

~ Water Utilities Department~

Milford's wastewater treatment facility was chosen as the North American test site for a new state-of-the-art monitoring probe, called ASP-CON, to measure multiple parameters including pH, temperature, dissolved oxygen, ammonia, potassium, mixed liquor suspended solids and oxygen uptake rates. Installed in Milford on May 7, 2013, the probe measurements are monitored by the manufacturer in Scotland. Since Milford's temperatures are higher than Scotland's in the summer and lower in the winter, the ASP-CON's control computer and hardware will undergo modifications.

Our **Wastewater Department staff** accomplished the following equipment replacements: return activated sludge (RAS) main seal assembly on a secondary clarifier (a significant, on-site wastewater facility infrastructure repair), the compost screener engine, and two yard hydrants. Employees installed a plunger and packing gland onto the filtrate pump, an effluent D.O analyzer and probe, a hydraulic tank on the backhoe, and inserted a new sludge line so that primary and secondary sludge lines may be combined next year. They painted the aeration tank air lines. Outsourced departmental tasks included generator switch gear replacement (an 8-month major upgrade to this 30+ year old facility), having a main pump motor rewound, a main shaft rebuilt, standby generator batteries replaced, the aeration tank Flygt pump rebuilt, and the area around the new septage receiving building paved.

During 2013, the **Water Department personnel** replaced three outdated hydrants. The three-man crew repaired seven unscheduled water main breaks. Eighteen miles of the water distribution system were investigated for leaks; one leak was detected and repaired. The new Freightliner dump truck was put into service. In-house staff began replacing large water meters and installed 1500' of 8" water main on Beech and Smith Streets. Our employees assisted with upgrading the electrical cables under the Souhegan River that power the Curtis Well pumps, and replacing meters, chemical pumps and software in the Curtis Well pump house. Outsourced projects included resurfacing the roof of the Dram Cup tank to correct a large amount of concrete spalling. The Prospect and Dram Cup tanks were inspected and cleaned. The Kokko and Keyes Wells were decommissioned.

During 2013, the **Collection System crew** maintained sewer easements and performed routine inspections of pump stations and siphon chambers. The three-man crew cleaned approximately 45,000 feet of sewer main in north Milford as well as approximately 80,000 feet of sewer main in west Milford. They repaired 50 feet of 10" clay sewer main on Beech Street and an emergency repair of 60 feet of 8" clay pipe sewer main on Souhegan Street. More than 40 manholes were rehabilitated on Highland, Amherst, Grove, Perkins, Mont Vernon, West, Mill, Walker, Dearborn, High, Alder, Marshall, Prospect, Union, Ford, Beech, Smith, Oak, and Nashua Streets. One commercial and five residential sewer permits were issued during 2013.

The Water Utilities staff continues to team with TeTon Environmental to administer Milford's EPA-mandated **Industrial Pretreatment Program**. In 2013, three Industrial Discharge Permits (IDPs) were issued, two IDPs were re-issued, seven industrial user sites were inspected, and six industrial user wastewater discharge sites were sampled.

Call the Water Utilities Department at 249-0660 x 0 when scheduling an in-ground excavation on your Milford property. DIGSAFE does not automatically notify the Water Utilities Department. This responsibility lies with each property owner. Water and sewer lines near the area to be dug will be marked at **no cost to you**. Request a **free** operational tour during regular business hours.

Respectfully submitted,

David L. Boucher, Director

WATER DEPARTMENT

2013 ANNUAL SUMMARY OF OPERATIONS

Curtis Well	323,424,000 Gallons
Pennichuck Water	15,941,000 Gallons
Total Water Pumped	339,365,000 Gallons
Average Demand	929,767 Gallons/Day
Over 1 Million Gallons*	108 Days
Annual Rainfall	39.13 Inches

*Number of days that the Town pumped 1 million gallons or more of water.

WASTEWATER FACILITY

2013 ANNUAL SUMMARY OF OPERATIONS

Milford Flow Treated	410,874,038 Gallons
Wilton Flow Treated**	48,307,000 Gallons
Septage Treated	1,128,962 Gallons
Total Flow Treated	460,310,000 Gallons
Average Flow Treated	1,261,123 Gallons/Day
Design Flow	2,150,000 Gallons/Day
Daily Average Hydraulic Load	58.6 % of Design
Annual Rainfall	39.13 Inches