ppq=parts per quadrillion, or picograms per liter AL=Action Level MCLG=Maximum Contaminant Level Goal MRDL=Maximum Residual Disinfectant Level mrem/year=millirems per year (a measure of radiation absorbed by the body) NTU=Nephelometric Turbidity Units (a measure of water clarity) ppm=parts per million, or milligrams per liter (mg/l) ppt=parts per trillion, or nanograms per liter TT=Treatment Technique

Contaminant (units)	Traditional MCL in mg/L	To convert for CCR, multiply by	MCL in CCR units	MCLG	Major Sources in Drinking Water
Total Coliform Bacteria	MCL: (systems that collect ≥40 samples/ month) 5% of monthly samples are positive; (systems that collect < 40 samples/ month) more than 1 positive monthly sample		MCL: (systems that collect ≥40 samples/ month) 5% of monthly samples are positive; (systems that collect < 40 samples/ month) more than 1 positive monthly sample	0	Naturally present in the environment
Fecal coliform and <i>E.</i> coli	0		0	0	Human and animal fecal waste
Turbidity (NTU)	TT	-	TT	n/a	Soil runoff

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Contaminant (units)	Traditional MCL in mg/L	To convert for CCR, multiply by	MCL in CCR units	MCLG	Major Sources in Drinking Water
Giardia lamblia					
Viruses					
Heterotrophic plate count bacteria	Surface water treatment = treatment technique			0	Naturally present in the environment
Legionella					
Cryptosporidium					
Antimony (ppb)	.006	1,000	6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Arsenic (ppb)	0.01 <sup>1</sup>	1,000	10 <sup>1</sup>	0 <sup>1</sup>	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Asbestos (MFL)	7 MFL	-	7	7	Decay of asbestos cement water mains; Erosion of natural deposits
Barium (ppm)	2	-	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Beryllium (ppb)	.004	1,000	4	4	Discharge from metal refineries and coal-burning factories; Discharge from electrical, aerospace, and defense industries
Cadmium (ppb)	.005	1,000	5	5	Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; Runoff from waste batteries and paints
Chromium (ppb)	.1	1,000	100	100	Discharge from steel and pulp mills; Erosion of natural deposits

<sup>&</sup>lt;sup>1</sup>These arsenic values are effective January 23, 2006. Until then, the MCL is 0.05mg/l and there is no MCLG.

Contaminant (units)	Traditional MCL in mg/L	To convert for CCR, multiply by	MCL in CCR units	MCLG	Major Sources in Drinking Water
Cyanide (ppb)	.2	1,000	200	200	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories
Fluoride (ppm)	2	-	2	2	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Mercury (ppb)	.002	1,000	2	2	Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills; Runoff from cropland
Nitrate (ppm)	10	-	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrite (ppm)	1	-	1	1	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Selenium (ppb)	.05	1,000	50	50	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Thallium (ppb)	.002	1,000	2	0.5	Leaching from ore-processing sites; Discharge from electronics, glass, and drug factories
2,4-D (ppb)	.07	1,000	70	70	Runoff from herbicide used on row crops
2,4,5-TP [Silvex](ppb)	.05	1,000	50	50	Residue of banned herbicide
Acrylamide	TT	-	TT	0	Added to water during sewage/wastewater treatment
Alachlor (ppb)	.002	1,000	2	0	Runoff from herbicide used on row crops
Atrazine (ppb)	.003	1,000	3	3	Runoff from herbicide used on row crops
Benzo(a)pyrene [PAH] (nanograms/l)	.0002	1,000,000	200	0	Leaching from linings of water storage tanks and distribution lines

Contaminant (units)	Traditional MCL in mg/L	To convert for CCR, multiply by	MCL in CCR units	MCLG	Major Sources in Drinking Water
Carbofuran (ppb)	.04	1,000	40	40	Leaching of soil fumigant used on rice and alfalfa
Chlordane (ppb)	.002	1,000	2	0	Residue of banned termiticide
Dalapon (ppb)	.2	1,000	200	200	Runoff from herbicide used on rights of way
Di(2-ethylhexyl) adipate (ppb)	.4	1,000	400	400	Discharge from chemical factories
Di(2-ethylhexyl) phthalate (ppb)	.006	1,000	6	0	Discharge from rubber and chemical factories
Dibromochloropropan e (ppt)	.0002	1,000,000	200	0	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards
Dinoseb (ppb)	.007	1000	7	7	Runoff from herbicide used on soybeans and vegetables
Dioxin [2,3,7,8-TCDD] (ppq)	.0000003	1,000,000,000	30	0	Emissions from waste incineration and other combustion; Discharge from chemical factories
Diquat (ppb)	.02	1,000	20	20	Runoff from herbicide use
Endothall (ppb)	.1	1,000	100	100	Runoff from herbicide use
Endrin (ppb)	.002	1,000	2	2	Residue of banned insecticide
Epichlorohydrin	TT	-	TT	0	Discharge from industrial chemical factories; An impurity of some water treatment chemicals
Ethylene dibromide (ppt)	.00005	1,000,000	50	0	Discharge from petroleum refineries
Glyphosate (ppb)	.7	1,000	700	700	Runoff from herbicide use
Heptachlor (ppt)	.0004	1,000,000	400	0	Residue of banned pesticide

Contaminant (units)	Traditional MCL in mg/L	To convert for CCR, multiply by	MCL in CCR units	MCLG	Major Sources in Drinking Water
Heptachlor epoxide (ppt)	.0002	1,000,000	200	0	Breakdown of heptachlor
Hexachlorobenzene (ppb)	.001	1,000	1	0	Discharge from metal refineries and agricultural chemical factories
Hexachlorocyclopenta diene (ppb)	.05	1,000	50	50	Discharge from chemical factories
Lindane (ppt)	.0002	1,000,000	200	200	Runoff/leaching from insecticide used on cattle, lumber, gardens
Methoxychlor (ppb)	.04	1,000	40	40	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock
Oxamyl [Vydate] (ppb)	.2	1,000	200	200	Runoff/leaching from insecticide used on apples, potatoes and tomatoes
Pentachlorophenol (ppb)	.001	1,000	1	0	Discharge from wood preserving factories
Picloram (ppb)	.5	1,000	500	500	Herbicide runoff
PCBs [Polychlorinated biphenyls] (ppt)	.0005	1,000,000	500	0	Runoff from landfills; Discharge of waste chemicals
Simazine (ppb)	.004	1,000	4	4	Herbicide runoff
Toxaphene (ppb)	.003	1,000	3	0	Runoff/leaching from insecticide used on cotton and cattle
Benzene (ppb)	.005	1,000	5	0	Discharge from factories; Leaching from gas storage tanks and landfills
Carbon tetrachloride (ppb)	.005	1,000	5	0	Discharge from chemical plants and other industrial activities

Contaminant (units)	Traditional MCL in mg/L	To convert for CCR, multiply by	MCL in CCR units	MCLG	Major Sources in Drinking Water
Chlorobenzene (ppb)	.1	1,000	100	100	Discharge from chemical and agricultural chemical factories
o-Dichlorobenzene (ppb)	.6	1,000	600	600	Discharge from industrial chemical factories
p-Dichlorobenzene (ppb)	.075	1,000	75	75	Discharge from industrial chemical factories
1,2-Dichloroethane (ppb)	.005	1,000	5	0	Discharge from industrial chemical factories
1,1-Dichloroethylene (ppb)	.007	1,000	7	7	Discharge from industrial chemical factories
cis-1,2- Dichloroethylene (ppb)	.07	1,000	70	70	Discharge from industrial chemical factories
trans-1,2- Dichloroethylene (ppb)	.1	1,000	100	100	Discharge from industrial chemical factories
Dichloromethane (ppb)	.005	1,000	5	0	Discharge from pharmaceutical and chemical factories
1,2-Dichloropropane (ppb)	.005	1,000	5	0	Discharge from industrial chemical factories
Ethylbenzene (ppb)	.7	1,000	700	700	Discharge from petroleum refineries
Styrene (ppb)	.1	1,000	100	100	Discharge from rubber and plastic factories; Leaching from landfills
Toluene (ppm)	1	-	1	1	Discharge from petroleum factories

Contaminant (units)	Traditional MCL in mg/L	To convert for CCR, multiply by	MCL in CCR units	MCLG	Major Sources in Drinking Water
Tetrachloroethylene (ppb)	.005	1,000	5	0	Discharge from factories and dry cleaners
1,2,4- Trichlorobenzene (ppb)	.07	1,000	70	70	Discharge from textile-finishing factories
1,1,1-Trichloroethane (ppb)	.2	1,000	200	200	Discharge from metal degreasing sites and other factories
1,1,2-Trichloroethane (ppb)	.005	1,000	5	3	Discharge from industrial chemical factories
Trichloroethylene (ppb)	.005	1,000	5	0	Discharge from metal degreasing sites and other factories
Vinyl Chloride (ppb)	.002	1,000	2	0	Leaching from PVC piping; Discharge from plastics factories
Xylenes (ppm)	10	-	10	10	Discharge from petroleum factories; Discharge from chemical factories
Beta/photon emitters (mrem/yr)	4 mrem/yr	-	4	0	Decay of natural and man-made deposits
Alpha emitters (pCi/l)	15 pCi/l	-	15	0	Erosion of natural deposits
Combined radium (pCi/l)	5 pCi/l	-	5	0	Erosion of natural deposits
Uranium (pCi/L <sup>2</sup> ) ** effective Dec 8, 2003	30µg/l	-	30	0	Erosion of natural deposits

<sup>&</sup>lt;sup>2</sup> If lab reports value in pCi/L, convert to  $\mu$ g/L using the following formula: \_\_\_\_pCi/L X 1.49 = \_\_\_\_ $\mu$ g/L - 11 -

Contaminant (units)	Traditional MCL in mg/L	To convert for CCR, multiply by	MCL in CCR units	MCLG	Major Sources in Drinking Water
Lead (ppb)	AL=.015	1,000	AL=15	0	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppm)	AL=1.3	-	AL=1.3	1.3	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
TTHMs [Total trihalomethanes] (ppb)	.080	1,000	80	n/a	By-product of drinking water chlorination
Haloacetic Acids (HAA) (ppb)	.060	1,000	60	n/a	By-product of drinking water disinfection
Bromate (ppb)	.010	1,000	10	0	By-product of drinking water chlorination
Chlorite (ppm)	1	-	1	0.8	By-product of drinking water chlorination
Chlorine (ppm)	MRDL = 4	-	MRDL = 4	MRDLG = 4	Water additive used to control microbes
Chloramines (ppm)	MRDL = 4	-	MRDL = 4	MRDLG = 4	Water additive used to control microbes
Chloride dioxide (ppb)	MRDL = .8	1,000	MRDL = 800	MRDLG = 800	Water additive used to control microbes
Total organic carbon (ppm)	TT	-	TT	n/a	Naturally present in the environment

# TABLE 2: HEALTH EFFECTS LANGUAGE

# **Description of Columns:**

<u>Contaminant (units)</u> – This column identifies the contaminants and the required units of measurement. Water systems are required to report certain contaminants in small units of measurement (usually parts per billion) so that the level detected is a number greater than 1. Refer to the units for each contaminant to determine if you can report the value your lab provides "as is" or if you need to convert that value because the units are not the same.

<u>Health Effects Language</u> – This language is required to be included in the CCR when the MCL, MRDL, or TT is exceeded for the specific contaminant.

# How to Use the Table:

If you have a contaminant that exceeds an MCL, MRDL, or TT, you must include the health effects language found in this table in your report.

# **Special Educational Statement for Nitrate, Arsenic, and Lead:**

Nitrate, lead and arsenic also require special educational language if your detected value is above certain levels but below the MCL or AL.

If your water contains:

- Nitrate above 5 ppm (50 % of the MCL), but below 10 ppm (the MCL),
- Arsenic above 5 ppb and up to and including 10 ppb (future MCL), or
- Lead above 15 ppb (the Action Level) in more than 5 % (and up to and including 10%) when taking 20 or more samples, **OR** a single sample when taking fewer than 20 samples,

you must include in your report the relevant special educational statement listed below about that contaminant.

**Nitrate:** Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.

**Arsenic:** While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. 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.

Note: Beginning in the report due by July 1, 2002, and ending January 22, 2006, a community water system that detects arsenic above 10 ppb and up to and including 50 ppb must include the arsenic health effects language.

**Lead**: Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4791).

# **Regulated Contaminants:**

<u>Key</u> MCL=Maximum Contaminant Level MFL=million fibers per liter MRDLG=Maximum Residual Disinfectant Level Goal

N/A=Not Applicable

**pCi/I**=picocuries per liter (a measure of radioactivity) **ppb**=parts per billion, or micrograms per liter (µg/I) **ppq**=parts per quadrillion, or picograms per liter AL=Action Level MCLG=Maximum Contaminant Level Goal MRDL=Maximum Residual Disinfectant Level mrem/year=millirems per year (a measure of radiation absorbed by the body) NTU=Nephelometric Turbidity Units (a measure of water clarity) ppm=parts per million, or milligrams per liter (mg/l) ppt=parts per trillion, or nanograms per liter TT=Treatment Technique

	Health Effects Language					
Contaminant (units)	(Required when MCL, MRDL, or TT is exceeded)					
Total Coliform Bacteria	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.					
Fecal coliform and <i>E. coli</i>	Fecal coliforms and <i>E. coli</i> are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term health effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems.					
Turbidity (NTU)	Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.					
Giardia lamblia Viruses Heterotrophic plate count bacteria Legionella <i>Cryptosporidium</i>	Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.					
Antimony (ppb)	Some people who drink water containing antimony well in excess of the MCL over many years could experience increases in blood cholesterol and decreases in blood sugar.					
Arsenic (ppb)	Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.					
Asbestos (MFL)	Some people who drink water containing asbestos in excess of the MCL over many years may have an increased risk of developing benign intestinal polyps.					
Barium (ppm)	Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.					

Contominent (unite)	Health Effects Language
Contaminant (units)	(Required when MCL, MRDL, or TT is exceeded)
Beryllium (ppb)	Some people who drink water containing beryllium well in excess of the MCL over many years could develop intestinal lesions.
Cadmium (ppb)	Some people who drink water containing cadmium in excess of the MCL over many years could experience kidney damage.
Chromium (ppb)	Some people who use water containing chromium well in excess of the MCL over many years could experience allergic dermatitis.
Cyanide (ppb)	Some people who drink water containing cyanide well in excess of the MCL over many years could experience nerve damage or problems with their thyroid.
Fluoride (ppm)	This is an alert about your drinking water and a cosmetic dental problem that might affect children under nine years of age. At low levels, fluoride can help prevent cavities, but children drinking water containing more than 2 milligrams per liter (mg/L) of fluoride may develop cosmetic discoloration of their permanent teeth (dental fluorosis). Dental fluorosis, in its moderate or severe forms, may result in a brown staining and or pitting of the permanent teeth. This problem occurs only in developing teeth, before they erupt from the gums. Drinking water containing more than 4 mg/L of fluoride (the U.S. Environmental Protection Agency's drinking water standard) can increase your risk of developing bone disease.
Mercury [inorganic] (ppb)	Some people who drink water containing inorganic mercury well in excess of the MCL over many years could experience kidney damage.
Nitrate (ppm)	Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.
Nitrite (ppm)	Infants below the age of six months who drink water containing nitrite in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.
Selenium (ppb)	Selenium is an essential nutrient. However, some people who drink water containing selenium in excess of the MCL over many years could experience hair or fingernail losses, numbness in fingers or toes, or problems with their circulation.
Thallium (ppb)	Some people who drink water containing thallium in excess of the MCL over many years could experience hair loss, changes in their blood, or problems with their kidneys, intestines, or liver.
2,4-D (ppb)	Some people who drink water containing the weed killer 2,4-D well in excess of the MCL over many years could experience problems with their kidneys, liver, or adrenal glands.
2,4,5-TP [Silvex](ppb)	Some people who drink water containing silvex in excess of the MCL over many years could experience liver problems.

Contominent (unite)	Health Effects Language				
Contaminant (units)	(Required when MCL, MRDL, or TT is exceeded)				
Acrylamide	Some people who drink water containing high levels of acrylamide over a long period of time could have problems with their nervous system or blood, and may have an increased risk of getting cancer.				
Alachlor (ppb)	Some people who drink water containing alachlor in excess of the MCL over many years could have problems with their eyes, liver, kidneys, or spleen, or experience anemia, and may have an increased risk of getting cancer.				
Atrazine (ppb)	Some people who drink water containing atrazine well in excess of the MCL over many years could experience problems with their cardiovascular system or reproductive difficulties.				
Benzo(a)pyrene [PAH] (nanograms/I)	Some people who drink water containing benzo(a)pyrene in excess of the MCL over many years may experience reproductive difficulties and may have an increased risk of getting cancer.				
Carbofuran (ppb)	Some people who drink water containing carbofuran in excess of the MCL over many years could experience problems with their blood, or nervous or reproductive systems.				
Chlordane (ppb)	Some people who drink water containing chlordane in excess of the MCL over many years could experience problems with their liver or nervous system, and may have an increased risk of getting cancer.				
Dalapon (ppb)	Some people who drink water containing dalapon well in excess of the MCL over many years could experience minor kidney changes.				
Di(2-ethylhexyl) adipate (ppb)	Some people who drink water containing di (2-ethylhexyl) adipate well in excess of the MCL over many years could experience general toxic effects or reproductive difficulties.				
Di(2-ethylhexyl) phthalate (ppb)	Some people who drink water containing di (2-ethylhexyl) phthalate in excess of the MCL over many years may have problems with their liver, or experience reproductive difficulties, and may have an increased risk of getting cancer.				
Dibromochloropropane (ppt)	Some people who drink water containing DBCP in excess of the MCL over many years could experience reproductive difficulties and may have an increased risk of getting cancer.				
Dinoseb (ppb)	Some people who drink water containing dinoseb well in excess of the MCL over many years could experience reproductive difficulties.				
Dioxin [2,3,7,8-TCDD] (ppq)	Some people who drink water containing dioxin in excess of the MCL over many years could experience reproductive difficulties and may have an increased risk of getting cancer.				
Diquat (ppb)	Some people who drink water containing diquat in excess of the MCL over many years could get cataracts.				
Endothall (ppb)	Some people who drink water containing endothall in excess of the MCL over many years could experience problems with their stomach or intestines.				

Contonia ont (unito)	Health Effects Language					
Contaminant (units)	(Required when MCL, MRDL, or TT is exceeded)					
Endrin (ppb)	Some people who drink water containing endrin in excess of the MCL over many years could experience liver problems.					
Epichlorohydrin	Some people who drink water containing high levels of epichlorohydrin over a long period of time could experience stomach problems, and may have an increased risk of getting cancer.					
Ethylene dibromide (ppt)	Some people who drink water containing ethylene dibromide in excess of the MCL over many years could experience problems with their liver, stomach, reproductive system, or kidneys, and may have an increased risk of getting cancer.					
Glyphosate (ppb)	Some people who drink water containing glyphosate in excess of the MCL over many years could experience problems with their kidneys or reproductive difficulties.					
Heptachlor (ppt)	Some people who drink water containing heptachlor in excess of the MCL over many years could experience liver damage and may have an increased risk of getting cancer.					
Heptachlor epoxide (ppt)	Some people who drink water containing heptachlor epoxide in excess of the MCL over many years could experience liver damage, and may have an increased risk of getting cancer.					
Hexachlorobenzene (ppb)	Some people who drink water containing hexachlorobenzene in excess of the MCL over many years could experience problems with their liver or kidneys, or adverse reproductive effects, and may have an increased risk of getting cancer.					
Hexachlorocyclopentadiene (ppb)	Some people who drink water containing hexachlorocyclopentadiene well in excess of the MCL over many years could experience problems with their kidneys or stomach.					
Lindane (ppt)	Some people who drink water containing lindane in excess of the MCL over many years could experience problems with their kidneys or liver.					
Methoxychlor (ppb)	Some people who drink water containing methoxychlor in excess of the MCL over many years could experience reproductive difficulties.					
Oxamyl [Vydate] (ppb)	Some people who drink water containing oxamyl in excess of the MCL over many years could experience slight nervous system effects.					
Pentachlorophenol (ppb)	Some people who drink water containing pentachlorophenol in excess of the MCL over many years could experience problems with their liver or kidneys, and may have an increased risk of getting cancer.					
Picloram (ppb)	Some people who drink water containing picloram in excess of the MCL over many years could experience problems with their liver.					
PCBs [Polychlorinated biphenyls] (ppt)	Some people who drink water containing PCBs in excess of the MCL over many years could experience changes in their skin, problems with their thymus gland, immune deficiencies, or reproductive or nervous system difficulties, and may have an increased risk of getting cancer.					
Simazine (ppb)	Some people who drink water containing simazine in excess of the MCL over many years could experience problems with their blood.					

Contominent (unite)	Health Effects Language
Contaminant (units)	(Required when MCL, MRDL, or TT is exceeded)
Toxaphene (ppb)	Some people who drink water containing toxaphene in excess of the MCL over many years could have problems with their kidneys, liver, or thyroid, and may have an increased risk of getting cancer.
Benzene (ppb)	Some people who drink water containing benzene in excess of the MCL over many years could experience anemia or a decrease in blood platelets, and may have an increased risk of getting cancer.
Carbon tetrachloride (ppb)	Some people who drink water containing carbon tetrachloride in excess of the MCL over many years could experience problems with their liver and may have an increased risk of getting cancer.
Chlorobenzene (ppb)	Some people who drink water containing chlorobenzene in excess of the MCL over many years could experience problems with their liver or kidneys.
o-Dichlorobenzene (ppb)	Some people who drink water containing o-dichlorobenzene well in excess of the MCL over many years could experience problems with their liver, kidneys, or circulatory systems.
p-Dichlorobenzene (ppb)	Some people who drink water containing p-dichlorobenzene in excess of the MCL over many years could experience anemia, damage to their liver, kidneys, or spleen, or changes in their blood.
1,2-Dichloroethane (ppb)	Some people who drink water containing 1,2-dichloroethane in excess of the MCL over many years may have an increased risk of getting cancer.
1,1-Dichloroethylene (ppb)	Some people who drink water containing 1,1-dichloroethylene in excess of the MCL over many years could experience problems with their liver.
cis-1,2-Dichloroethylene (ppb)	Some people who drink water containing cis-1,2-dichloroethylene in excess of the MCL over many years could experience problems with their liver.
trans-1,2-Dichloroethylene (ppb)	Some people who drink water containing trans-1,2-dichloroethylene well in excess of the MCL over many years could experience problems with their liver.
Dichloromethane (ppb)	Some people who drink water containing dichloromethane in excess of the MCL over many years could have liver problems and may have an increased risk of getting cancer.
1,2-Dichloropropane (ppb)	Some people who drink water containing 1,2-dichloropropane in excess of the MCL over many years may have an increased risk of getting cancer.
Ethylbenzene (ppb)	Some people who drink water containing ethylbenzene well in excess of the MCL over many years could experience problems with their liver or kidneys.
Styrene (ppb)	Some people who drink water containing styrene well in excess of the MCL over many years could have problems with their liver, kidneys, or circulatory system.
Toluene (ppm)	Some people who drink water containing toluene well in excess of the MCL over many years could have problems with their nervous system, kidneys, or liver.

Contominant (unita)	Health Effects Language				
Contaminant (units)	(Required when MCL, MRDL, or TT is exceeded)				
Tetrachloroethylene (ppb)	Some people who drink water containing tetrachloroethylene in excess of the MCL over many years could have problems with their liver, and may have an increased risk of getting cancer.				
1,2,4-Trichlorobenzene (ppb)	Some people who drink water containing 1,2,4-trichlorobenzene well in excess of the MCL over many years could experience changes in their adrenal glands.				
1,1,1-Trichloroethane (ppb)	Some people who drink water containing 1,1,1-trichloroethane in excess of the MCL over many years could experience problems with their liver, nervous system, or circulatory system.				
1,1,2-Trichloroethane (ppb)	Some people who drink water containing 1,1,2-trichloroethane well in excess of the MCL over many years could have problems with their liver, kidneys, or immune systems.				
Trichloroethylene (ppb)	Some people who drink water containing trichloroethylene in excess of the MCL over nany years could experience problems with their liver and may have an increase isk of getting cancer.				
Vinyl Chloride (ppb)	Some people who drink water containing vinyl chloride in excess of the MCL over many years may have an increased risk of getting cancer.				
Xylenes (ppm)	Some people who drink water containing xylenes in excess of the MCL over many years could experience damage to their nervous system.				
Beta/photon emitters (mrem/yr)	Certain minerals are radioactive and may emit forms of radiation known as photons and beta radiation. Some people who drink water containing beta particle and photon radioactivity in excess of the MCL over many years may have an increased risk of getting cancer.				
Alpha emitters (pCi/l)	Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.				
Combined radium (pCi/l)	Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.				
Uranium (pCi/L <sup>1</sup> )	Some people who drink water containing uranium in excess of the MCL over many				
** effective Dec 8, 2003	years may have an increased risk of getting cancer and kidney toxicity.				
Lead (ppb)	Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.				

<sup>&</sup>lt;sup>1</sup> If lab reports value in pCi/L, convert to  $\mu$ g/L using the following formula: \_\_\_\_pCi/L X 1.49 = \_\_\_\_ $\mu$ g/L - 19 -

Contonin ont (unite)	Health Effects Language
Contaminant (units)	(Required when MCL, MRDL, or TT is exceeded)
Copper (ppm)	Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.
TTHMs [Total trihalomethanes] (ppb)	Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.
Haloacetic Acids (HAA) (ppb)	Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.
Bromate (ppb)	Some people who drink water containing bromate in excess of the MCL over many years may have an increased risk of getting cancer.
Chlorite (ppm)	Some infants and young children who drink water containing chlorite in excess of the MCL could experience nervous system effects. Similar effects may occur in fetuses of pregnant women who drink water containing chlorite in excess of the MCL. Some people may experience anemia.
Chlorine (ppm)	Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.
Chloramines (ppm)	Some people who use water containing chloramines well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chloramines well in excess of the MRDL could experience stomach discomfort or anemia.
Chloride dioxide (ppb)	Some infants and young children who drink water containing chlorine dioxide in excess of the MRDL could experience nervous system effects. Similar effects may occur in fetuses of pregnant women who drink water containing chlorine dioxide in excess of the MRDL. Some people may experience anemia.
Total organic carbon (ppm)	Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.

### PART 2: SAMPLE CCR

### 2003 ANNUAL DRINKING WATER QUALITY REPORT PWSID # 1234567 Sampletown Water Company

Este informe contiene información muy importante sobre su agua de beber. Tradúzcalo ó hable con alguien que lo entienda bien. (This report contains very important information about your drinking water. Translate it, or speak with someone who understands it.)

### WATER SYSTEM INFORMATION:

This report shows our water quality and what it means. If you have any questions about this report or concerning your water utility, please contact **Joe Sampson** at **717-867-5309**. We want you to be informed about your water supply. If you want to learn more, please attend any of our regularly scheduled meetings. They are held the first Tuesday of each month at 7:30 PM in the Borough building.

### SOURCE(S) OF WATER:

Our water sources are 3 municipal wells. These wells are located west of town, behind the municipal garage.

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. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

#### **MONITORING YOUR WATER:**

We routinely monitor for contaminants in your drinking water according to federal and state laws. The following table shows the results of our monitoring for the period of January 1 to December 31, 2003. The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data is from prior years in accordance with the Safe Drinking Water Act. The date has been noted on the sampling results table.

### **DEFINITIONS AND ABBREVIATIONS:**

**Action Level(AL)** - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

*Maximum Contaminant Level (MCL)* - 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.

*Maximum Contaminant Level Goal (MCLG)* - 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.

*Maximum Residual Disinfectant Level (MRDL)* - The highest level of a disinfectant that is allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

*Maximum Residual Disinfectant Level Goal (MRDLG)* - The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

*ppb* = parts per billion, or micrograms per liter ( $\mu$ g/L)

**ppm** = parts per million, or milligrams per liter (mg/L)

### DETECTED SAMPLE RESULTS

Chemical Contaminant	MCL in CCR units	MCLG	Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Fluoride	2*	4	0.98	-	ppm	6/2003	Ν	Water additive which promotes strong teeth.
Nitrate	10	10	6	1 - 9	ppm	6/2003	N	Runoff from fertilizer use.
Atrazine	3	3	3.575	0.1 - 10	ppb	10/2003	Y	Runoff from herbicide used on row crops.
Chlorine	4	4	2.8	0.2 - 3.0	ppm	12/2003	Ν	Water additive used to control microbes.

\*EPA's MCL for fluoride is 4 ppm. However, Pennsylvania has set a lower MCL to better protect human health.

Contaminant	Action Level (AL)	MCLG	90 <sup>th</sup> Percentile Value	Units	# of Sites Above AL of Total Sites	Violation of TT Y/N	Sources of Contamination
							Corrosion of
Lead	15	0	2	ppb	1 out of 20	N	household plumbing.
							Corrosion of
Copper	1.3	1.3	0.62	ppm	0 out of 20	N	household plumbing.

# HEALTH EFFECTS:

About our Atrazine violation: During March, April and May, a big surge in the use of atrazine-based herbicides by area farmers caused our water to exceed the MCL for atrazine. We sent a notice warning you of this problem when it occurred. We are working with the state and local farmers to ensure that this never happens again, and we are monitoring atrazine levels monthly. You should know that some people who drink water containing atrazine well in excess of the MCL over many years could experience problems with their cardiovascular system or reproductive difficulties. If you want more information about atrazine or the violation, please call us (867-5309), Sample County's Health Department (999-423-4444), or the State Drinking Water office (853-323-3333).

### OTHER VIOLATIONS:

We were late in submitting our 2002 CCR report to DEP.

### EDUCATIONAL INFORMATION:

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 human activity. Contaminants that may be present in source water include:

• Microbial contaminants, such as viruses and bacteria, which 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 run-off, 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 run-off and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater run-off and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

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

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 the 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).

### **OTHER INFORMATION:**

**About Nitrate:** Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.

# PART 3: BLANK CCR TEMPLATE

The following pages contain a blank CCR Template. Mandatory language has been protected, however, there are areas you may modify. Please refer to the following formatting instructions.

### WATER SYSTEM INFORMATION:

If you have regularly scheduled meetings, replace the bracketed text with details about your meeting. You may delete this text if you do not hold meetings.

# SOURCE(S) OF WATER:

Under the source water assessment paragraph, replace the bracketed text with the appropriate information. If you have not had a source water assessment, you may delete the entire paragraph.

# MONITORING YOUR WATER:

Insert the year.

# **DETECTED SAMPLE RESULTS:**

If you are reporting data from a previous year, footnote or include the date below the contaminant.

There are four columns that you can copy and paste from the Table 1: Detected Contaminants. These include: MCL in CCR units, MCLG, Units, and Sources of Contamination.

For the lead and copper table, insert data in the following columns: the 90<sup>th</sup> Percentile Value, # of Sites Above AL of Total Sites, and Violation of TT Y/N.

For the microbial contaminants table, insert data in the following columns: Highest # or % of Positive Samples, and Violation Y/N. If you had a non-detect for either row, you may delete that specific row from the table.

### HEALTH EFFECTS:

When you violate an MCL, MRDL, or TT, you must include the specific health effects language for that contaminant. You may copy and paste from Table 2: HEALTH EFFECTS LANGUAGE.

### **OTHER VIOLATIONS:/OTHER INFORMATION:**

You may delete these sections if you do not have violations or information to report.

### Printing your template:

To avoid printing the entire file,

- 1. Move your cursor to the first page of your completed template.
- 2. Use "Current Page" option to print that page.
- 3. Repeat steps 1 and 2 for each page.



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WATER STANDARDS AND FACILITY REGULATION

# 2008 ANNUAL DRINKING WATER QUALITY REPORT

# PWSID #: 4310038\_\_\_\_\_ NAME: Walker Township Municipal Authority

Este informe contiene información muy importante sobre su agua de beber. Tradúzcalo ó hable con alguien que lo entienda bien. (This report contains very important information about your drinking water. Translate it, or speak with someone who understands it.)

# WATER SYSTEM INFORMATION:

This report shows our water quality and what it means. If you have any questions about this report or concerning your water utility, please contact <u>the Municipal Authority Office</u> located at <u>5568 Bouquet Street</u>, P.O. Box 116, McConnellstown, PA <u>16660</u>, (814)627-1890, Monday - Friday, 8:00 a.m. - <u>12:00 noon</u>.

We want you to be informed about your water supply. If you want to learn more, please attend any of our regularly scheduled meetings. They are held the second Monday of each month at the Municipal Office on Bouquet Street at 7:00 p.m.

# SOURCE(S) OF WATER:

Our water source(s) is/are: (Name-Type-Location)

Two artesian ground wells, located at the water treatment plant, behind the Victoria Manor development

outside McConnellstown.

A Source Water Assessment of our source(s) was completed in 20\_\_\_ by the PA Department of Environmental Protection (PADEP). The Assessment has found that our source(s) is/are potentially most susceptible to (activities) [ex. road deicing materials, accidental spills along roads and leaks in underground storage tanks.] Overall, our source(s) has/have [little, moderate, high] risk of significant contamination. Summary reports of the Assessment are available by writing to \_\_\_\_ [insert water system name, address] and will be available at www.depweb.state.pa.us, keyword: source water. Complete reports were distributed to municipalities, water supplier, local planning agencies and PADEP offices. Copies of the complete report are available for review at the PADEP \_\_\_\_\_\_ Regional Office, Records Management Unit at (\_\_\_) \_\_\_\_\_.

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. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

# **MONITORING YOUR WATER:**

We routinely monitor for contaminants in your drinking water according to federal and state laws. The following tables show the results of our monitoring for the period of January 1 to December 31, <u>2008</u>. The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data is from prior years in accordance with the Safe Drinking Water Act. The date has been noted on the sampling results table.

# **DEFINITIONS AND ABBREVIATIONS:**

Action Level (AL) - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

*Maximum Contaminant Level (MCL)* - 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.

*Maximum Contaminant Level Goal (MCLG)* - 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.

*Maximum Residual Disinfectant Level (MRDL)* - The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

*Maximum Residual Disinfectant Level Goal (MRDLG)* - The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**Treatment Technique (TT)** - A required process intended to reduce the level of a contaminant in drinking water.

*Mrem/year* = millirems per year (a measure of radiation absorbed by the body)

*pCi/L* = picocuries per liter (a measure of radioactivity)

ppm = parts per million, or milligrams per liter
(mg/L)

*ppq* = parts per quadrillion, or picograms per liter

*ppb* = parts per billion, or micrograms per liter (µg/L)

*ppt* = parts per trillion, or nanograms per liter

# **DETECTED SAMPLE RESULTS:**

Chemical Contaminant	MCL in CCR units	MCLG	Highest Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Chlorine	MRDL=4	MRDL=4	.31	.2231	ppm	10-21-08	Ν	Water additive used to control microbes
Trihalomethanes (TTHM)	80	80	.00775		ppb	8-13-08	Ν	By-product of drinking water chlorination
Haloacetic acids five (HAA5)	60	60	0	0	ppb	8-15-08	Ν	By-product of drinking water chlorination
Barium	2	2	.028		ppm	6-6-06	Ν	Discharge of drilling wastes,metal refineris, erosion of natural deposits
Nitrate	10	10	1.19		ppm	8-13-08	Ν	Runoff from fertilizer use, leaching from septic tanks, sewage, erosion of natural deposits
Combined Radium	5	0	5.43	1.16 - 5.43	pCi/L	5-2-06	Ν	Erosion of natural deposits

Contaminant	Action Level (AL)	MCLG	90 <sup>th</sup> Percentile Value	Units	# of Sites Above AL of Total Sites	Violation of TT Yes or No	Sources of Contamination
Lead	15	0	.25000	ppb	10	Ν	Corrosion of household plumbing.
Copper	1.3	1.3	.00130	ppm	10	Ν	Corrosion of household Plumbing.

Microbial	MOL	MOLO	Highest # or % of Positive	Violation	Typical Sources
		MCLG	Samples	T/IN	of contamination
Total Coliform	For systems that	0	0	N	
Bacteria	collect <40				
	samples/month:				
	<ul> <li>More than 1</li> </ul>				
	positive monthly				
	sample				Naturally present in
	For systems that				the environment
	collect > 40				
	samples/month:				
	• 5% of monthly				
	samples are				
	positive				
Fecal Coliform	0	0	0	N	Human and animal
Bacteria or E. coli					fecal waste.

# **HEALTH EFFECTS:**

There were no detections for either total coliform bacteria or fecal coliform bacteria during normal, twice

monthly testing.

# OTHER VIOLATIONS:

There were no violations.

# **EDUCATIONAL INFORMATION:**

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. Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which 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 run-off, 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 byproducts of industrial processes and petroleum production, and can also come from gas stations, urban

stormwater runoff, and septic systems.

• 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 and DEP prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA and DEP regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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).

# **OTHER INFORMATION:**

The information provided above basically shows that through extensive required testing by DEP, the water

that you are consuming has been shown to be free of harmful contaminants that could affect your health.