# Peterborough Wastewater Treatment Plant tour, Organizer's Report

Nanda Affonso, P.Eng., Executive of the Peterborough Chapter of PEO in conjunction with Kent Keeling, Chief Environmental Officer of the City of Peterborough organized two tours of 20 participants each to visit the Peterborough Wastewater Treatment Plant. The tours took place on November 2nd and November 9th at 10:00 am for about 1.5 hours long. We had great attendance at the tours; we saw a total of 23 attendees .
The Plant is 425 Kennedy Road right next to the 115 Highway by-pass, and it is operated by the City of Peterborough and permitted by the Ministry of the Environment and Climate Change. Their website is
http://www.peterborough.ca/Living/City_Services/Environmental_Services/Environmental_Protection/Waste_Water_Treatment_Plant.htm

The tour was divided into 2 groups in order to allow better interaction while seeing the operation. We spent most of their time outside walking through the process in detail, from Raw Sewage to the final step of Sterilization (by UV lights). We also toured the Laboratory. This was quite interesting since it tied to the September tours of the Water Treatment Plant quite well. We also spent some time in the Operator's room.

The Plant was built in the mid1920's and has seen several expansions and small to large projects in the last 15 years. It has the capacity to receive 68.2 mega Litres of raw sewage per day. In the event of excess, storage tanks can handle the additional load (these were built 2 years ago).

The plant's backup generator is a diesel generator that can run the entire plant in the event of a power failure. It will only take 20 seconds to respond to power loss and a few minutes for all power to be restored by this 1500 kW generator.

The City of Peterborough as a number of pumping stations to pump sewage to a higher elevation, from areas where elevation is not suitable for gravity flow. Once in the Plant, the Process flows by gravity.

Another uniqueness to this facility is that is collects methane gases from the anaerobic digester. This is converted to electricity by a co-generator and used for heating up the digesters itself and the excess is sold back to the electric grid.

Report by Nanda Affonso, P.Eng.

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