

2008 WATER QUALITY REPORT FOR THE ELK RIDGE WATER SYSTEM PWSID # 0210006

Is my water safe?

Last year, as in years past, your tap water met all U.S. Environmental Protection Agency (EPA) and state drinking water health standards. The Washington County Department of Water Quality vigilantly safeguards its water supplies and once again we are proud to report that our water system has never violated a maximum contaminant level or any other water quality standard.

Do I need to take special precautions?

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/Centers for Disease Control (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).

Where does my water come from?

The Elk Ridge Water System utilizes one well as its water source. The water for this system receives iron removal, manganese removal, pH adjustment and chlorination prior to entering the distribution system.

Source water assessment and its availability

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for the Elk Ridge water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to the source, 2) identification of potential sources of contamination, and 3) determination of susceptibility of the water supply to contamination. Recommendations for protecting the drinking water supply conclude this report.

The sources of Elk Ridge's water supply is one well in an unconfined fractured rock aquifer. The Source Water Assessment area was delineated by the WSP using EPA approved methods specifically designed for this source type.

Point sources of contamination were investigated within the assessment area from field inspections, contaminant inventory databases, and previous studies. The Maryland Office of Planning's 2000 digital land use map for Washington County was used to identify non-point sources of contamination. Well information and water quality data were also reviewed. An aerial photograph and maps showing potential contaminants sources and land use within the Source Water Assessment area are included in this report.

The susceptibility analysis is based on review of the existing water quality data for the Elk Ridge Water System, the presence of potential sources of contamination in the source water assessment area, well integrity, and the inherent vulnerability of the aquifer. The Elk Ridge Water supply may be susceptible to contamination by volatile organic compounds. It was determined that Radon-222, a naturally occurring contaminant, may pose a risk to the Elk Ridge water supply. This water supply is not susceptible to contamination by inorganic compounds, synthetic organic compounds or microbiological contaminants.

Why are there contaminants in my drinking water?

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 (EPA) Safe Drinking Water Hotline (800-426-4791).

How can I get involved?

The Washington County Department of Water Quality has an Advisory Board that meets on a monthly basis. For information on attending a meeting, please contact our main office at (240) 313-2600.

Water Quality Data Table

The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently.

<u>Contaminants</u>	<u>MCLG or MRDLG</u>	<u>MCL, TT, or MRDL</u>	<u>Your Water</u>	<u>Range Low High</u>	<u>Sample Date</u>	<u>Violation</u>	<u>Typical Source</u>
Inorganic Contaminants							
Fluoride (ppm)	4	4	0.113	NA	2007	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate [measured as Nitrogen] (ppm)	10	10	0.2	NA	2007	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium (optional) (ppm)		MPL	9.004	NA	2008	No	Erosion of natural deposits; Leaching
Radioactive Contaminants							
Alpha emitters (pCi/L)	0	15	3	NA	2003	No	Erosion of natural deposits
Beta/photon emitters (pCi/L)	0	50	5	NA	2003	No	Decay of natural and man-made deposits. The EPA considers 50 pCi/L to be the level of concern for Beta particles.
Radium (combined 226/228) (pCi/L)	0	5	0.4	NA	2003	No	Erosion of natural deposits

<u>Contaminants</u>	<u>MCLG</u>	<u>AL</u>	<u>Your Water</u>	<u>Sample Date</u>	<u># Samples Exceeding AL</u>	<u>Exceeds AL</u>	<u>Typical Source</u>
Inorganic Contaminants							
Copper - action level at consumer taps (ppm)	1.3	1.3	0.25	2007	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead - action level at consumer taps (ppb)	0	15	0.15	2007	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

Unit Descriptions	
<u>Term</u>	<u>Definition</u>
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or micrograms per liter (µg/L)
pCi/L	pCi/L: picocuries per liter (a measure of radioactivity)
NA	NA: not applicable
ND	ND: Not detected
NR	NR: Monitoring not required, but recommended.

Important Drinking Water Definitions	
Term	Definition
MCLG	MCLG: Maximum Contaminant Level Goal: 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.
MCL	MCL: Maximum Contaminant Level: 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.
TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Variances and Exemptions	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
MRDLG	MRDLG: Maximum residual disinfection level goal. 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.
MRDL	MRDL: Maximum residual disinfectant level. 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.
MNR	MNR: Monitored Not Regulated
MPL	MPL: State Assigned Maximum Permissible Level

Results of voluntary monitoring

The Washington County Department of Water Quality conducts routine testing on your water system that is not included in the Water Quality Table. A list of parameters and their results for 2008 are located in the Table of Results of Customer Interest below.

TABLE OF RESULTS OF CUSTOMER INTEREST

PARAMETERS	LEVEL/RANGE DETECTED	UNIT OF MEASUREMENT
pH	6.9 to 7.6	Standard Unit
Chlorine	0.5 to 2.1	ppm
Turbidity	0.1 to 0.4	NTU
Hardness	68 to 86	ppm
Alkalinity	95 to 65	ppm
Manganese	0.00 to .033	ppm
Iron	0.01 to 0.260	ppm

For more information on the Washington County Department of Water Quality, please visit our website at www.washco-md.net/water_sewer.

**For more information on the Elk Ridge Water System
Contact Mr. Kim L. Bowers at (240)-313-2600**

2008 WATER QUALITY REPORT FOR THE HIGHFIELD WATER SYSTEM PWSID # 0210001

Is my water safe?

Last year, as in years past, your tap water met all U.S. Environmental Protection Agency (EPA) and state drinking water health standards. The Washington County Department of Water Quality vigilantly safeguards its water supplies and once again we are proud to report that our system has never violated a maximum contaminant level or any other water quality standard.

Do I need to take special precautions?

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/Centers for Disease Control (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).

Where does my water come from?

The Highfield System utilizes four wells as its primary water source. This water is pH adjusted; fluoridated; and chlorinated prior to entering the distribution system. During periods of low water table conditions, water can be purchased from the Washington Township Municipal Authority. Washington Township Municipal Authority uses three springs and three wells as their water source. No water was purchased from Washington Township Municipal Authority in 2000 through 2008.

Source water assessment and its availability

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for the Highfield Water System. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to the source, 2) identification of potential sources of contamination, and 3) determination of susceptibility of the water supply to contamination. Recommendations for protecting the drinking water supply conclude this report.

The sources of Highfield's water supply are four wells that draw from an unconfined fractured rock aquifer. The Source Water Assessment area was delineated by the WSP using EPA approved methods specifically designed for this source type.

Point sources of contamination were identified within the assessment area from field inspections, contaminant inventory databases, and previous studies. The Maryland Office of Planning's 2000 digital land use map for Washington County was used to identify non-point sources of contamination. Well information and water quality data were also reviewed. An aerial photograph and maps showing potential contaminants sources and land use within the Source Water Assessment area are included in this report.

The susceptibility analysis is based on review of the existing water quality data for the Highfield Water System, the presence of potential sources of contamination in the source water assessment area, well integrity, and the inherent vulnerability of the aquifer. It was determined that Radon-222, a naturally occurring contaminant, may pose a risk to the Highfield water supply. The water supply is not susceptible to contamination by inorganic compounds, other radionuclides, volatile organic compounds, synthetic organic compounds, or microbiological contaminants.

For more information on the report, please contact Mr. Kim L. Bowers of our office at (240) 313-2600.

Why are there contaminants in my drinking water?

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 (EPA) Safe Drinking Water Hotline (800-426-4791).

How can I get involved?

The Washington County Department of Water Quality has an Advisory Board that meets on a monthly basis. For information about attending a meeting, please contact our main office at (240) 313-2600.

Water Quality Data Table

The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently.

<u>Contaminants</u>	<u>MCLG or MRDLG</u>	<u>MCL, TT, or MRDL</u>	<u>Your Water</u>	<u>Range</u> <u>Low</u> <u>High</u>		<u>Sample Date</u>	<u>Violation</u>	<u>Typical Source</u>
Inorganic Contaminants								
Barium (ppm)	2	2	0.05		0.05	2007	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	4	4	0.1	NA		2007	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate [measured as Nitrogen] (ppm)	10	10	1.8	0.5	2.5	2008	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium (optional) (ppm)		MPL	10.4	5.1	15.7	2007	No	Erosion of natural deposits; Leaching
Radioactive Contaminants								
Alpha emitters (pCi/L)	0	15	1		1	2003	No	Erosion of natural deposits
Beta/photon emitters (pCi/L)	0	50	3		3	2003	No	Decay of natural and man-made deposits. The EPA considers 50 pCi/L to be the level of concern for Beta particles.
Volatile Organic Contaminants								
Tetrachloroethylene (ppb)	0	5	0.5		0.5	2007	No	Discharge from factories and dry cleaners
<u>Contaminants</u>	<u>MCLG</u>	<u>AL</u>	<u>Your Water</u>	<u>Sample Date</u>	<u># Samples Exceeding AL</u>	<u>Exceeds AL</u>	<u>Typical Source</u>	
Inorganic Contaminants								
Copper - action level at consumer taps (ppm)	1.3	1.3	0.577	2007	0	No	Corrosion of household plumbing systems; Erosion of natural deposits	
Lead - action level at consumer taps (ppb)	0	15	0	2007	0	No	Corrosion of household plumbing systems; Erosion of natural deposits	
Unit Descriptions								
<u>Term</u>	<u>Definition</u>							
ppm	ppm: parts per million, or milligrams per liter (mg/L)							
ppb	ppb: parts per billion, or micrograms per liter (µg/L)							
pCi/L	pCi/L: picocuries per liter (a measure of radioactivity)							
NA	NA: not applicable							
ND	ND: Not detected							
NR	NR: Monitoring not required, but recommended.							

Important Drinking Water Definitions	
Term	Definition
MCLG	MCLG: Maximum Contaminant Level Goal: 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.
MCL	MCL: Maximum Contaminant Level: 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.
TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Variances and Exemptions	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
MRDLG	MRDLG: Maximum residual disinfection level goal. 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.
MRDL	MRDL: Maximum residual disinfectant level. 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.
MNR	MNR: Monitored Not Regulated
MPL	MPL: State Assigned Maximum Permissible Level

Results of voluntary monitoring

The Washington County Department of Water Quality conducts routine testing on your water system that is not included in the Water Quality Data Table. A list of parameters and their results are listed in the Table of Results of Customer Interest below.

TABLE OF TEST RESULTS OF CUSTOMER INTEREST

PARAMETER	LEVEL/RANGE DETECTED	UNIT OF MEASUREMENT
PH	6.8 to 7.9	Standard Unit
Chlorine	0.1 to 2.1	ppm
Turbidity	0 to 1.97	NTU
Fluoride	0.7 to 1.7	ppm

For more information on the Washington County Department of Water Quality, please visit our website at www.washco-md.net/water_sewer

**For more information on the Highfield Water System
Contact: Mr. Kim L. Bowers at (240) 313-2600**

2008 WATER QUALITY REPORT FOR THE MT. AETNA WATER SYSTEM PWSID# 0210015

Is my water safe?

Last year, as in years past, your tap water met all U.S. Environmental Protection Agency (EPA) and state drinking water health standards. The Washington County Department of Water Quality vigilantly safeguards its water supplies and once again we are proud to report that our system has never violated a maximum contaminant level or any other water quality standard.

Do I need to take special precautions?

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/Centers for Disease Control (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).

Where does my water come from?

The Mt. Aetna Water System utilizes two springs, one well and a stream intake as its water source. The water receives chlorination and pH adjustment prior to entering the distribution system

Source water assessment and its availability

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for the Mount Aetna water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to the source, 2) identification of potential sources of contamination, and 3) determination of susceptibility of the water supply to contamination. Recommendations for protecting the drinking water supply conclude this report.

The sources of Mount Aetna's water supply are one well and two springs in unconfined fractured rock aquifers. The Source Water Assessment area was delineated by the WSP using EPA approved methods specifically designed for this source type.

Point sources of contamination were investigated within the assessment area from field inspections, contaminant inventory databases, and previous studies. The Maryland Office of Planning's 2000 digital land use map for Washington County was used to identify non-point sources of contamination. Well information and water quality data were also reviewed. An aerial photograph and maps showing potential contaminants sources and land use within the Source Water Assessment area are included in this report.

The susceptibility analysis is based on review of the existing water quality data for the Mount Aetna Water System, the presence of potential sources of contamination in the source water assessment area, well and spring box integrity, and the inherent vulnerability of the aquifer. The Mount Aetna Water supply is susceptible to total coliform bacteria. Radon-222, a naturally occurring contaminant, may pose a risk to the water supply. It was determined that the water supply is not susceptible to contamination by inorganic compounds, other radio nuclides, volatile organic compounds, synthetic organic compounds or microbiological contaminants.

Why are there contaminants in my drinking water?

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 (EPA) Safe Drinking Water Hotline (800-426-4791).

How can I get involved?

The Washington County Department of Water Quality has an Advisory Board that meets on a monthly basis. For information about attending a meeting, please contact our main office at (240) 313-2600.

Water Quality Data Table

The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently.

<u>Contaminants</u>	<u>MCLG or MRDLG</u>	<u>MCL, TT, or MRDL</u>	<u>Your Water</u>	<u>Range Low High</u>	<u>Sample Date</u>	<u>Violation</u>	<u>Typical Source</u>
Disinfectants & Disinfection By-Products							
(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.)							
Haloacetic Acids (HAA5) (ppb)	NA	60	0	NA	2007	No	By-product of drinking water chlorination
TTHMs [Total Trihalomethanes] (ppb)	NA	80	20.03	NA	2007	No	By-product of drinking water disinfection
Inorganic Contaminants							
Copper - source water (mg/L)		MPL	0.012(M PL)	NA	2001	No	Corrosion of household plumbing systems; Erosion of natural deposits
Nitrate [measured as Nitrogen] (ppm)	10	10	0.3	NA	2008	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium (optional) (ppm)		MPL	16.5	NA	2007	No	Erosion of natural deposits; Leaching

<u>Contaminants</u>	<u>MCLG</u>	<u>AL</u>	<u>Your Water</u>	<u>Sample Date</u>	<u># Samples Exceeding AL</u>	<u>Exceeds AL</u>	<u>Typical Source</u>
Inorganic Contaminants							
Copper - action level at consumer taps (ppm)	1.3	1.3	0.076	2006	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead - action level at consumer taps (ppb)	0	0.015	7	2006	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

Additional Monitoring

As part of an on-going evaluation program the EPA has required us to monitor some additional contaminants/chemicals. Information collected through the monitoring of these contaminants/chemicals will help to ensure that future decisions on drinking water standards are based on sound science.

<u>Name</u>	<u>Reported Level</u>	<u>Range Low High</u>
Metolachlor (ppb)	0.5	NA 0.5

Unit Descriptions	
<u>Term</u>	<u>Definition</u>
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or micrograms per liter (µg/L)

NA	NA: not applicable
ND	ND: Not detected
NR	NR: Monitoring not required, but recommended.

Important Drinking Water Definitions	
Term	Definition
MCLG	MCLG: Maximum Contaminant Level Goal: 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.
MCL	MCL: Maximum Contaminant Level: 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.
TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Variations and Exemptions	Variations and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
MRDLG	MRDLG: Maximum residual disinfection level goal. 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.
MRDL	MRDL: Maximum residual disinfectant level. 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.
MNR	MNR: Monitored Not Regulated
MPL	MPL: State Assigned Maximum Permissible Level

Results of voluntary monitoring

The Washington County Department of Water Quality conducts routine testing on your water system that is not included in the Water Quality Data Table. A list of these parameters and their results are listed in the Table of Results of Customer Interest below.

TABLE OF RESULTS OF CUSTOMER INTEREST

PARAMETER	LEVEL/RANGE DETECTED	UNIT OF MEASUREMENT
pH	6.7 to 8.0	Standard Unit
Chlorine	0.2 to 1.4	ppm
Alkalinity	17 to 34	ppm
Hardness	17 to 51	ppm
Turbidity	0.2 to 38.0	NTU

For more information on the Washington County Department of Water Quality, please visit our website at www.washco-md.net/water_sewer

For more information on the Mt. Aetna Water System

Contact Mr. Kim L. Bowers at (240) 313-2600

2008 WATER QUALITY REPORT FOR THE SANDY HOOK WATER SYSTEM PWSID# 021009

Is my water safe?

Last year, as in years past, your tap water met all U.S. Environmental Protection Agency (EPA) and state drinking water health standards. The Washington County Department of Water Quality vigilantly safeguards its water supplies and once again we are proud to report that our system has never violated a maximum contaminant level or any other water quality standard.

Do I need to take special precautions?

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/Centers for Disease Control (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).

Where does my water come from?

The Sandy Hook Water System utilizes two wells as its source of water. This water is treated for iron removal, pH adjustment, water softening, and chlorination prior to entering the distribution system.

Source water assessment and its availability

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for the Sandy Hook water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to the source, 2) identification of potential sources of contamination, and 3) determination of susceptibility of the water supply to contamination. Recommendations for protecting the drinking water supply conclude this report.

The sources of Sandy Hook's water supply in an unconfined fractured rock aquifer. The Source Water Assessment area was delineated by the WSP using EPA approved methods specifically designed for this source type.

Point sources of contamination were investigated within the assessment area from field inspections, contaminant inventory databases, and previous studies. The Maryland Office of Planning's 2000 digital land use map for Washington County was used to identify non-point sources of contamination. Well information and water quality data were also reviewed. An aerial photograph and maps showing potential contaminants sources and land use within the Source Water Assessment area are included in this report.

The susceptibility analysis is based on review of the existing water quality data for the Sandy Hook Water System, the presence of potential sources of contamination in the source water assessment area, well integrity, and the inherent vulnerability of the aquifer. It was determined that the Sandy Hook water supply is not susceptible to contamination by inorganic compounds, radionuclides, volatile organic compounds or microbiological contaminants.

Why are there contaminants in my drinking water?

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 (EPA) Safe Drinking Water Hotline (800-426-4791).

How can I get involved?

The Washington County Department of Water Quality has an Advisory Board that meets on a monthly basis. For more information on attending one of these meetings, please contact our main office at (240) 313-2600.

Water Quality Data Table

The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently.

<u>Contaminants</u>	<u>MCLG</u> or <u>MRDLG</u>	<u>MCL,</u> <u>TT, or</u> <u>MRDL</u>	<u>Your</u> <u>Water</u>	<u>Range</u> <u>Low</u> <u>High</u>	<u>Sample</u> <u>Date</u>	<u>Violation</u>	<u>Typical Source</u>
Disinfectants & Disinfection By-Products							
(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.)							
Haloacetic Acids (HAA5) (ppb)	NA	60	2.88	NA	2008	No	By-product of drinking water chlorination
TTHMs [Total Trihalomethanes] (ppb)	NA	80	12.08	NA	2008	No	By-product of drinking water disinfection
Inorganic Contaminants							
Fluoride (ppm)	4	4	0.15	NA	2007	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate [measured as Nitrogen] (ppm)	10	10	0.2	NA	2008	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium (optional) (ppm)		MPL	1.39	NA	2007	No	Erosion of natural deposits; Leaching
<u>Contaminants</u>	<u>MCLG</u>	<u>AL</u>	<u>Your</u> <u>Water</u>	<u>Sample</u> <u>Date</u>	<u># Samples</u> <u>Exceeding AL</u>	<u>Exceeds</u> <u>AL</u>	<u>Typical Source</u>
Inorganic Contaminants							
Copper - action level at consumer taps (ppm)	1.3	1.3	0.03	2008	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead - action level at consumer taps (ppb)	0	0.015	0.007	2008	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

Additional Monitoring

As part of an on-going evaluation program the EPA has required us to monitor some additional contaminants/chemicals. Information collected through the monitoring of these contaminants/chemicals will help to ensure that future decisions on drinking water standards are based on sound science.

<u>Name</u>	<u>Reported Level</u>	<u>Range</u>	
		<u>Low</u>	<u>High</u>
Aldicarb sulfoxide (ppb)	1.5	1.5	1.5
Bromodichloromethane (ppb)	0.5	0.5	0.5
Chloroform (ppb)	0.5	0.5	0.5
Unit Descriptions			
<u>Term</u>	<u>Definition</u>		
Ppm	ppm: parts per million, or milligrams per liter (mg/L)		
Ppb	ppb: parts per billion, or micrograms per liter (µg/L)		
NA	NA: not applicable		
ND	ND: Not detected		
NR	NR: Monitoring not required, but recommended.		

Important Drinking Water Definitions	
Term	Definition
MCLG	MCLG: Maximum Contaminant Level Goal: 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.
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TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Variances and Exemptions	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
MRDLG	MRDLG: Maximum residual disinfection level goal. 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.
MRDL	MRDL: Maximum residual disinfectant level. 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.
MNR	MNR: Monitored Not Regulated
MPL	MPL: State Assigned Maximum Permissible Level

Results of voluntary monitoring

The Washington County Department of Water Quality conducts routine testing on your water system that is not included in the Water Quality Data Table. A list of parameters and their results are listed in the Table of Results of Customer Interest below.

TABLE OF RESULTS OF CUSTOMER INTEREST

PARAMETER	LEVEL/RANGE DETECTED	UNIT OF MEASUREMENT
pH	8.1 to 7.1	Standard Units
Chlorine	2.1 to 0.4	ppm
Turbidity	0.3 to 0.1	NTU
Hardness	222 to 51	ppm
Alkalinity	141 to 78	ppm
Manganese	0.000 to 0.048	ppm
Iron	0.010 to 0.300	ppm
Chloride	2.1 to 0.4	ppm

For more information on the Washington County Department of Water Quality, please visit our website at www.washco-md.net/water_sewer.

**For more information on the Sandy Hook Water System
Contact Mr. Kim L. Bowers at (240) 313-2600**

2008 WATER QUALITY REPORT FOR THE SHARPSBURG WATER SYSTEM PWSID # 0210017

Is my water safe?

Last year, as in years past, your tap water met all U.S. Environmental Protection Agency (EPA) and state drinking water health standards. Washington County Department of Water Quality vigilantly safeguards its water supplies and once again we are proud to report that our system has never violated a maximum contaminant level or any other water quality standard.

Do I need to take special precautions?

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/Centers for Disease Control (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).

Where does my water come from?

The water supply for the Sharpsburg Water System comes from the Potomac River, a surface water source. This water is processed through the Sharpsburg Water Treatment Plant. The Water Treatment Plant provides filtration, chlorination, pH adjustment, Ultra Violet disinfection and fluoridation of the water prior to entering the distribution system.

Source water assessment and its availability

The Maryland Department of the Environment has developed and the EPA has approved its plan for the development of Source Water Assessments. MDE completed the final Assessment in July 2002. For more information on this report contact Mr. Kim L. Bowers at (240) 313-2600.

Why are there contaminants in my drinking water?

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 (EPA) Safe Drinking Water Hotline (800-426-4791).

Results of voluntary monitoring

The Washington County Department of Water Quality conducts routine testing of your water system that is not included in the Water Quality Data Table. The MDE has also completed testing that is not included in the Water Quality Data Table. A list of these parameters and their results are located in the Table of Results of Customer Interest below.

TABLE OF RESULTS OF CUSTOMER INTEREST

PARAMETER	LEVEL/RANGE DETECTED	UNIT OF MEASUREMENT
pH	6.6 to 8.2	Standard Unit
Chlorine	0.9 to 3.6	ppm
Hardness	68 to 257	ppm
Alkalinity	23 to 130	ppm

Water Quality Data Table

The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently.

<u>Contaminants</u>	<u>MCLG or MRDLG</u>	<u>MCL, TT, or MRDL</u>	<u>Your Water</u>	<u>Range</u>		<u>Sample Date</u>	<u>Violation</u>	<u>Typical Source</u>
				<u>Low</u>	<u>High</u>			
Disinfectants & Disinfection By-Products								
(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.)								
Haloacetic Acids (HAA5) (ppb)	NA	60	26.69	20.2	43.3	2008	No	By-product of drinking water chlorination
TTHMs [Total Trihalomethanes] (ppb)	NA	80	43.89	0	80.52	2008	No	By-product of drinking water disinfection
Inorganic Contaminants								
Fluoride (ppm)	4	4	0.67	0.00	1.34	2008	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate [measured as Nitrogen] (ppm)	10	10	1.3	NA		2008	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium (optional) (ppm)		MPL	15.0	NA		2008	No	Erosion of natural deposits; Leaching
Microbiological Contaminants								
Turbidity (NTU) 95% of the samples were below the TT value of 0.3 A value less than 95% constitutes a TT violation. The highest single measurement was 0.3. Any measurement in excess of 1 is a violation unless otherwise approved by the state.						2008	No	Soil runoff
Radioactive Contaminants								
Alpha emitters (pCi/L)	0	15	2	NA		2002	No	Erosion of natural deposits
Radium (combined 226/228) (pCi/L)	0	5	1	NA		2002	No	Erosion of natural deposits
<u>Contaminants</u>	<u>MCLG</u>	<u>AL</u>	<u>Your Water</u>	<u>Sample Date</u>	<u># Samples Exceeding AL</u>	<u>Exceeds AL</u>	<u>Typical Source</u>	
Inorganic Contaminants								
Copper - action level at consumer taps (ppm)	1.3	1.3	0.229	2008	0	No	Corrosion of household plumbing systems; Erosion of natural deposits	
Lead - action level at consumer taps (ppb)	0	0.015	0.010	2008	0	No	Corrosion of household plumbing systems; Erosion of natural deposits	

Additional Monitoring

As part of an on-going evaluation program the EPA has required us to monitor some additional contaminants/chemicals. Information collected through the monitoring of these contaminants/chemicals will help to ensure that future decisions on drinking water standards are based on sound science.

<u>Name</u>	<u>Reported Level</u>
Bromodichloromethane (ppb)	4.3
Chloroform (ppb)	7.3

Unit Descriptions	
<u>Term</u>	<u>Definition</u>
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or micrograms per liter (µg/L)
pCi/L	pCi/L: picocuries per liter (a measure of radioactivity)
NTU	NTU: Nephelometric Turbidity Units. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.
NA	NA: not applicable
ND	ND: Not detected
NR	NR: Monitoring not required, but recommended.

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