7.1.3.6 Process Capacity

The expanded plant is being design to provide a total capacity of 50,000 m^3/d. A review of the plant processes indicate that excess capacity in the conventional activated sludge plant and digesters may be available, to enable rerating the major processes to provide a higher capacity, without a tankage expansion. The outfall is designed to provide an capacity of 150,000 m^3/d (average day flow).

7.1.3.7 Factors Affecting Expandability

Receiving Water Capacity

Before 2004, the combined effluent from the Mid Halton WWTP and the Oakville South West WWTP will need to achieve non-toxic effluent quality with respect to chlorine. This could be provided by installing dechlorination facilities at the South West WWTP or alternatively constructing an ultraviolet disinfection system at the Mid Halton WWTP.

With Lake Ontario as the receiving water, the assimilative capacity does not pose a significant restriction on future expansions to this site.

Biosolids Management

Adequate on-site biosolids digestion process capacity exists on-site to manage all of the biosolids generated at flows in excess of the 50,000 m^3/d capacity. Expansion beyond about 65,000 m^3/d will require addressing biosolids treatment capacity.

Site Capacity

The ultimate site capacity of the Mid Halton WWTP is 400,000 m^3/d based on providing conventional activated sludge treatment. The site can be expanded in modules of 25,000 m^3/d, 50,000 m^3/d, or larger modules. The addition of modules will depend on the rate of growth in the service area, and practical expansion phasing. A new outfall will be required a flows greater than 150,000 m^3/d.

7.1.4 Oakville South West Wastewater Treatment Plant

7.1.4.1 Background

The Oakville South-West wastewater treatment plant (WWTP) currently provides wastewater treatment capacity to the urban area in south Oakville bounded by Burloak Drive to the west, Reynolds Street to the east, the QEW to the North and Lake Ontario to the south, in addition to a small area just west of 16 Mile Creek north of the QEW. The plant was originally commissioned in 1955 with a rated capacity of 4,545 m^3/d, and was subsequently expanded in 1968 and 1977 to provide the current Certificate of Approval rated capacity of 45,460 m^3/d. The facility is divided into four separate plants (Plant 1 through to Plant 4). Due to their physical condition, the two oldest plants (Plants 1 and 2) were removed from service leaving an available operating capacity of 35,000 m^3/d.