

CLARIFICATION PUMPING STATIONS vs SEWAGE TREATMENT PLANTS

Pumping Stations are sewage works located throughout the collection system that pump the sewage from a low area directly to a Sewage Treatment Plant or up into a gravity sewer so it can continue flowing to the Sewage Treatment Plant. They are generally comprised of a wet well, pumps and a forcemain and are often located in residential areas. The Municipal Class EA Project Schedules set out criteria to classify pumping stations, specifically;

Schedule A (2) - Increase pumping station capacity by adding or replacing equipment where new equipment is located within an existing building or structure and where the existing rated capacity is not exceeded;

Schedule A+ (3) - Increase pumping station capacity by adding or replacing equipment and appurtenances, where new equipment is located in an existing building or structure and where its existing rated capacity is exceeded;

Schedule B (8) - Construct new pumping station or increase pumping station capacity by adding or replacing equipment and appurtenances, where new equipment is located in a new building or structure; and

Schedule C - NA

Sewage Treatment Plants are located at the end of the sewage collection system where they treat the sewage before discharge to the environment. They are generally located in an isolated area with a buffer to sensitive land uses. Sewage Treatment Plants are generally comprised of:

headworks - where the sewage is lifted, screened and grit removed;

clarifiers - tanks where solids in the sewage are settled and removed;

Aeration tanks - tanks where air is added for the biological stabilization of organic matter;

solid handling system - where solids, from sewage, are collected, dewatered, stabilized and then released into the environment;

disinfection - where final effluent is treated before discharge; and

outfall - pipe/conduit that discharges treated effluent to the environment.

The Municipal Class EA Project Schedules set out criteria to classify Sewage Treatment Plants, specifically:

Schedule A (3) - Expand/refurbish/upgrade sewage treatment plant including outfall up to existing rated capacity where no land acquisition is required;

Schedule A (9) - Increase sewage treatment plant capacity beyond existing rate capacity through improvements to operations and maintenance activities only, but without construction of works to expand, modify or retrofit the plant or the outfall to the receiving the water body, with no increase to total mass loading to receiving water body as identified in the Certificate of Approval.

Schedule A+ - NA

Schedule B (10) - Expand sewage treatment plant, including relocation or replacement of outfall to receiving water body, up to existing rated capacity where new land acquisition is required;

Schedule B (11) - Increase sewage treatment plant capacity beyond existing rated capacity through improvements to operations and maintenance activities only but without construction of works to expand, modify or retrofit the plant or the outfall to the receiving water body where there is an increase to total mass loading to the receiving water body as identified in the Certificate of Approval; and

Schedule C (2) - Construct new sewage treatment plant or expand existing sewage treatment plant beyond existing rated capacity including outfall to receiving water body.

A Sewage Treatment Plant includes all components of both the liquid and solid treatment process and, although the individual components may not be separately identified, the criteria, established in the Class EA Project Schedules, are designed to apply to all components of the Sewage Treatment Plant. Works, at the Sewage Treatment Plants, must be planned following the appropriate Project Schedule for Sewage Treatment Plants whether the work involves several components of the plant or just a single component.