Canadian Coalition on Wastewater-Related COVID-19 Research

Draft Framework April 23, 2020

Decision Application 1

Decision Application 2

Main end-users of research outcomes

- Public health surveillance
- Emergency Operations Centres (EOC)
- Health regulators

SARS-CoV-2 **wastewater surveillance** as an aggregated indicator of community COVID-19, including spread and asymptomatic presence

SARS-CoV-2 **infectivity and exposure via wastewater**, including risk assessment, environmental fate and transport

Main end-users of research outcomes

- Public health
- Utilities/ municipalities
- Environmental and systems regulators
- Occupational health groups

Wastewater sampling, processing and preservation/archiving

Analytical techniques – RT-qPCR, other (Level 2 labs)

Analytical techniques – genetic, culture methods, other (Level 3 labs)

Wastewater system characterization and modelling to enable appropriate interpretation and connection of results to community

Epidemiological and surveillance modelling to apply results to inform trends and community prevalence analysis

Wastewater system characterization to link results to risk assessments and transport assessments

Application of results to appropriate risk assessment considerations

Research Elements

Effective and transparent communication and positioning of results to better support evidence-informed decisions and public engagement

Canadian Water Network