

Project:

Waste & Sewage Dumping
Station

Client:

City of Hamilton
Hamilton, Ontario



Description:

Byrne Engineering Inc. was retained to design a waste and sewage dumping station for the Regional Municipality of Hamilton-Wentworth. The station replaces two existing dumping facilities at the Woodward Avenue Sewage Treatment Plant that had become outdated due to the Region's inability to monitor or control the dumped influent.

The station provides facilities for dumping of sewage and storm waste in a manner that ensures the influent is measured and monitored so the Region can exercise appropriate control. Tanker trucks empty their loads from grade into two below ground concrete tanks. When the influent is measured, it is transferred via two vertical chopper

pumps to the existing Woodward Avenue plant for processing. The complete operation is automatic from when the tankers are admitted to the station to their exit.

The system also includes a card entry system for the drivers and a keypad for entry of load data. This information is automatically forwarded to the Region's SCADA system for processing.

The unattended facility, which is completely automated, includes ventilation and exhaust, scrubber, pumps, transfer of influent, wash down of below ground tanks, hazardous vapour warning and alarm system and card entry system for the drivers.

Catch basin waste is dumped into a third underground vault containing a custom designed trailer for draining, hauling and dumping the waste at local landfill sites.

The services provided by Byrne Engineering Inc. included:

- Concept Development
- Preplanning
- Regulatory Approval Liaison
- Engineering Design
- Preparation of Contract Documents
- Contract Administration
- Construction Review

