

October 11, 2019

2019 Major Fund Audit - Sewer Utility Report

Background

Internal Audit reviewed the City's sewer utility funding and processes for replacing its ageing sewer system.

The City's 2,100 km sewer system has a replacement value of over \$6 billion. Built initially of combined sewer and storm pipes, new and replacement sewer pipes are now constructed independently. Sewer mains have been replaced at an annual rate of 0.6 percent of the system during the past 10 years, with approximately 50 percent of the combined sewer system replaced or separated to date.

Under the Liquid Waste and Resource Management Plan by Metro Vancouver and approved by the Ministry of Environment in May 2010, Burnaby, New Westminster and Vancouver will implement plans to prevent combined sewer overflows by 2050.

Scope

The scope of the audit includes assessment of whether:

1. Sewage Utility tax is properly collected, used and applied towards City's administered "Sewage Utility" account;
2. The City's Sewage Utility programs and processes are in compliance with government legislations and established City policies and procedures;
3. The City manages its sewerage and watercourse system with the objective of meeting current and expected future demand; and
4. Effectiveness, efficiency and economy of management's processes and controls of the Sewage Utility.

Our work included interviewing staff, examining and reviewing records to provide reasonable independent assurance that the existing internal controls and business processes relating to the above scope are adequate and effective.

The audit is not designed to detect fraud. Accordingly there should be no such reliance.

Conclusion

The City's sewer utility processes comply with tax and collection policies and meet all legislative requirements. To strengthen sewer utility operations, management has committed to enhance operational effectiveness and efficiency by improving process documentation, increasing internal controls, addressing potential business continuity risks, expanding meter codes for better analysis, and strengthening meter data input integrity.

The more significant findings and recommendations are:

E.1 Need for a Long-Term Sewer and Drainage Masterplan

A long-term master plan (30 to 50 year time horizon) to guide the planning and delivery of services impacting sewers and drainage in the City will help achieve the goals set in the Integrated Rainwater Management Plan and Rain City Strategy.

E.2 Improve Alignment and Consistency among Policies and By-laws Impacting Sewers and Drainage Services

Identifying key gaps and opportunities and aligning by-laws and policies impacting the sewer and drainage services will accelerate the pace of deployment of innovative solutions. This will improve planning for programs and projects, enhance processing of development applications and industry capacity, and achieve efficiencies in service delivery.

E.3 Develop Common Meter Reading Format to Meet Operational Demand

Streamlining new meter installation and work on older meters to a common reading format will increase accuracy and improve efficiency in the billing process and safeguard the City's reputation.

E.4 Standardization of Meter Reading Codes and Process Required

A standardized set of meter reading codes and related processes will reduce conflicting data and results and minimize time-consuming re-validation.

E.5 Address Limitation of Data Transfer for Metered Reading Data and System Issues

Review and implementation of Tempest system enhancements and automation will improve efficiency and accuracy of Utility Billing work flow.

Findings and recommendations have been discussed with appropriate management and work is underway to address them.