

**PWSID# NJ(1904002)**

**EAST BROOKWOOD ESTATES PROPERTY OWNERS ASSOC. INC**

**Annual Drinking Water Quality Report**

**For the Year 2012, Results from the Year 2011**

We are pleased to present to you this year's Annual Drinking Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources.

We are committed to ensuring the quality of your water. Our 3 wells are located in East Brookwood Estates and draw groundwater from the Sandstone Aquifer.

The New Jersey Department of Environmental Protection (NJDEP) has completed and issued the Source Water Assessment Report and Summary for this public water system and non community water systems which is available at [WWW.state.nj.us/dep/swap](http://WWW.state.nj.us/dep/swap) or by contacting NJDEP's Bureau of Safe Drinking Water at (609) 292-5550. You may also contact your public water system to obtain information regarding your water system's Source Water Assessment. This water system's source water susceptibility ratings and a list of potential contaminant sources is attached.

We are pleased to report that our drinking water meets all federal and state safety requirements. 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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

EPA requires monitoring for over 80 drinking water contaminants. Those contaminants listed in the table are only contaminants detected in your water.

TEST RESULTS						
Contaminant	Violation Y/N	Level Detected	Units of Measurement	MCLG	MCL	Likely Source of Contamination
<b>Radioactive Contaminants</b>						
Alpha Emitters Test result 2009 Well #1 11/09/09 Well #2 Well #3 Waived Last 2 Quarters Well 2	NO	Range Average 1.16-2.03 .487-1.69 1.68-5.00	PCi/l	0	15	Erosion of natural
Radium 226 Test Results 2009 Well #1 1/09/09 Well #2 Well #3 Waived Last 2 Quarters Well 2	NO	Range Average -0.02 <1-3.48 .932-1.33 <1-1.69	pCi/l	0	5	Erosion of natural deposits

Radium 228 Test Results 2009 Well #1 11/09/09 Well #2 Well #3 Waived Last 2 Quarters Wells 1,2,3	NO	Range Average .16566 .91716 0.42 <1-.005	pCi/l	0	5	Erosion of natural deposits
Uranium Test Results 2009 Well #1 11/09/09 Well #2 Well #3 Waived Last 2 Quarters Wells 2	No	Range Average .16566 0.090- 0.98 .00113 .0015- .007		0	30	Erosion of natural deposits
9						
<b>Inorganic Contaminants:</b>						
Copper Tested 9//26/11 90 <sup>th</sup> Percentile	NO	0.617	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits
Lead Tested 9/26/11 90 <sup>th</sup> Percentile	NO	0.0067	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
				10		
Nitrate (as Nitrogen) Well #1 Tested 02/28/11 5/16/11 8/8/11 12/6/11 Well #2 Tested 12/5/11 Well #3 Tested 12/6/11	NO  NO  NO	High Low Ave. 9.05 6.62 7.9 9.05 8.32 7.71 6.62 3.60 1.11	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Barium Tested Well #1 8/12/09 Well#2 8/12/09 Well#3 8/12/09	NO	High Low Ave .0366 .0130  .0239 0.0130 0.0222 0.0366	Mg/l	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
<b>Volatile Organic Contaminants</b>						
Toluene Tested 8/2/06	NO	.780	Ug/ L	1	1000	Discharge from petroleum factories
Tetrachloroethene Well #3 Tested 11/30/11	NO	0.410	Ug/L	1	1	Discharge from industrial chemical factories
✓ <b>Stage 2 Monitoring</b> Trihalomethane Tested 8/24/11 30 Woodsedge Rd 24 Brookwood Dr. 58 Brookwood Dr. Annual Running Average	NO		Ug/l	N/A	80	By-product of drinking water disinfection

<b>Stage 2 Monitoring</b> Haloacetic Acids Five Tested 8/24/11 30 Woodsedge Rd. 24. Brookwood Dr. 58 Brookwood Dr. Annual Running Average	NO	   2.04  1.33  .94  1.43	Ug/L          Ug/L Ug/L Ug/L	N/A	80	By-product of drinking water disinfection
<b>Stage 1</b> Trihalomethane Tested 5/15/10 8/11/10 11/5/10 2/09/11 24 Brookwood Rd. 30 Woods Edge Rd. Average THMS  Haloacetic Acids Five Tested 5/15/10 8/11/10 11/5/10 2/09/11 24 Brookwood Rd 30 Woods Edge Rd Average HAA5	NO	    2.2 10 1.7 1.8 2.6 12 8.2 5.3 3.9 7.0   ND 1.9 1.2 1.2 2.6 3.6 2.3 1.4 1.07 2.4	Ug/L Ug/L Ug/L	NA	80	By-product of drinking water disinfection

Methyl tertiary butyl ether (MTBE)	NO	0.580 Ug/L	Ug/L	70	70	Leaking underground gasoline and fuel oil tanks. Gasoline and fuel oil spills.
Tetrachloroethene Well #3 Tested 11/30/11	NO	0.410 Ug/L		1	1	
Chloroform Well # 1 8/9/10 11/21/10	NO	High Low Ave 0.62 0.960 0.280	Ug/L	N/A		
<b>Secondary Contaminant</b>		<b>Level Detected</b>	<b>Units of Measure Mg/lL</b>	<b>RUL</b>		
Manganese Tested 8/10/09 Well #3 Trout Brook		0.864	mg/L	<b>RUL 0.05</b> The secondary Recommended Upper Limit (RUL) for manganese is based on staining of laundry. Manganese is an essential nutrient, and toxicity is not expected from levels, which would be encountered in drinking water.		
Iron Tested 8/10/09 Well #3 Trout Brook		0.481	Mg/L	<b>RUL 0.3</b> The secondary Recommended Upper Limit (RUL) for iron is based on unpleasant taste of the water and staining of laundry. Iron is an essential nutrient, but some people who drink water with iron levels well above the RUL could develop deposits of iron in a number of organs in the body.		

<p>Sodium Well #1 Brookwood Rd. Tested 2/23/11 5/18/11 8/8/11 11/21/11</p> <p>Well #2  Tested 5/20/10</p> <p>Well #3 Tested 2/23/11 5/16/11 8/8/11 11/21/11</p>	<p>Average 51.5 64.0 70.7 7.02 64.3</p> <p>Average 46.0 62.0 41.8 32.4 47.9</p>	<p>pm</p>	<p><b>MCL-50 Sodium</b> <b>For healthy individuals the sodium intake from water is not important, because a much greater of sodium takes place from salt in the diet. However sodium levels above the Recommended Upper Limit (RUL) may be of concern to individuals on sodium restricted diet.</b></p>
<p>Total Hardness Tested 8/20/09 Well #1 Well#2 Well#3</p>	<p>Average 316.0 250.0 320.0 380.0</p>	<p>ppm</p>	<p>MCL 50-250</p>
<p>Total Dissolved Solids Tested 8/13/09  Well#1 Well #2 Well #3</p>	<p>Average 516.3  774 634 709</p>	<p>ppb</p>	<p>500</p>

**Stage 2 Disinfectants and Disinfectants Byproduct Rule with revisions submitted on April 28, 2011 for Stage 2, compliance has been approved. EBPOA has to continue to monitor and report DBPs under the Stage 1 rule at our current amount and frequency until Stage 2 compliance monitoring begins. Stage 2 compliance monitoring will begin on October 2013.**

<p>Iron Tested 8/10/09</p> <p>Well #3 Trout Brook</p>	<p>0.481</p>	<p>Mg/L</p>	<p><b>RUL 0.3 The secondary Recommended Upper Limit (RUL) for iron is based on unpleasant taste of the water and staining of laundry. Iron is an essential nutrient, but some people who drink water with iron levels well above the RUL could develop deposits of iron in a number of organs in the body.</b></p>
<p><b>Microbiological Violation Contaminants YES/NO</b></p> <p>Total Coliform Bacteria</p> <p>5/17/11            YES</p> <p>5/20/11            NO</p> <p>5/24/11            NO</p> <p>6/7/11              NO</p> <p>6/14/11            NO</p>	<p>Units of Measurement</p> <p>Col/100ml</p> <p>1 of 1 positive</p> <p>4 of 4 negative</p> <p>1 of 1 negative</p> <p>5 of 5 negative</p> <p>1 of 1 negative</p>	<p>Col/MI</p>	<p><b>Level Detected</b></p> <p>Systems that sample 1 per Month is 0 positive monthly presence of coliform bacteria of monthly samples</p> <p><b>Likely Source of Contamination</b></p> <p>Naturally present in environment</p>

**The table shows that our system uncovered some Microbiological Contaminant problems this year. The duration of the violation was from May 17 2011 to MAY 20, 2011. present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present. Coliforms were found in one sample and this was a warning of potential problems. We have corrected this problem. Check samples were taken on all three wells along with 5 system samples all sample were negative.**

### **Lead**

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. (Name of utility) is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water is available from the Safe Drinking Water Hotline at 1-800-426-4791 or at <http://www.epa.gov/safewater/lead>.

### **Manganese**

The secondary Recommended Upper Limit (RUL) for manganese is based on staining of laundry. Manganese is an essential nutrient, and toxicity is not expected from levels, which would be encountered in drinking water.

### **Nitrate**

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant-you should ask advice from your health care provider. Infants below the age of six months who drink water-containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.

### **Sodium**

For healthy individuals the sodium intake from water is not important, because a much greater of sodium takes place from salt in the diet. However sodium levels above the Recommended Upper Limit (RUL) may be of concern to individuals on sodium restricted diet.

### **Iron**

The secondary Recommended Upper Limit (RUL) for iron is based on unpleasant taste of the water and staining of laundry. Iron is an essential nutrient, but some people who drink water with iron levels well above the RUL could develop deposits of iron in a number of organs in the body.

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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Regulated Disinfectants	Level Detected (Average & Highest Detect)	MRDL	MRDLG
Chlorine	0.40      0.42	4.0 ppm	4.0 ppm

We constantly monitor for various contaminants in the water supply to meet all regulatory requirements. If you have any questions about this report or concerning your water utility, please contact Rich Stopa at 973-347-9004. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our scheduled meetings. Please call for the date, time and location.

The East Brookwood Water Department routinely monitors for contaminants in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2011.

**The state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.**

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 activity.

Contaminants that may be present in source water 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 storm water 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 storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can, also come from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

## DEFINITIONS

In the following table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Parts per trillion (ppt) or Nanograms per liter (nanograms/l) - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

Parts per quadrillion (ppq) or Picograms per liter (picograms/l) - one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000.

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

Millirems per year (mrem/yr) - measure of radiation absorbed by the body.

Million Fibers per Liter (MFL) - million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.

Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water.

Turbidity in excess of 5 NTU is just noticeable to the average person.

Action Level - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT) - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Maximum Contaminant Level - The "Maximum Allowed" (MCL) is 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.

Maximum Contaminant Level Goal - The "Goal"(MCLG) is 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.

Secondary Contaminant- Substances that do not have an impact on health. Secondary Contaminants affect aesthetic qualities such as odor, taste or appearance. Secondary standards are recommendations, not mandates.

Recommended Upper Limit (RUL) – Recommended maximum concentration of secondary contaminants. These reflect aesthetic qualities such as odor, taste or appearance. RUL's are recommendations, not mandates.

Maximum Residual Disinfectant 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.

Maximum Residual Disinfectant Goal (MRDLG): 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.

We have learned through our monitoring and testing that some contaminants have been detected. As you can see by the table, our system had no violations. We are proud that your drinking water meets or exceeds all Federal and State safety requirements. We constantly monitor for various Contaminants in the water supply to meet all regulatory requirements.

To ensure the continued quality of our water we treat for Microbiological Contaminants it with -Sodium hypo Chloride. Microbiological Contaminants are the naturally present in the environment.

The Safe Drinking Water Act regulations allow monitoring waivers to reduce or eliminate the monitoring requirements for asbestos, volatile organic chemicals and synthetic organic chemicals. Our system received monitoring waivers for synthetic organic chemicals and reduced monitoring for Copper and Lead, Volatile Organic Compounds, Inorganic Contaminants and Secondary Contaminants of these types of contaminants.

Some people who drink water containing tetrachloroethylene in excess of the MCL over many years could have problems with their liver, and may have an increased risk of getting cancer.

Children may receive a slightly higher amount of a contaminant present in the water than do adults, on a body weight basis, because they may drink a greater amount of water per pound of body weight than do adults. For this reason, reproductive or developmental effects are used for calculating a drinking water standard if these effects occur at lower levels than other health effects of concern. If there is insufficient toxicity information for a chemical (for example, lack of data on reproductive or developmental effects), an extra uncertainty factor may be incorporated into the calculation of the drinking water standard, thus making the standard more stringent, to account for additional uncertainties regarding these effects. In the cases of lead and nitrate, effects on infants and children are the health endpoints upon which the standards are based.

Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites, which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

We at the East Brookwood Water Department work hard to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future. Please call our office if you have questions

.Community Water systems must keep copies of the CCR for at least 5 years.

## E Brookwood Property Owners Association, Inc.- PWSID # 1904002

E Brookwood Property Owners Association, Inc. is a public community water system consisting of 3 well(s), 0 wells under the influence of surface water, 0 surface water intake(s), 0 purchased ground water source(s), and 0 purchased surface water source(s).

This system's source water comes from the following aquifer(s) and/or surface water body(s) (if applicable): igneous and metamorphic rocks

This system purchases water from the following water system(s) (if applicable):

### Susceptibility Ratings for E Brookwood Property Owners Association, Inc. Sources

The table below illustrates the susceptibility ratings for the seven contaminant categories (and radon) for each source in the system. The table provides the number of wells and intakes that rated high (H), medium (M), or low (L) for each contaminant category. For susceptibility ratings of purchased water, refer to the specific water system's source water assessment report.

The seven contaminant categories are defined at the bottom of this page. DEP considered all surface water highly susceptible to pathogens, therefore all intakes received a high rating for the pathogen category. For the purpose of Source Water Assessment Program, radionuclides are more of a concern for ground water than surface water. As a result, surface water intakes' susceptibility to radionuclides was not determined and they all received a low rating.

If a system is rated highly susceptible for a contaminant category, it does not mean a customer is or will be consuming contaminated drinking water. The rating reflects the potential for contamination of source water, not the existence of contamination. Public water systems are required to monitor for regulated contaminants and to install treatment if any contaminants are detected at frequencies and concentrations above allowable levels. As a result of the assessments, DEP may customize (change existing) monitoring schedules based on the susceptibility ratings.

Sources	Pathogens			Nutrients			Pesticides			Volatile Organic Compounds			Inorganics			Radio-nuclides			Radon			Disinfection Byproduct Precursors			
	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	
Wells - 3		1	2	2	1				3	2		1			3			3			1	2			3
GUDI - 0																									
Surface water intakes - 0																									

- **Pathogens:** Disease-causing organisms such as bacteria and viruses. Common sources are animal and human fecal wastes.
- **Nutrients:** Compounds, minerals and elements that aid growth, that are both naturally occurring and man-made. Examples include nitrogen and phosphorus.
- **Volatile Organic Compounds:** Man-made chemicals used as solvents, degreasers, and gasoline components. Examples include benzene, methyl tertiary butyl ether (MTBE), and vinyl chloride.
- **Pesticides:** Man-made chemicals used to control pests, weeds and fungus. Common sources include land application and manufacturing centers of pesticides. Examples include herbicides such as atrazine, and insecticides such as chlordane.
- **Inorganics:** Mineral-based compounds that are both naturally occurring and man-made. Examples include arsenic, asbestos, copper, lead, and nitrate.
- **Radionuclides:** Radioactive substances that are both naturally occurring and man-made. Examples include radium and uranium.
- **Radon:** Colorless, odorless, cancer-causing gas that occurs naturally in the environment. For more information go to <http://www.nj.gov/dep/rp/radon/index.htm> or call (800) 648-0394.
- **Disinfection Byproduct Precursors:** A common source is naturally occurring organic matter in surface water. Disinfection byproducts are formed when the disinfectants (usually chlorine) used to kill pathogens react with dissolved organic material (for example leaves) present in surface water.