

Vail's Grove Cooperative, Inc.

Five Vail Boulevard • Peach Lake
Brewster, New York 10509
(914) 669-5100 • Fax: (914) 669-5064
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May 31, 2018

Ms. Anne Bittner, M.S.P.H.
Sr. Public Health Sanitarian
Putnam County Health Department
One Geneva Road
Brewster, New York 10509

RE: Vail's Grove Cooperative
Federal Public Water Supply Identification No. 3902654
Annual Water Quality Report for Year 2017

Dear Ms. Bittner:

Enclosed is a copy of Vail's Grove Cooperative's Annual (2017) Water Quality Report.

As always, if you have any questions, feel free to call this office.

Sincerely,
For The Public Health Committee of the Board of Directors



Cindy R. Battreall
Assistant Secretary
Board of Directors

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

Northeast Laboratories Incorporated
129 Mill Street
Berlin, CT. 06037-9990

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 the 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. It 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 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 2017. 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 Lakeshore 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 of pressure per square inch. NY State certifies operators who serve on our Public Health Committee who test chlorine levels daily. During 2017 the wells produced and delivered 9,550,000 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.

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, New York 10509 at (845) 803-1370. Kathleen Heuschkel, Vail's Grove "Principal Operator in charge" will also answer any questions on drinking water quality. She may be reached at (845) 612-1851. Patrick 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 3rd Thursday of each month.

In light of recent terrorist activities, in the event of suspected vandalism or sabotage at the pump house; contact Kathleen Heuschkel at (845) 612-1851 or the State Police at (845) 279-6161 or the Putnam County Sheriff's office at (845) 225-4300.

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. On the New York State schedule, our water is tested for inorganic contaminants, nitrate, nitrite, 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 coliforms is 0 per 100 ml.

During the year 2017, there were no positive coliforms bacteria detected. We also monitored for the following: Purgeable Organic Compounds; Nitrates; nitrites; Trihalomethanes; Tetrahalomethanes and disinfectant by-products in drinking water which were all **well below allowable limits**.

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 2017, 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 will waste as much as **200 gallons a day**. Don't run the faucet to get a cold drink. Please 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 maybe more vulnerable to disease causing micro-organisms or pathogens in drinking water than the general population. Immune compromised persons such as persons with cancer undergoing chemotherapy, persons that have undergone organ transplants, people with HIV/AIDS or 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 *Cyptosporidium* *Giarda* 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 maybe higher than other homes in the community as a result of materials used 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 Contaminate Level Goal (MCLG):The level of contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

Maximum Contaminate Level(MCL):The highest level of a contaminate that is allowed in drinking water. MCL's are set as close to the MCLG as possible.

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

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

Variances 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 2005 and 2011. In 2008, Vail's Grove operated under a waiver from sampling SOC's)

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

90th Percentile Value: The values reported for lead and copper represent the 90th 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 90th percentile is equal to or greater than 90% lead and copper values detected at your water system.

NDL: No determined limit

n/d: Not determined 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
Flannigan 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 2017

Contaminant	Date	Unit	MCLG or Standard	Detected level	Information	Violated
Benzene	6/22/2017	ug/L	0.5	ND	<p>The source is a by-product of drinking water</p> <p>THHMs are formed when source water contains large amounts of organic matter. Some people who drink water containing THHMs experience problems with their liver, kidneys, central nervous systems, and may have an increased risk of getting cancer.</p>	NO
Bromobenzene	6/22/2017	ug/L	0.5	ND		
Bromochloromethane	6/22/2017	ug/L	0.5	ND		
Bromodichloromethane	6/22/2017	ug/L	0.5	2.1 ug/L		
Bromoform	6/22/2017	ug/L	0.5	1.8 ug/L		
Bromomethane	6/22/2017	ug/L	0.5	ND		
n-Butylbenzene	6/22/2017	ug/L	0.5	ND		
sec-Butylbenzene	6/22/2017	ug/L	0.5	ND		
tert-Butylbenzene	6/22/2017	ug/L	0.5	ND		
Carbontetrachloride	6/22/2017	ug/L	0.5	ND		
Chlorobenzene	6/22/2017	ug/L	0.5	ND		
Chloroethane	6/22/2017	ug/L	0.5	ND		
Chloroform	6/22/2017	ug/L	0.5	73 ug/L		
Chloromethane	6/22/2017	ug/L	0.5	ND		
2-Chlorotoluene	6/22/2017	ug/L	0.5	ND		
4-Chlorotoluene	6/22/2017	ug/L	0.5	ND		
Dibromochloromethane	6/22/2017	ug/L	0.5	3.5 ug/L		
1,2-dibromoethane (EDB)	6/22/2017	ug/L	0.5	not tested		
Dibromomethane	6/22/2017	ug/L	0.5	ND		
1,2-dichlorobenzene	6/22/2017	ug/L	0.5	ND		
1,3-dichlorobenzene	6/22/2017	ug/L	0.5	ND		
1,4-dichlorobenzene	6/22/2017	ug/L	0.5	ND		
Dichlorodifluoromethane	6/22/2017	ug/L	0.5	ND		
1,1-Dichloroethane	6/22/2017	ug/L	0.5	ND		
1,2-Dichloroethane	6/22/2017	ug/L	0.5	ND		

1,1-Dichloroethene	6/22/2017	ug/L	0.5	ND
cis-1,2-dichloroethene	6/22/2017	ug/L	0.5	ND
trans-1,2-dichloroethene	6/22/2017	ug/L	0.5	ND
1,2-Dichloropropane	6/22/2017	ug/L	0.5	ND
1,3-Dichloropropane	6/22/2017	ug/L	0.5	ND
2,2-Dichloropropane	6/22/2017	ug/L	0.5	ND
1,1-Dichloropropene	6/22/2017	ug/L	0.5	ND
cis-1,3-dichloropropene	6/22/2017	ug/L	0.5	ND
trans-1,3-dichloropropene	6/22/2017	ug/L	0.5	ND
Ethylbenzene	6/22/2017	ug/L	0.5	ND
hexachlorobutadiene	6/22/2017	ug/L	0.5	ND
Isopropylbenzene	6/22/2017	ug/L	0.5	ND
4-Isopropyltoluene	6/22/2017	ug/L	0.5	ND
Methyl tert-butyl ether, MTBE	6/22/2017	ug/L	10	0.5
Methylene Chloride	6/22/2017	ug/L	0.5	ND
Napthalene	6/22/2017	ug/L	0.5	ND
n-Propylbenzene	6/22/2017	ug/L	0.5	ND
Styrene	6/22/2017	ug/L	0.5	ND
1,2,3-Trichloropropane	6/22/2017	ug/L	0.5	ND
1,2,3-Trimethylbenzene	6/22/2017	ug/L	0.5	ND
1,1,1,2-Tetrachloroethane	6/22/2017	ug/L	0.5	ND
1,1,2,2-Tetrachloroethane	6/22/2017	ug/L	0.5	ND
Tetrachloroethane (PCE)	6/22/2017	ug/L	0.5	ND
Toluene	6/22/2017	ug/L	0.5	ND
Total Trihalomethanes	6/22/2017		80	8.03
1,2,3-Trichlorobenzene	6/22/2017	ug/L	0.5	ND
1,2,4-Trichlorobenzene	6/22/2017	ug/L	0.5	ND
1,1,1-Trichloroethane	6/22/2017	ug/L	0.5	ND
1,1,2-Trichloroethane	6/22/2017	ug/L	0.5	ND
Trichloroethene (TCE)	6/22/2017	ug/L	0.5	ND
Trichlorofluoromethane	6/22/2017	ug/L	0.5	ND
1,2,4-trimethylbenzene	6/22/2017	ug/L	0.5	ND
1,3,5-Trimethylbenzene	6/22/2017	ug/L	0.5	ND
Vinyl Chloride	6/22/2017	ug/L	0.5	ND

Same as above

NO

See Note 1

NO

Xylenes (total)

6/22/2017 ug/L

1000 ND

Sample QC

Surrogate	Recovery	QC Limits
Bromofluorobenzene	95%	70%-130%
1,2-Dichlorobenzene-d4	99%	70%-130%

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Trihalomethanes		RESULT	UNITS	DATE
2017				
Bromodichloromethane	2	0.5 ug/L	6/20/2017	
Bromoform	1.8	0.5 ug/L	6/20/2017	
Chloroform	0.73	0.5 ug/L	6/20/2017	
Dibromochloromethane	3.5	0.5 ug/L	6/20/2017	
Total Trihalomethanes(TTHM)	8.03	0.5 ug/L	6/20/2017	
QA/QC SURROGATES				
%1,2-DICHLOROBENZENE	95	70-130	%	
%BROMOFLUOROBENZENE	99	70-130	%	

AWQR 2017

Nitrites/Nitrates

DATE	MCL STANDARD	DETECTED	INFORMATION	VISITATION
#####	1	<0.004		No
#####	10	2.21		No

Nitrite as Nitrogen

Nitrate as Nitrogen

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