## SANITARY SEWER MAINTENANCE ANNUAL REPORT 2012

The York City Sewer Maintenance division is responsible for the maintenance and repair of over 520,000 linear feet of sanitary sewer line located within the City. The sewer system is a critical component in the operations of the York City WWTP. It conveys the wastewater generated by sewer users in the City, and portions of seven (7) other municipalities, to the WWTP for treatment. A properly maintained sewer system is required to convey the contaminated wastewater from the users in our community to treatment in a manner that protects human health and the environment. Blockages in the sewer system cause sewage overflows and unsanitary living conditions for the users. The maintenance of sewers includes the cleaning and televising of sewer lines, and repairs to mains, laterals, and manholes. The division is also responsible for the maintenance of the City's five flood pump stations. In addition, the Sewer Maintenance division is required to provide PA One call markings for underground sanitary and storm sewer utilities. The division is headed by the Sewer Maintenance Supervisor and has six (6) full time employees.

## **Activity Summary for 2012**

The division recorded 188 sewer-related actions or complaints. Sluggish or blocked mains generated 14 complaints. There were 81 complaints related to actual lateral blockages. Five (5) of these were when a plumber was unable to restore service or reported a defect. The department restored service by using sewer-cleaning rods or a Harben. Plumbers addressed the other 76 lateral complaints. Fifteen (15) laterals were inspected with the CCTV equipment. The other complaints resulted in a general investigation or were unrelated to lateral or main malfunctions. A total of 172 trouble reports occurred while on-duty and 16 were call-outs. The call-outs are as follows: six due to main blockages and seven due to reports of lateral blockages.

The division repaired three laterals during 2012. (2011, 2 repairs; 2010: 5 repairs, 2009: 9 repairs, 2008: 4 repairs, 2007: 6 repairs, 2006: 4 repairs, 2005: 3 repairs, 2004: 6 repairs).

The division had one main repair during 2012. A section of 8-inch terra cotta pipe failed on S. West St and required emergency repair.

The department cleaned 445,934 lineal feet of sanitary sewer during 2012 (2011, 257,091; (2010: 182,500; 2009: 245,200; 2008: 163,058; 2007: 135,567). This increase resulted from having a full staff, and less manhole replacement work, and suitable weather for cleaning during January, February, and March. These months are typically to cold to permit all but emergency jetting/cleaning.

No major replacements or rehabilitation took place in 2012. Main Sewer pipe replacement/rehabilitation: 2012: 0 lf; 2011: 3001 lf; 2010: 2707 lf; 2009: 1322 lf; 2008: 817 lf.

The crew televised 0' lineal feet of sanitary sewer mains in 2012. (2011, 1500'; 2010: 6,490'; 2009: 1,278': 2008: 7817'; 2007: 5,024')

In 2012, 4,146 manholes were inspected during cleaning and maintenance activities.

A total of 1 sanitary sewer manhole frame and cover was replaced and adjusted to grade. The department assisted Highway in locating 30 and replacing 3 storm sewer manholes. No manhole cushions were installed. (2011; 17 SS manholes 19 SS due to sewer construction, 3 SWS manholes; 2010: 63 SS manholes, 10 SWS manholes, 2009 – 35 SS manholes, 10 SWS manholes)

The chemical root control program for laterals continued in 2012. Root control was applied to 22 service laterals where homeowners indicated or the division found root problems (2011: 21 laterals; 2010: 50 laterals; 2009: 29 laterals). Root control was applied to 2643' of sewer mains in problem areas (2011, 391').

The department continued its multi-year contract with CSL. This firm collected data and prepared reports from the 15 inter-municipal flow meters and two rain gauges. The information was used for sewer billing collection system capacity evaluation. The performance of the vendor remains excellent. This contract has provided the City with increased value at a lower cost, when compared to the previous service provider.

The department responded to 1,884 requests for PA-One Call utility markings. This is a slight increase from previous year (2011: 1888; 2010: 1709: 2009: 1826: 2008: 2115; 2007: 2113; 2006: 2,066; 2005: 1,727).

Five (5) Flood Pump Stations were inspected and maintained. All five stations were operational and ready for a flood emergency.

Hurricane Sandy provided another significant rain event to the York area and collection system. Recovery to pre-Sandy system flow levels was much sooner than with 2011's TS Lee. This storm event reminds us that these events can occur with varying magnitude and frequency.

The department continues to use a database management system for tracking activities within the department.

The Sewer Emergency Response Team continued to operate for serious sewer related backups.

The department continued to update the comprehensive sewer maps and lateral detail sheets.

The Superintendent continued to work on the mapping and attribute components of the GIS system for sanitary sewers and storm sewer system. Inventorying and inclusion of the storm water outfalls to the Codorus Creek and tributaries continued as part of the

City's ongoing MS4 program.

A program of preparing detailed inlet maps and piping began in 2012 and will continue into 2013.

The department assisted the Highway crew in paving and excavation projects. It also assisted the Parks Bureau in several projects.

In turn, the Highway Bureau assisted Sewer Maintenance on several patching and manhole projects.

The department continues to assist the WWTP in cleaning and inspection projects.

One employee retired during November and will not be replaced until 2013.