BARTON HILLS VILLAGE
WATER CONSUMER CONFIDENCE REPORT for 2007

In 1996, Congress amended the Safe Drinking Water Act to require that all community water systems deliver to their customers a brief annual water quality report. This Consumer Confidence Report includes information on where water comes from, village compliance with federal and state testing requirements and on-going efforts to ensure that Barton Hills Village (BHV) water meets or exceeds quality standards.

BHV water comes from two primary wells, with two back-up wells, to service the village's 140 homes. The wells draw from aquifers extending to the north and northeast of BHV. A Wellhead Protection Plan was approved by the State of Michigan in April 1997. One of the first in the state, this plan identifies BHV water sources, possible risks of contamination and strategies to ensure the future safety of the water supply. The complete report is available for public inspection from the BHV Clerk's office (734-665-5574 or bhvclerk@comcast.net).

The State of Michigan performed an assessment of BHV source water in 2003 to determine the susceptibility, or relative potential, of contamination. The susceptibility rating is on a six-tiered scale from "very-low" to "high" based primarily on geologic sensitivity, water chemistry and contaminant sources. All four BHV wells indicate that the groundwater is obtained from a confined aquifer. The geologic sensitivity for a confined aquifer is characterized as "low." For more information about the Source Water Assessment report, contact the BHV Clerk's Office (734-665-5574 or bhvclerk@comcast.net)

Review of the contaminant source inventory developed for the BHV Wellhead Protection Program and last revised in November 1996 indicates there are several known contaminant sources of concern within the Wellhead Protection Area. These contaminant sites include agricultural areas where fertilizers and pesticides are used, an abandoned gas station, an industrial waste generator and a permitted sanitary sewage/wastewater facility, as well as residential septic systems. In addition to the on-going steps being taken as part of the Wellhead Protection Plan, Barton Hills Village adopted Ordinance #21 in 2001 which requires inspection of BHV residential septic systems on a regular basis.

The sources of drinking water for most communities (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water before it is treated include:

Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses.

Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

In order to ensure that tap water is safe to drink, the Environmental Protection Agency (EPA) prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health. Barton Hills Village water is treated according to EPA regulations. Monthly samples are tested by a certified laboratory to ensure that any contamination is dealt with immediately. In addition, periodic tests are performed for over 65 possible contaminants.

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 EPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

The following table lists all the drinking water contaminants that were detected in BHV water during the 2007 calendar year (January 1-December 31). The state requires monitoring for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

Terms and abbreviations used in the table:

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 MCLGs as feasible using the best available treatment technology.

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

Maximum Residual Disinfection Level Goal (MRDLG): the level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Maximum Residual Disinfection Level (MRDL): the highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

n/a: not applicable *nd*: not detectable at testing limit *ppb*: parts per billion or micrograms per liter

ppm: parts per million or milligrams per liter

pCi/L: picocuries per liter (a measure of radiation)

	MCL	MCLG	Barton Hills Water	Range of Detections	Sample Date	Violation	Typical Source of Contaminant
Inorganic Contaminants							
Arsenic (ppb)	10	0	5	4-5	3/9/05	No	Erosion of natural deposits Runoff from orchards Runoff from glass and electronics production wastes
Barium (ppm)	2	2	0.20	0.15-0.20	3/9/05	No	Erosion of natural deposits Discharge of drilling wastes Discharge of metal refineries
Fluoride (ppm)	4	4	0.40	0.35-0.40	7/26/07	No	Erosion of natural deposits Discharge from fertilizer and aluminum factories
Sodium (ppm)	n/a*	n/a*	22	15-22	7/26/07	No	Naturally occurring in groundwater
*Sodium is an unregulated contaminant and there is no MCL or MCLG assigned to it. Unregulated contaminant monitoring helps the EPA to determine whether there is a need to regulate that contaminant.							
Radionuclides							
Radium 228 (pCi/l)	5	0	1.3	1-1.3	7/9/01	No	Erosion of natural deposits
Bacteriological Monitoring							
Total coliform	More than 1 positive sample	0	1 positive sample out of 7	0-1	August	No	Naturally present in the environment
Total Trihalomethanes (ppb)	80	80	0.8	0.7-0.9	7/26/07	No	By-product of drinking water disinfection
Chlorine Residual at the Sampling Site (ppm)	MRDL =4	MRDLG =4	0.07	0.03-0.1	12/31/07	No	Water additive used to control microbes
Lead/Copper Monitoring at Customer's Tap							
Lead (ppb)	AL =15	0	4.05	0 out of 5 homes exceeded AL	8/22/06	No	Corrosion of household plumbing systems Erosion of natural deposits

Copper (ppb)	AL =1300	0	495	0 out of 5 homes exceeded AL	8/22/06	No	Corrosion of household plumbing systems Erosion of natural deposits

Lead Testing. One of the five homes tested in BHV in 2006 was found to have an elevated lead level in its drinking water, resulting in closer examination and public notice required by the Michigan Department of Environmental Quality. Extensive follow-up testing of homes and the BHV wells indicated very low levels of lead and copper in the municipal water system. Since subsequent test results were well under the established standards, being nearer to the "not-detected" mark, it is most probable that the single elevated level was the result of a plumbing fixture at that particular house. In May 2007 MDEQ notified BHV that all requirements had been met and that Barton Hills Village had returned to compliance with lead and copper action levels. Routine testing and monitoring of the BHV water system continue on the normal, federally regulated schedule.

Village-wide flushing of water mains and testing of hydrant flow were conducted in cooperation with Ann Arbor Township Fire Department in October 2007. Test results are forthcoming.

Barton Hills Village will continue efforts to ensure the highest quality water possible. Residents are encouraged to participate by maintaining septic systems, using fertilizers sparingly (especially those containing phosphorus) and disposing of hazardous materials properly. Additional information regarding water resources is included in the Barton Bulletin, which is distributed to BHV residents every few weeks. Residents may also relay concerns to the Board of Trustees, which meets the second Monday of each month at 6:00 PM at the Village Hall. For more information, contact Maintenance Superintendent Walter Esch (734-663-1284) or Water Committee Chairman Jim Wilkes (734-663-6174).