



## Southborough DEPARTMENT OF PUBLIC WORKS

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(508)-485-1210

Public Water Supply  
# 2277000

Town of Southborough and the MWRA are pleased to provide our customers with the 2011 Annual Water Quality Report.

**SOUTHBOROUGH'S WATER SYSTEM:** The Town of Southborough purchases 100% of our water from the MWRA. The Town pumps fully treated water from the MWRA's distribution system into the Town's distribution system at the Town's two pumping stations. The Town's three water tanks control the water system. The Department of Public Works Department (DPW) manages the Town's water system. There are 4, full-time, highly dedicated employees that comprise your DPW Water Division. The Water Commissioners are Southborough's Board of Selectmen. The Selectmen meet on Tuesday nights in the Town House Public Hearing Room; the meetings are televised. The town website, southboroughtown.com, posts the Selectmen's agendas along with water reports and other water system information. Water customers are encouraged to participate at Selectmen's meetings that discuss water issues.

**WATER CONSERVATION:** In an effort to meet the Water Management Act (WMA) standards and to encourage conservation, Southborough implemented a voluntary water ban for summer 2011. Summer 2011 saw above average precipitation, lowering water usage throughout Town by 18% when compared to a dry 2010. The Town only pumped 306 million gallons (MG) of water into our distribution system in 2011, the lowest quantity Southborough has pumped since 1996. However, even with this low water usage, Southborough residents did not meet the WMA standard of 65 gal/day in 2011.

**WATER SYSTEM MAINTENANCE:** A contractor examined approximately half (52 miles) of the Town's water mains as part of our annual leak detection survey. The survey identified 4 hydrant leaks and 3 service leaks. In all, 1 water main break, 8 service leaks and 16 hydrants were repaired in 2011. The Water Division performed the annual flushing program in the last week of April. The flushing program flushes water mains in order to remove naturally occurring tuberculation and sedimentation. Throughout 2011 the Water Division employees performed all required routine system maintenance.

**WATER SYSTEM IMPROVEMENTS:** Contractors applied a special epoxy seam sealant to the interior of the 1931 riveted steel Clear Hill Stand pipe (water tank on Overlook Drive) and painted the ceiling and roof of the structure in fall 2011. In 2011 the Town also began preparing all major system components for communication and control through the SCADA (Supervisory Control And Data Acquisition) system. The Water Division has been working to replace all residential meters. A contractor replaced, and downsized, all large non-residential meters in the system. The water system also purchased a new generator for use at the Boland Pumping Station. This generator eliminates the need for the back-up gasoline powered water pump at the station. The Town decided not to use the back-up water pump after the power outage during Hurricane Irene caused the back-up water pump to run for a significant amount of time. This caused excessive heat in the pump's exhaust system and set fire to the station.

**BACKFLOW PREVENTION (CROSS CONNECTIONS):** Southborough continues to enforce the Department of Environmental Protection (DEP) mandated cross connection control and prevention program under 310 CMR 22.22 through device testing and cross connection surveys. A cross connection happens when negative system pressure, usually created by high volume flows such as a main break or fire fighting, suctions water back through services into the system. The Town performs cross connection surveys at businesses to ensure required backflow prevention devices are in place and tests the devices to make sure that they are working properly. Backflow devices are required on all lawn irrigation systems, even at residences.

**DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP) NOTICES OF NON-COMPLIANCE:** The DEP conducted a Sanitary Survey of Southborough's water system in March 2010. Although the Town's water system was generally in compliance with DEP regulations, the Town received Notices of Non-Compliance for 3 items. The 1st notice was due to the condition of the coating on the Oak Hill tank. The 2nd notice was due to the condition of the paint on the interior and exterior of the roof on the Clear Hill tank. The 3rd notice was due to the Town's backflow device testing. The work on the Oak Hill tank was completed in 2010 and the Clear Hill tank work was completed in 2011. The Town met the backflow testing requirements in 2010 and 2011. The Town has addressed all the issues of our Notice of Non-Compliance.

**WATER ANALYSIS:** The DEP requires that Southborough sample the water from three locations with vinyl-lined asbestos cement pipe each year for PCE (tetrachloroethylene). None was detected. The Town is also required to sample 10 sites each month for the presence of coliform bacteria and 15 sites twice a year for the presence of lead and copper. The range of PCE and total coliform results and the 90th percentile lead & copper results are below.

COMPOUND	ACTION LEVEL	DETECTION LIMIT	90TH PERCENTILE		VIOLATION
			3/24/11	9/22/11	
Lead (ppb)	15	0.05	1.66	1.19	NO
Copper (ppb)	1300	0.5	108	95	NO

Questions? Contact Karen Galligan, DPW Superintendent, at the DPW 508-485-1210.