

*VAIL'S GROVE COOPERATIVE, INC.  
Five Vail Boulevard  
Brewster, New York 10509  
PHONE 914-669-5100  
FAX 914-669-5064*

TO: All Shareholders/Residents Vail's Grove Cooperative, Inc.

FROM: The Public Health Committee of the Board of Directors  
Vail's Grove Cooperative, Inc.

RE: Annual Water Quality Report (AWQR)  
For Vail's Grove Cooperative For Calendar Year 2014  
5 Vail Boulevard  
Brewster, NY 10509  
(Federal Public Water Supply Identification Number 3903654)

DATE: May 26, 2015

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To comply with State regulations, Vail's Grove Cooperative annually issues a report describing the quality of your drinking water. The purpose of this report is to raise your understanding of drinking water and awareness of the need to protect our drinking water sources. We test your drinking water in accordance with the requirements of New York State for numerous contaminants including, total coliform, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds (VOC's), total trihalomethanes, synthetic organic compounds (SOC's), and purgeable organic compounds (POC's). Last year, we conducted tests for contaminants, of which none was a level higher than the State allows.

In general, 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 activities. Contaminants that may be present in source water include: microbial contaminants, inorganic contaminants; pesticides and herbicides; organic chemical contaminants; and radioactive contaminants. In order to ensure that tap water is safe to drink, the State and the EPA prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. The State Health Departments and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

This Annual Water Quality Report (AWQR) is to keep you informed about the water and services delivered to you during calendar year 2014. The Cooperative's goal is to provide a safe and dependable supply of drinking water. Our water source is from three subterranean bedrock wells (each at an approximate depth of 300 feet) located near the pump house at the North end of Vail's Lake Shore Drive. The water is pumped from the wells into two (2) 25,000-gallon storage (50,000 gallons total) tanks after chlorination, and then pumped to the homes and Pavilion of the Vail's Grove community at between 70 and 80 pounds per square inch. NY State certifies operators who serve on our Public

Health Committee who test chlorine levels daily. During 2014 the wells produced and delivered 9,508,000 gallons of potable water. In 2003, The Department of Health completed a Source Water Assessment Summary and Final report regarding the three wells at Vail's Grove. The full report is available at the Vail's Grove Office should you wish to read it.

We replaced our water storage tanks and associated water delivery equipment at the newly renovated Pump House.

For more information or to discuss any drinking water issues, feel free to call us at (914) 669-5100, or you may call the Putnam County Department of Health located at One Geneva Road, Brewster, NY 10509 at (845) 803-1370. Kathleen Heuschkel, Vail's Grove's "Principal Operator in Charge" will also answer any questions on drinking water quality. She may be reached (days) at (845) 612-1851. J. Waltzer (Operator) may be reached at (845) 669-8085. P. McGuinness (Operator) may be reached at (845) 669-5548. J. Moore may be reached at (845) 803-2786/(914) 669-9606. Any issues concerning drinking water quality may also be discussed at our regular monthly board meetings on the 3<sup>rd</sup> Thursday of each month. During Calendar 2014, Ms. K. Heuschkel assumed the title and duties of Principal Operator.

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Vail's Grove Cooperative, Inc. routinely monitors (by a laboratory certified by New York State) for various substances and possible contaminants in our drinking water, according to Federal and State laws and on a schedule as determined by the State of New York. Attached tables show results of some of our monitoring from several previous years and list **only detected contaminants**. On the New York State schedule, our water is tested for inorganic contaminants, nitrate, lead and copper, volatile organic contaminants, synthetic organic contaminants, and total trihalomethanes. Our water is tested for coliform bacteria once per month. A coliform violation occurs when a total coliform positive sample is positive for E coli and a repeat total coliform sample is positive, or when a total coliform positive sample is negative for E coli, but a repeat coliform sample is positive for total coliforms *and* E coli. The MCL for coliform is 0 per 100 ml.

During the year 2014, there were no positive coliform bacteria detected. We also monitored for the following Purgeable Organic Compounds in Drinking Water which were all **below detectable limits**:

*Dichlorodifluoromethane, Chloromethane, Vinyl chloride, Bromomethane, Chloroethane, Trichlorofluoromethane, 1,1-Dichloroethene, Methylene Chloride, Trans-1,2-Dichloroethene, 1,1-Dichloroethane, Cis-1,2-Dichloroethene, 2,2-Dichloropropane, Bromochloromethane, 1,1,1-Trichloroethane, 1,1-Dichloropropene, 1,2-Dichloroethane, Carbon Tetrachloride, Benzene, Trichloroethene, 1,2-Dichloropropane, Dibromomethane, Cis-1,3-Dichloropropene, Toluene, Trans-1,3-Dichloropropene, 1,1,2-Trichloroethane, 1,3-Dichloropropane, Chlorobenzene, 1,1,1,2-Tetrachloroethane, Ethyl Benzene, m,p-Xylene, Styrene, o-Xylene, 1,1,2,2-Tetrachloroethane, Isopropyl Benzene, 1,2,3-Trichloropropane, Bromo Benzene, n-Propyl Benzene, 2-Chlorotoluene, 4-Chlorotoluene, 1,3,5-*

*Trimethyl Benzene, Tert-Butyl Benzene, 1,2,4-Trimethyl Benzene, Sec-Butyl Benzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, p-Isopropyltoluene, 1,2-Dichlorobenzene, n-Butyl Benzene, 1,2,4-Trichlorobenzene, Naphthalene, Hexachlorobutadiene, 1,2,3-Trichlorobenzene, 1,2 Dibromo-3-chloropropane, Methyl Ethyl Ketone, Tetrachloroethene, Total Xylenes, and Methyl tert-Butyl Ether (MTBE),*

*The following Haloacetic Acids were detected: Dichloroacetic Acid, Dibromoacetic Acid. In 2011, we also monitored for the following Synthetic Organic Compounds (SOC's) which were all ND (non-detectable):*

*1,2-Dibromoethane (EDB), Glyphosate, Aldicarb, Aldicarb sulfoxide, Aldicarb sulfone, Carbaryl, Carbofuran, 3-Hydroxycarbofuran, Methomyl, Oxamyl(Vydate), Endothall, Diquat, Alachlor, Aldrin, Atrazine, Benzo(a)pyrene, Butachlor, Di(2-ethylhexyl)adipate, Di(2-ethylhexyl)phthalate, Dieldrin, Endrin, Heptachlor, Heptachlor epoxide, Hexachlorobenzene, Hexachlorocyclopentadiene, Lindane (gamma-BHC), Metolachlor(Dual), Methoxychlor, Metribuzin(Sencor), Propachlor, Simazine, Aroclor 1016, Aroclor 1221, Aroclor 1232, Aroclor 1242, Aroclor 1248, Aroclor 1254, Aroclor 1260, Chlordane, Toxaphene, 2,4,5-TP(Silvex), 2,4-D, Dalapon, Dicamba, Dinoseb, Pentachlorophenol, Picloram.*

**WE ARE PLEASED TO REPORT THAT VAIL'S GROVE DRINKING WATER CONTINUES TO MEET ALL FEDERAL AND STATE REQUIREMENTS. Last year your tap water met all State drinking water health standards. In 2014, our system did not violate a maximum contaminant level (MCL).**

#### **Water Conservation**

Because of the recent necessity for water conservation, the Board of Directors has approved a rule applicable when the state or either county has imposed a water emergency, water watch, or any other drought condition calling for water conservation. This rule mandates that Vail's Grove residents:

- Will not wash cars**
- Will not water their landscape with hoses or sprinklers**
- Will not wash down driveways or roadways**

**Failure to comply with the above will result in an Improper Use Fee by the Board for each occurrence.**

We all recognize the need to conserve water during times of drought. It is just as important to use water wisely when the supply is plentiful. Some common sense measures to conserve water include:

- Shut faucets off tightly. A small drip can waste 25 gallons per day.
- Check all toilets for leakage. A bad toilet leak can waste as much as 200 gallons a day.
- Don't run the faucet to get a cold drink. Place a container of water in the refrigerator.
- Don't run the faucet while shaving or brushing your teeth.

- Take shorter showers and half-full baths. Install low flow showerheads and faucets.
- Run washing machine and dishwasher only when full. Don't wash dishes under a running faucet.
- Don't cut the lawn too short, longer grass saves water.
- Mulch around trees and plants to help retain moisture.

### **Health Considerations**

There are some people who may be more vulnerable to disease causing microorganisms or pathogens in drinking water than the general population. Immune-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 their drinking water from their health care providers. EPA/CDC guidelines on the proper means to lessen the risk of infection by Cryptosporidium Giardia and other microbial pathogens are available from the Safe Drinking Water Hotline (800) 426-4791.

### **About Lead**

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead in 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. Don't use hot water for drinking purposes. Additional information is available from Safe Drinking Water Hotline (800) 426-4791.

### **Definitions:**

**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 Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLG as possible.

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

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

**Variations and Exemptions:** State permission not to meet an MCL or treatment technique under certain conditions. In 2001 Vail's Grove operated under a waiver from sampling synthetic organic compounds (SOC's). In 2002, SOC's were tested. SOC testing was done again in the year 2005 and 2011. In 2008, Vail's Grove operated under a waiver from sampling synthetic organic compounds (SOC's).

**Milligrams per liter (mg/l):** Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm).

**Micrograms per liter (ug/l):** Corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb).

**Nanograms per liter (ng/l):** Corresponds to one part of liquid in one trillion parts of liquid (parts per trillion – ppt).

**Picocuries per liter (pCi/L):** Picocuries per liter is a measure of the radioactivity in water.

**90<sup>th</sup> Percentile Value:** The values reported for lead and copper represent the 90<sup>th</sup> percentile. A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal to or below it. The 90<sup>th</sup> percentile is equal to or greater than 90% of the lead and copper values detected at your water system.

**NDL:** No determined limit.

**n/d:** Not detected in routine laboratory analysis.

**N/A:** Not applicable.

**LT or <:** Less than **GT or >:** Greater than

**BDL:** Below detectable limits.

cc: Commissioner, New York State Department of Health  
Attn: Director, Bureau of Public Water Supply Protection  
Flanigan Square, 547 River Street, Room 400  
Troy, New York 12180-2216

Ms. Anne Bittner  
Putnam County Health Department  
One Geneva Road  
Brewster, New York 10509

Northeast Laboratories of Danbury  
129 Mill Street  
Berlin, CT 06037-9990

Purgeable Organic Compounds

TABLE 2  
POC's Detected in 2014

Contaminant	Date	Unit	MCLG or Standard	Detected level	Information	Violate
Benzene	7/9/2014	ug/L	0.5 ND			
Bromobenzene	7/9/2014	ug/L	0.5 ND			
Bromochloromethane	7/9/2014	ug/L	0.5 ND			
Bromodichloromethane	7/9/2014	ug/L	0.5 1.8 ug/L			
Bromoform	7/9/2014	ug/L	0.5 1.5 ug/L			NO
Bromomethane	7/9/2014	ug/L	0.5 ND			
n-Butylbenzene	7/9/2014	ug/L	0.5 ND			
sec-Butylbenzene	7/9/2014	ug/L	0.5 ND			
tert-Butylbenzene	7/9/2014	ug/L	0.5 ND			
Carbontetrachloride	7/9/2014	ug/L	0.5 ND			
Chlorobenzene	7/9/2014	ug/L	0.5 ND			
Chloroethane	7/9/2014	ug/L	0.5 ND			
Chloroform	7/9/2014	ug/L	0.5 1.2 ug/L			
Chloromethane	7/9/2014	ug/L	0.5 ND			
2-Chlorotoluene	7/9/2014	ug/L	0.5 0.53 ug/L			
4-Chlorotoluene	7/9/2014	ug/L	0.5 ND			
1,2-dibromo-3-chloropropane (DBCP)	7/9/2014	ug/L	0.5 ND			
Dibromochloromethane	7/9/2014	ug/L	0.5 2.9 ug/L			
1,2-dibromoethane (EDB)	7/9/2014	ug/L	0.5 ND			
Dibromomethane	7/9/2014	ug/L	0.5 ND			
1,2-dichlorobenzene	7/9/2014	ug/L	0.5 ND			
1,3-dichlorobenzene	7/9/2014	ug/L	0.5 ND			
1,4-dichlorobenzene	7/9/2014	ug/L	0.5 ND			
Dichlorodifluoromethane	7/9/2014	ug/L	0.5 ND			
1,1-Dichloroethane	7/9/2014	ug/L	0.5 ND			
					The source is a by-product of drinking water TTHMs are formed when source water contains large amounts of organic matter. Some people who drink water containing TTHMs in excess of the MCL. over many years may experience problems with their liver, kidneys, central nervous systems, and may have an increased risk of getting cancer.	NO
					Same as above	NO

1,2-Dichloroethane	7/9/2014 ug/L	0.5 ND	
1,1-Dichloroethene	7/9/2014 ug/L	0.5 ND	
cis-1,2-dichloroethene	7/9/2014 ug/L	0.5 ND	
trans-1,2-dichloroethene	7/9/2014 ug/L	0.5 ND	NO
1,2-Dichloropropane	7/9/2014 ug/L	0.5 ND	
1,3-Dichloropropane	7/9/2014 ug/L	0.5 ND	
2,2-Dichloropropane	7/9/2014 ug/L	0.5 ND	
1,1-Dichloropropene	7/9/2014 ug/L	0.5 ND	
cis-1,3-dichloropropene	7/9/2014 ug/L	0.5 ND	
trans-1,3-dichloropropene	7/9/2014 ug/L	0.5 ND	
Ethylbenzene	7/9/2014 ug/L	0.5 ND	
hexachlorobutadiene	7/9/2014 ug/L	0.5 ND	
Isopropylbenzene	7/9/2014 ug/L	0.5 ND	
4-Isopropyltoluene	7/9/2014 ug/L	0.5 ND	
Methyl tert-butyl ether, MTBE	7/9/2014 ug/L	1 ND	
Methylene Chloride	7/9/2014 ug/L	0.5 ND	
Napthalene	7/9/2014 ug/L	0.5 ND	
n-Propylbenzene	7/9/2014 ug/L	0.5 ND	
Styrene	7/9/2014 ug/L	0.5 ND	
1,2,3-Trichloropropane	7/9/2014 ug/L	0.5 ND	
1,2,3-Trimethylbenzene	7/9/2014 ug/L	0.5 ND	
1,1,1,2-Tetrachloroethane	7/9/2014 ug/L	0.5 ND	
1,1,2,2-Tetrachloroethane	7/9/2014 ug/L	0.5 ND	
Tetrachloroethane (PCE)	7/9/2014 ug/L	0.5 ND	
Toluene	7/9/2014 ug/L	0.5 ND	
1,2,3-Trichlorobenzene	7/9/2014 ug/L	0.5 ND	
1,2,4-Trichlorobenzene	7/9/2014 ug/L	0.5 ND	
1,1,1-Trichloroethane	7/9/2014 ug/L	0.5 ND	
1,1,2-Trichloroethane	7/9/2014 ug/L	0.5 ND	
Trichloroethene (TCE)	7/9/2014 ug/L	0.5 ND	
Trichlorofluoromethane	7/9/2014 ug/L	0.5 ND	
1,2,4-trimethylbenzene	7/9/2014 ug/L	0.5 ND	
1,3,5-Trimethylbenzene	7/9/2014 ug/L	0.5 ND	
Vinyl Chloride	7/9/2014 ug/L	0.5 ND	

same as above

See Note 1

Xylenes (total)

7/9/2014 ug/L

0.5 ND

Sample QC

Surrogate	Recovery	QC Limits
Bromofluorobenzene	104%	70%-130%
1,2-Dichlorobenzene-d4	102%	70%-130%

(Note 1): The MCL for Total Trihalomethanes (TTHM) is 100.0 ug/l)

QA/QC surrogates\*\*\*  
on

7/15/2013 Small percentages of these POC's were also detected (i.e 1,2 dichlorobenzene and bromofluorobenzene).

No MCL exists for these 2 POC compounds.



SYNTHETIC ORGANIC COMPOUNDS  
TESTED FOR YEAR 2014

Contaminant

Result DL Units

1,2-Dibromo-3-chloropropane (DBCP)	ND	0.01 ug/L	
1,2-dibromoethane (EDB)	ND	0.01 ug/L	
Glyphosate	ND	6.00 ug/L	
Aldicarb	ND	0.50 ug/L	
Aldicarb sulfoxide	ND	0.50 ug/L	
Aldicarb Sulfone	ND	0.80 ug/L	
Carbaryl	ND	0.50 ug/L	
Carbofuran	ND	0.90 ug/L	
3-Hydroxycarbpfuran	ND	0.50 ug/L	
Methomyl	ND	0.50 ug/L	
Oxamyl	ND	2.00 ug/L	
Sample QC			
Surrogate	Recovery	QC limits	
4-Bromo-3,5-dimethylphenyl-N-methylcarbamate	1.04	70%-130%	
Endothall	ND	9.00 ug/L	
Diquat	ND	0.40 ug/L	
Aroclor 1016	ND	0.08 ug/L	
Aroclor 1221	ND	20.00 ug/L	
Aroclor 1232	ND	0.50 ug/L	
Aroclor 1242	ND	0.30 ug/L	
Aroclor 1248	ND	0.10 ug/L	
Aroclor 1254	ND	0.10 ug/L	
Aroclor 1260	ND	0.20 ug/L	
Chlordane	ND	0.20 ug/L	
Toxaphene	ND	0.02 ug/L	
Dieldrin	ND	0.02 ug/L	

Endrine	ND	0.01 ug/L
2,4,5-TP (Silvex)	ND	0.20 ug/L
2,4-D	ND	0.10 ug/L
Dalapon	ND	1.00 ug/L
Dicamba	ND	0.10 ug/L
Dinoseb	ND	0.20 ug/L
Pentachlorophenol	ND	0.04 ug/L
Picloram	ND	0.10 ug/L

Sample QC

Surrogate	Recovery	QC Limits
DCAA	0.96	70%-130%

(Note 1): The MCL for Total Trihalomethanes (TTHM) is 100.0 ug/l)

CONTAMINANT

DATE

MDL STANDARD

DETECTED

INFORMATION

VIOLA

TABLE 3

**HALOACETIC ACIDS(HAA5's)**

HAA5's in our drinking water are a byproduct of the chlorination which is necessary to prevent coliform

Monochloro Acetic Acid	7/9/2014	1.0 ug/l	ND
Dichloro Acetic Acid	7/9/2014	0.5 ug/l	1.0 ug/l
Trichloro Acetic Acid	7/9/2014	0.5 ug/l	ND
Monobromo Acetic Acid	7/9/2014	0.5 ug/l	ND
Dibromo Acetic Acid	7/9/2014	0.5 ug/l	1.6 ug/l
Sample QC			
Surrogate		Recovery QC Limits	
2,3-Dibromopropionic Acid		74% 70%-130%	

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*Trimethyl Benzene, Tert-Butyl Benzene, 1,2,4-Trimethyl Benzene, Sec-Butyl Benzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, p-Isopropyltoluene, 1,2-Dichlorobenzene, n-Butyl Benzene, 1,2,4-Trichlorobenzene, Naphthalene, Hexachlorobutadiene, 1,2,3-Trichlorobenzene, 1,2 Dibromo-3-chloropropane, Methyl Ethyl Ketone, Tetrachloroethene, Total Xylenes, and Methyl tert-Butyl Ether (MTBE),*

*The following Haloacetic Acids were detected: Dichloroacetic Acid, Dibromoacetic Acid. In 2011, we also monitored for the following Synthetic Organic Compounds (SOC's) which were all ND (non-detectable):*

*1,2-Dibromoethane (EDB), Glyphosate, Aldicarb, Aldicarb sulfoxide, Aldicarb sulfone, Carbaryl, Carbofuran, 3-Hydroxycarbofuran, Methomyl, Oxamyl(Vydate), Endothall, Diquat, Alachlor, Aldrin, Atrazine, Benzo(a)pyrene, Butachlor, Di(2-ethylhexyl)adipate, Di(2-ethylhexyl)phthalate, Dieldrin, Endrin, Heptachlor, Heptachlor epoxide, Hexachlorobenzene, Hexachlorocyclopentadiene, Lindane (gamma-BHC), Metolachlor(Dual), Methoxychlor, Metribuzin(Sencor), Propachlor, Simazine, Aroclor 1016, Aroclor 1221, Aroclor 1232, Aroclor 1242, Aroclor 1248, Aroclor 1254, Aroclor 1260, Chlordane, Toxaphene, 2,4,5-TP(Silvex), 2,4-D, Dalapon, Dicamba, Dinoseb, Pentachlorophenol, Picloram.*

**WE ARE PLEASED TO REPORT THAT VAIL'S GROVE DRINKING WATER CONTINUES TO MEET ALL FEDERAL AND STATE REQUIREMENTS. Last year your tap water met all State drinking water health standards. In 2014, our system did not violate a maximum contaminant level (MCL).**

#### **Water Conservation**

Because of the recent necessity for water conservation, the Board of Directors has approved a rule applicable when the state or either county has imposed a water emergency, water watch, or any other drought condition calling for water conservation. This rule mandates that Vail's Grove residents:

- Will not wash cars
- Will not water their landscape with hoses or sprinklers
- Will not wash down driveways or roadways

**Failure to comply with the above will result in an Improper Use Fee by the Board for each occurrence.**

We all recognize the need to conserve water during times of drought. It is just as important to use water wisely when the supply is plentiful. Some common sense measures to conserve water include:

- Shut faucets off tightly. A small drip can waste 25 gallons per day.
- Check all toilets for leakage. A bad toilet leak can waste as much as 200 gallons a day.
- Don't run the faucet to get a cold drink. Place a container of water in the refrigerator.
- Don't run the faucet while shaving or brushing your teeth.

- Take shorter showers and half-full baths. Install low flow showerheads and faucets.
- Run washing machine and dishwasher only when full. Don't wash dishes under a running faucet.
- Don't cut the lawn too short, longer grass saves water.
- Mulch around trees and plants to help retain moisture.

### **Health Considerations**

There are some people who may be more vulnerable to disease causing microorganisms or pathogens in drinking water than the general population. Immune-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 their drinking water from their health care providers. EPA/CDC guidelines on the proper means to lessen the risk of infection by Cryptosporidium Giardia and other microbial pathogens are available from the Safe Drinking Water Hotline (800) 426-4791.

### **About Lead**

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead in 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. Don't use hot water for drinking purposes. Additional information is available from Safe Drinking Water Hotline (800) 426-4791.

### **Definitions:**

**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 Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLG as possible.

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

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

**Variations and Exemptions:** State permission not to meet an MCL or treatment technique under certain conditions. In 2001 Vail's Grove operated under a waiver from sampling synthetic organic compounds (SOC's). In 2002, SOC's were tested. SOC testing was done again in the year 2005 and 2011. In 2008, Vail's Grove operated under a waiver from sampling synthetic organic compounds (SOC's).



**Milligrams per liter (mg/l):** Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm).

**Micrograms per liter (ug/l):** Corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb).

**Nanograms per liter (ng/l):** Corresponds to one part of liquid in one trillion parts of liquid (parts per trillion – ppt).

**Picocuries per liter (pCi/L):** Picocuries per liter is a measure of the radioactivity in water.

**90<sup>th</sup> Percentile Value:** The values reported for lead and copper represent the 90<sup>th</sup> percentile. A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal to or below it. The 90<sup>th</sup> percentile is equal to or greater than 90% of the lead and copper values detected at your water system.

**NDL:** No determined limit.

**n/d:** Not detected in routine laboratory analysis.

**N/A:** Not applicable.

**LT or <:** Less than **GT or >:** Greater than

**BDL:** Below detectable limits.

cc: Commissioner, New York State Department of Health  
Attn: Director, Bureau of Public Water Supply Protection  
Flanigan Square, 547 River Street, Room 400  
Troy, New York 12180-2216

Ms. Anne Bittner  
Putnam County Health Department  
One Geneva Road  
Brewster, New York 10509

Northeast Laboratories of Danbury  
129 Mill Street  
Berlin, CT 06037-9990

Purgeable Organic Compounds

TABLE 2  
POC's Detected in 2014

Contaminant	Date	Unit	MCLG or Standard	Detected Level	Information	Violate
Benzene	7/9/2014	ug/L	0.5	ND		
Bromobenzene	7/9/2014	ug/L	0.5	ND		
Bromochloromethane	7/9/2014	ug/L	0.5	ND		
Bromodichloromethane	7/9/2014	ug/L	0.5	1.8 ug/L		
Bromoform	7/9/2014	ug/L	0.5	1.5 ug/L		NO
Bromomethane	7/9/2014	ug/L	0.5	ND		
n-Butylbenzene	7/9/2014	ug/L	0.5	ND		
sec-Butylbenzene	7/9/2014	ug/L	0.5	ND		
tert-Butylbenzene	7/9/2014	ug/L	0.5	ND		
Carbontetrachloride	7/9/2014	ug/L	0.5	ND		
Chlorobenzene	7/9/2014	ug/L	0.5	ND		
Chlorethane	7/9/2014	ug/L	0.5	ND		
Chloroform	7/9/2014	ug/L	0.5	1.2 ug/L		
Chloromethane	7/9/2014	ug/L	0.5	ND		NO
2-Chlorotoluene	7/9/2014	ug/L	0.5	0.53 ug/L		
4-Chlorotoluene	7/9/2014	ug/L	0.5	ND		
1,2-dibromo-3-chloropropane (DBCP)	7/9/2014	ug/L	0.5	ND		
Dibromochloromethane	7/9/2014	ug/L	0.5	2.9 ug/L		
1,2-dibromoethane (EDB)	7/9/2014	ug/L	0.5	ND		
Dibromomethane	7/9/2014	ug/L	0.5	ND		
1,2-dichlorobenzene	7/9/2014	ug/L	0.5	ND		
1,3-dichlorobenzene	7/9/2014	ug/L	0.5	ND		
1,4-dichlorobenzene	7/9/2014	ug/L	0.5	ND		
Dichlorodifluoromethane	7/9/2014	ug/L	0.5	ND		
1,1-Dichloroethane	7/9/2014	ug/L	0.5	ND		
					The source is a by-product of drinking water TTHMs are formed when source water contains large amounts of organic matter. Some people who drink water containing TTHMs in excess of the MCL over many years may experience problems with their liver, kidneys, central nervous systems, and may have an increased risk of getting cancer.	
					Same as above	NO

1,2-Dichloroethane	7/9/2014 ug/L	0.5 ND	
1,1-Dichloroethene	7/9/2014 ug/L	0.5 ND	
cis-1,2-dichloroethene	7/9/2014 ug/L	0.5 ND	
trans-1,2-dichloroethene	7/9/2014 ug/L	0.5 ND	NO
1,2-Dichloropropane	7/9/2014 ug/L	0.5 ND	
1,3-Dichloropropane	7/9/2014 ug/L	0.5 ND	
2,2-Dichloropropane	7/9/2014 ug/L	0.5 ND	
1,1-Dichloropropene	7/9/2014 ug/L	0.5 ND	
cis-1,3-dichloropropene	7/9/2014 ug/L	0.5 ND	
trans-1,3-dichloropropene	7/9/2014 ug/L	0.5 ND	
Ethylbenzene	7/9/2014 ug/L	0.5 ND	
hexachlorobutadiene	7/9/2014 ug/L	0.5 ND	
Isopropylbenzene	7/9/2014 ug/L	0.5 ND	
4-Isopropyltoluene	7/9/2014 ug/L	0.5 ND	
Methyl tert-butyl ether, MTBE	7/9/2014 ug/L	1 ND	
Methylene Chloride	7/9/2014 ug/L	0.5 ND	
Naphthalene	7/9/2014 ug/L	0.5 ND	
n-Propylbenzene	7/9/2014 ug/L	0.5 ND	
Styrene	7/9/2014 ug/L	0.5 ND	
1,2,3-Trichloropropane	7/9/2014 ug/L	0.5 ND	
1,2,3-Trimethylbenzene	7/9/2014 ug/L	0.5 ND	
1,1,1,2-Tetrachloroethane	7/9/2014 ug/L	0.5 ND	
1,1,2,2-Tetrachloroethane	7/9/2014 ug/L	0.5 ND	
Tetrachloroethane (PCE)	7/9/2014 ug/L	0.5 ND	
Toluene	7/9/2014 ug/L	0.5 ND	
1,2,3-Trichlorobenzene	7/9/2014 ug/L	0.5 ND	
1,2,4-Trichlorobenzene	7/9/2014 ug/L	0.5 ND	
1,1,1-Trichloroethane	7/9/2014 ug/L	0.5 ND	
1,1,2-Trichloroethane	7/9/2014 ug/L	0.5 ND	
Trichloroethene (TCE)	7/9/2014 ug/L	0.5 ND	
Trichlorofluoromethane	7/9/2014 ug/L	0.5 ND	
1,2,4-trimethylbenzene	7/9/2014 ug/L	0.5 ND	
1,3,5-Trimethylbenzene	7/9/2014 ug/L	0.5 ND	
Vinyl Chloride	7/9/2014 ug/L	0.5 ND	

same as above

See Note 1

Xylenes (total)

7/9/2014 ug/L

0.5 ND

Sample QC

Surrogate	Recovery	QC Limits
Bromofluorobenzene	104%	70%-130%
1,2-Dichlorobenzene-d4	102%	70%-130%

(Note 1): The MCL for Total Trihalomethanes (TTHM) is 100.0 ug/l)

QA/QC surrogates\*\*\*  
on

7/15/2013 Small percentages of these POC's were also detected (i.e 1,2 dichlorobenzene and bromofluorobenzene).

No MCL exists for these 2 POC compounds.

SYNTHETIC ORGANIC COMPOUNDS  
TESTED FOR YEAR 2014

Contaminant  
Result  
DL  
Units

1,2-Dibromo-3-chloropropane (DBCP)  
1,2-dibromoethane (EDB)  
Glycophosate  
Aldicarb  
Aldicarb sulfoxide  
Aldicarb Sulfone  
Carbaryl  
Carbofuran  
3-Hydroxycarbpfuran  
Methomyl  
Oxamyl  
Sample QC

ND  
ND  
ND  
ND  
ND  
ND  
ND  
ND  
ND  
ND  
ND  
ND  
ND

0.01 ug/L  
0.01 ug/L  
6.00 ug/L  
0.50 ug/L  
0.50 ug/L  
0.80 ug/L  
0.50 ug/L  
0.90 ug/L  
0.50 ug/L  
0.50 ug/L  
2.00 ug/L

Surrogate

Recovery

QC limits

4-Bromo-3,5-dimethylphenyl-N-methylcarbamate

1.04

70%-130%

Endothall

ND

9.00 ug/L

Diquat

ND

0.40 ug/L

Aroclor 1016

ND

0.08 ug/L

Aroclor 1221

ND

20.00 ug/L

Aroclor 1232

ND

0.50 ug/L

Aroclor 1242

ND

0.30 ug/L

Aroclor 1248

ND

0.10 ug/L

Aroclor 1254

ND

0.10 ug/L

Aroclor 1260

ND

0.20 ug/L

Chlordane

ND

0.20 ug/L

Toxaphene

ND

0.02 ug/L

Dieldrin

ND

0.02 ug/L

	ND	0.01 ug/L	
Endrine	ND		
2,4,5-TP (Silvex)	ND	0.20 ug/L	
2,4-D	ND	0.10 ug/L	
Dalapon	ND	1.00 ug/L	
Dicamba	ND	0.10 ug/L	
Dinoseb	ND	0.20 ug/L	
Pentachlorophenol	ND	0.04 ug/L	
Picloram	ND	0.10 ug/L	
Sample QC			
Surrogate		Recovery	QC Limits
DCAA		0.96	70%-130%

(Note 1): The MCL for Total Trihalomethanes (TTHM) is 100.0 ug/l

CONTAMINANT

MDL STANDARD

DETECTED

INFORMATION

VIOLA

DATE

TABLE 3

**HALOACETIC ACIDS(HAA5's)**

HAA5's in our drinking water are a byproduct of the chlorination which is necessary to prevent coliform

Monochloro Acetic Acid	7/9/2014	1.0 ug/l	ND
Dichloro Acetic Acid	7/9/2014	0.5 ug/l	1.0 ug/l
Trichloro Acetic Acid	7/9/2014	0.5 ug/l	ND
Monobromo Acetic Acid	7/9/2014	0.5 ug/l	ND
Dibromo Acetic Acid	7/9/2014	0.5 ug/l	1.6 ug/l
Sample QC			
Surrogate		Recovery QC Limits	
2,3-Dibromopropionic Acid		74% 70%-130%	