Wastewater

Improving the Kitchener Wastewater Treatment Plant

Demolition of Plant 1 is in progress!

Pre-demolition activities kicked off in early April with demolition starting April 19th after receiving the demolition permit from the City of Kitchener.

Pre-demolition activities included site mobilization, site preparation, sediment and erosion control measures, abatement of designated substances and hazardous materials (asbestos) and removal of historical soil stockpiles.

Primary Clarifiers

Demolition activities have begun with the primary clarifiers. The clarifiers are being abandoned in place. This means all scrap steel will be removed and only the top portion of the concrete tank structure is being demolition to 30 cm below grade. The bulk of the concrete tank will be left in place with drainage holes pierced through the floor to allow drainage. The tanks will be filled with clean fill to match surrounding grades. Buried piping that runs between the clarifiers will be removed.

Clarifiers before demolition



Clarifiers after demolition



Aeration Tanks

Demolition of the aeration tanks is also in progress. The aeration tank is the largest structure of the project and consists of a large elevated concrete tanks structure subdivided into 28 tanks. A portion of the tanks were cleaned prior to the start of work while others remain partially filled with water and sludge. Water and sludge are being removed and conveyed back into the active plant for treatment.

The aeration tank will be partially abandoned in place and with the northeast corner fully removed to allow for a future sludge thickening building to be constructed. Abandonment will consist of the removal of the above grade portion of the tank to 30 cm below surrounding grade. Similar to the clarifiers, drainage holes will be created, and the area backfill to grade.

Scrap metal is actively sorted and shipped off site for recycling. Concrete is being stockpiles and will be crushed at the end of the work when all demolition is complete.

Aeration tanks before demolition



Aeration tanks during demolition



What's up next

- Importation of clean fill to backfill clarifiers. This will generate truck traffic through the designed truck routes (Homer Watson Blvd. to Pioneer Dr. to Green Valley Dr. to Mill Park Dr.)
- Finish dewatering the aeration tanks.
- Isolation of plant 1 from plant 2 followed by dewatering of the chlorine contact chamber.
- Removal of the steel bridges from the digester roofs which will be salvaged for re-use.

To date, no work has occurred on the project outside of the contract hours of 7am – 5pm, Monday to Friday.