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VILLAGE OF
CROTON
~ON~
HUDSON

ANNUAL WATER
QUALITY REPORT

2004

PWS ID#: NY5903425

Continuing Our Commitment

Once again we proudly present our annual water quality report. This edition covers all testing required to be reported through December 2004. We are pleased to tell you that our compliance with all state and federal drinking water laws remains exemplary. As in the past, we are committed to delivering the best quality drinking water. To that end, we remain vigilant in meeting the challenges of source water protection, water conservation, and community education while continuing to serve the needs of all of our water users.

For more information about this report, or for any questions relating to your drinking water, please call Thomas G. Brann, Water Foreman, at (914) 271-3775.



Important Health Information

Although our drinking water met or exceeded state and federal regulations, some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or online at www.epa.gov/safewater/.

Community Participation

You are invited to participate in our public forum and voice your concerns about your drinking water. The Village Board of Trustees meets on the first and third Monday of each month beginning at 8:00 p.m. at the Stanley H. Kellerhouse Municipal Building, 1 Van Wyck Street, Croton-on-Hudson, NY 10520.

OUR VILLAGE WEB SITE IS WWW.CROTONONHUDSON-NY.GOV

Facts and Figures

The water system supplies approximately 7,600 people, primarily in residences but also in businesses and industries, with 2,500 service connections. During 2004, the total amount of water withdrawn from the aquifer was approximately 382 million gallons. The daily average volume of water treated and pumped into the distribution system was 1.04 million gallons per day. Approximately 90% of the total was billed directly to consumers. The balance, or unaccounted for water, went to firefighting, hydrant use, leaks in the distribution system, and unauthorized use.

The 2004 billing rate was \$3.54 per 100 cubic feet (748) gallons. The minimum biannual bill was \$41.86 (from 0 to 900 cubic feet).

Working Hard For You

We will be implementing the planned pipe replacement for the Harmon area of the Village in 2005.

We are approximately 65% complete in the process of installing radio meter readers for every residential household in the Village. This state of the art reading system will simplify meter reading and billing. A radio transmitter is installed on the water meter. The portable radio receiver picks up the individual meter reading, stores it, and, when the reading is complete, downloads the data to the Village's billing system software.

In 2004, the Village acquired a critical piece of watershed property adjacent to the Village's well field. This acquisition will help the Village ensure that the wellhead protection area will remain in its current, largely undisturbed condition and not be developed in a way that could jeopardize the Village well field. The property may also be the site of a future well if and when one is acquired.



Where Does My Water Come From?

The Village of Croton-on-Hudson's main water source is a well system located approximately 4,000 feet downstream from the New Croton Dam and spillway. Water is pumped directly from the well field into the distribution system, which consists of a network of water mains, four storage tanks (reservoirs), pumps, booster pump stations, and other water-related infrastructure. The village's total storage capacity is 2.3 million gallons. Most residents receive water from the municipal water system; the remainder use private wells, which are not covered by the report. In 2004, there were no restrictions placed on our water source.

The NYS DOH has completed a Source Water Assessment for this system, based on available information. Possible and actual threats to this drinking water source were evaluated. The state Source Water Assessment includes a susceptibility rating based on the risk posed by each potential source of contamination and how easily contaminants can move through the subsurface to the wells. The susceptibility rating is an estimate of the potential for contamination of the source water; it does not mean that the water delivered to consumers is, or will become, contaminated. See section

"Sampling Results" for a list of the contaminants that have been detected, if any. The Source Water Assessments provide resource managers with additional information for protecting source waters into the future.

As mentioned before, our water is derived from three drilled wells. The Source Water Assessment has rated these wells as having a medium-high susceptibility to microbials. These ratings are due primarily to the fact that the wells are high yielding wells, drawing from a possible unconfined aquifer, which is a shallow aquifer that occurs immediately below the ground surface and has no overlying protective layer for protection from potential sources of contamination. While the Source Water Assessment rates our well(s) as being susceptible to microbials, please note that our water is disinfected to ensure that the finished water delivered into your home meets New York State's drinking water standards for microbial contamination.

A copy of the Source Water Assessment can be obtained for a fee by contacting the Village Engineer's Department at (914) 271-4783.

Substances That Might Be in Drinking Water

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 can pick up substances resulting from the presence of animals or from human activities. Contaminants that may be present in source water include microbiological 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 of New York and the U.S. Environmental Protection Agency (U.S. EPA) establish limits for the amounts of certain contaminants in water provided by public water systems. The New York State Health Department and the Food and Drug Administration (FDA) also establish limits for contaminants in bottled water for the protection of public health.

It should be noted that all drinking water, including bottled drinking water, may be reasonably 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 U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791 or the Westchester County Department of Health at (914) 813-5000.



Non-detected Contaminants

As required by state regulations, we routinely test our drinking water for numerous contaminants.

The following substances were tested for and were NOT detected: Alachlor, Aldicarb, Aldicarb Sulfoxide, Aldicarb Sulfone, Arsenic, Atrazine, Carbofuran, Chlordane, Dibromochloropropane, 2,4-D, Endrin, Ethylene Dibromide, Heptachlor, Heptachlor Epoxide, Lindane, Methoxychlor, PCB's, Pentachlorophenol, Toxaphene, 2,4,5-TP (Silvex), Aldrin, Benzo(a)pyrene, Butachlor, Carbaryl, Dalapon, Di-(2-ethylhexyl)adipate, Di-(2-ethylhexyl)phthalate, Dicamba, Dieldrin, Dinoseb, Endothall, Glyphosate, Hexachlorobenzene, Hexachlorocyclopentadiene, 3-Hydroxycarbofuran, Methomyl, Metolachlor, Metribuzin, Oxamyl(vydate), Picloram, Propachlor, Simazine, 2,3,7,8-TCDD (Dioxin), Cyanide, Cadmium, Chromium, Mercury, Selenium, Antimony, Beryllium, Thallium, Organohalide, Toxaphene, Dalapon, Dicamba, Dinoseb, Pichloram, Microextractables, Benzene, Bromobenzene, Bromomethane, n-Butylbenzene, Bromochloromethane, sec-Butylbenzene, tert-Butylbenzene, Carbon Tetrachloride, Chlorobenzene, Chloroethane, Chloromethane, 2-Chlorotoluene, 4-Chlorotoluene, Dibromomethane, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Dichlorodifluoromethane, 1,1-Dichloroethane, 1,2-Dichloroethane, cis-1,2-Dichloroethene, 1,2-Dichloropropane, 2,2-Dichloropropane, 1,1-Dichloropropene, cis-1,3- Dichloropropene, trans-1,3- Dichloropropene, hexachlorobutadiene, isopropylbenzene, p-isopropyltoluene, methylene chloride, n-propylbenzene, styrene, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, tetrachloroethene, toluene, 1,2,3-trichlorobenzene, 1,2,4-trichlorobenzene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, trichloroethene, trichlorofluoromethane, 1,2,3-trichloropropane, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, p/m-xylene, o-xylene, vinyl chloride, methyl tert butyl ether, Iron, Silver, trans-1,2-Dichloroethene, nitrite, zinc, monochloroacetic acid, monobromoacetic acid, dibromoacetic acid, nitrite, zinc, fluoride, nickel, odor.

How Is My Water Treated?

The Village's well field consists of three deep wells that pump into the distribution system and feeds four storage tanks located throughout the Village. Chlorine is added at the well field for disinfection purposes. We carefully monitor the amount of chlorine, adding only the quantity necessary to protect the safety of your water without compromising taste or other water-quality parameters.

Water Conservation Tips

Water conservation measures are an important first step in protecting our water supply. Such measures not only save the supply of our source water, but also can save you money by reducing your water bill. Here are a few suggestions:

Conservation measures you can use inside your home:

- Fix leaking faucets, pipes, toilets, etc.
- Replace old fixtures; install water-saving devices in faucets, toilets and appliances.
- Wash only full loads of laundry.
- Do not use the toilet for trash disposal.
- Take shorter showers.
- Do not let the water run while shaving or brushing teeth.
- Soak dishes before washing.
- Run the dishwasher only when full.

You can conserve outdoors as well:

- Water the lawn and garden in the early morning or evening.
- Use mulch around plants and shrubs.
- Repair leaks in faucets and hoses.
- Use water-saving nozzles.
- Use water from a bucket to wash your car, and save the hose for rinsing.

Information on other ways that you can help conserve water can be found at www.epa.gov/safewater/public_outreach/index.html.

Table Definitions

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

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.

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.

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.

MRDLG (Maximum Residual Disinfectant 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 contamination.

NA: Not applicable

ND: Not detected

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

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

Sampling Results

We are pleased to report that during the past year, the water delivered to your home or business complied with, or exceeded, all applicable state and federal drinking water operating, monitoring, and reporting requirements. We have compiled the table below to show what substances were detected in our drinking water during 2004. Although all of the substances listed are under the Maximum Contaminant Level (MCL) or other standards set by the U.S. EPA or NYS Department of Health, we feel it is important that you know exactly what was detected and how much of the substance was present in the water. The state allows us to test for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, through representative, are more than one year old.

REGULATED SUBSTANCES

SUBSTANCE (UNITS)	DATE SAMPLED	MCL (MRDL)	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Barium (ppm)	08/03/04	2	2	0.034	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chloride (ppm)	08/03/04	250	NA	72	NA	No	Naturally occurring or indicative of road salt contamination
Chlorine residual (ppm)	01/01/04–12/31/04	(4)	NA	0.6	0.2–0.6	No	Added for disinfection purposes
Ethylbenzene (ppb)	09/29/04	5	NA	2.5	NA	No	Discharge from petroleum refineries; Leaks from gasoline tanks
Gross Alpha (pCi/L)	06/02/04	15	15	0.8	NA	No	Erosion of natural deposits
Gross Beta ¹ (pCi/L)	06/02/04	50	50	3.4	NA	No	Erosion of natural deposits
Haloacetic Acids (HAAs) (ppb)	08/28/03	60	NA	3.7	NA	No	By-product of drinking water disinfection needed to kill harmful organisms
Manganese (ppb)	08/03/04	300	NA	13	NA	No	Naturally occurring; Indicative of landfill contamination
Nitrate (ppm)	04/07/04	10	10	0.6	NA	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Radium 226 (pCi/L)	06/02/04	5	0	0.3	NA	No	Erosion of natural deposits
Radium 228 (pCi/L)	06/02/04	5	0	0.6	NA	No	Erosion of natural deposits
Sodium ² (ppm)	08/03/04	—	NA	33	NA	No	Naturally occurring; Road salt; Water softeners; Animal waste
Sulfate (ppm)	08/03/04	250	NA	41	NA	No	Naturally occurring
TTHMs [Total Trihalomethanes] (ppb)	08/28/03	80	NA	22.1	NA	No	By-product of drinking water disinfection

Tap water samples were collected for lead and copper analyses from 40 homes throughout the service area

SUBSTANCE (UNITS)	DATE SAMPLED	ACTION LEVEL	MCLG	AMOUNT DETECTED (90TH% TILE) ⁴	RANGE (LOW-HIGH)	HOMES ABOVE ACTION LEVEL	VIOLATION	TYPICAL SOURCE
Copper (ppm)	06/04/03, 09/25/03	1.3	1.3	0.28	0.026–0.416	0	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead ³ (ppb)	06/04/03, 09/25/03	15	0	13	1–31	4	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives

¹ The state considers 50 pCi/L to be the level of concern for beta particles.

² It should be noted that our water contained more than 20 ppm of sodium and should not be used for drinking by people on severely restricted sodium diets.

³ 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 in your home's plumbing. If you are concerned about lead levels in your home's tap water and to minimize your exposure, you can flush your tap water for 30 seconds to 2 minutes before using tap water. You may also choose to have your own water tested at your own expense. Additional information is available from the Safe Drinking Water Hotline at (800) 426-4791.

⁴ The level presented represents the 90th percentile of the 40 sites tested. A percentile is a value on a scale of 100 that indicates the percent of the distribution that is equal to or below it. The 90th percentile is equal to or greater than 90% of the lead and copper values detected.