
ASSET MANAGEMENT FOR LIQUID WASTE SERVICES

Effective Date: September 28, 2018

Approved By: GVS&DD Board

Policy No. FN-025

PURPOSE

To establish asset management principles and framework to balance asset performance, risk, and cost to deliver liquid waste services.

POLICY

Liquid Waste Services delivers wastewater collection, treatment and drainage services through an extensive and complex portfolio of assets. This Policy outlines Metro Vancouver's commitment and methodology to manage these assets in a manner that minimizes asset failure risks and impact to customers and optimizes the lifecycle value of assets to consistently meet asset performance targets and enable evidence based decision making to continuously provide quality services.

ASSET MANAGEMENT PRINCIPLES

The methodology for managing Liquid Waste Services assets is guided by the following principles:

- a) **Integrated:** a comprehensive approach that examines the combined implications of managing all aspects of the asset life cycle. This includes interdependencies of assets or asset systems;
- b) **Risk-based:** manage asset risk relative to defined performance targets and asset criticality and focus expenditures and priorities based on risk and associated cost and benefit;
- c) **Sustainable:** a long-term approach to estimating asset investment and activities, which will better enable assets to meet future challenges, including changing demographics, legislative requirements and technological, financial and environmental factors;
- d) **Fiscally Responsible:** ensure activities and decisions aim at reducing the life cycle cost of asset ownership, while achieving defined asset performance targets;
- e) **Systematic:** a formal, consistent, repeatable and methodical approach to the management of assets; and
- f) **Innovative:** continuous improvement in Asset Management by examining new tools, technologies, practices and solutions.

ASSET CLASSES

This Policy is applicable to the management of each Liquid Waste Services asset in the following six asset classes:

- Wastewater Treatment Plants
- Sewers
- Pump Stations
- Odour and Corrosion Control Facilities
- Storage Facilities
- Drainage

ASSET DATA AND INFORMATION

To measure performance of Liquid Waste Services assets, Liquid Waste Services will develop and maintain an Asset Registry with comprehensive and accurate asset data and information. Data will be organized in a structured manner so that it can be stored, analyzed and reported at an adequate level for different business needs. Integrity of the data shall be constantly monitored, updated and maintained to provide accurate asset information.

The Liquid Waste Services Asset Registry will include at a minimum, the following:

- Asset grouping (e.g. utility, asset class)
- Asset location (e.g. facility, sub-facility/process)
- Asset details (e.g. make, model, material, size, install date, expected service life)
- Asset identification (e.g. type, number, description)
- Asset criticality and risk information
- Financial information (e.g. acquisition and disposal costs, estimated replacement cost, Operations & Maintenance costs)
- Asset condition and/or estimated remaining service life

ASSET PERFORMANCE AND LIKELIHOOD OF FAILURE

Liquid Waste Services will manage and renew each asset in accordance with clearly defined asset performance metrics and targets. Asset performance information is used as an indicator of an assets' likelihood of failure. Liquid Waste Services asset performance categories, key performance indicators and targets are provided in the table below.