Wastewater

Improving the Kitchener Wastewater Treatment Plant

Demolition of Plant 1 Continues

Demolition of Plant 1 continues on schedule. Here's a reminder of what the site looked like pre-demolition:



Here's what the site looked like in August 2023:



Pre-demolition activities have been completed, these included designated substance abatement, sludge and effluent water removal, and soil stockpile removal.

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Primary Clarifiers

Demolition activities continue within the primary clarifiers area. All scrap steel has been removed and the top portion of the concrete tank structure has been demolished to 30 cm below grade. Drainage holes have been pierced through the floor to allow drainage and three of the four clarifiers have been backfilled with clean imported fill. The return sludge pump building is partially demolished with the foundations slightly protruding from the ground.

What's left?

- The foundation of the return sludge pumping building will be removed to 30 cm below grade and backfilled to grade.
- The 4th clarifier will be backfilled to grade with clean fill.
- Buried piping that runs between the clarifiers will be removed.
- Underground piping that runs to chambers near the new UV building will be abandoned in place.

Clarifiers during demolition



Clarifiers partially backfilled



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 tank structure subdivided into 28 tanks.

All scrap metal has been removed and the aeration tank is approximately 50 per cent demolished. Crushed concrete from all other areas is being stockpiled in this area for crushing at the completion of the demolition work.

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Aeration tanks before demolition



Aeration tanks during demolition



What's left?

- Complete the full-depth demolition of the concrete tank.
- Crush concrete for offsite removal.
- Backfill the area with clean imported fill.

Digester Tanks

The abandoned digesters have been completely demolished and the area is 50 per cent backfilled to final grades.

Prior to the demolition, the contractor separated and removed two large bridge structures that supported the concrete roof of the digesters. The contractor salvaged the bridges and hopes to repurpose them on a future project.

Digesters Pre-Demolition



Digesters During Demolition



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What's left?

- Backfill the area with clean imported fill.

Chlorine Contact Tanks (CCT)

The Chlorine contact tanks have been dewatered and demolition has not started yet.

CCT Pre-Demolition **Curent CCT Conditions**



What's left:

- Remove residual water from tank.
- Demolish the walls down to the floor of the tank.
- Pierce holes in the bottom floor of the tank which will remain in place.
- Backfill the area to surrounding grades with clean fill.

What's up next for the demolition project?

- Complete demolition of remaining structures
- Crush and remove concrete material for re-use
- Importation of clean fill to backfill all areas. This will generate truck traffic through the designed truck routes
- Effluent watermain replacement
- Restoration all areas

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Other work at the plant – replacement of the administration building roof

Beginning the week of September 18 a contractor will begin work to replace the roof of the Administration Building at the Kitchener WWTP.

- The project expected to take three to four weeks to complete.
- A vac truck will be required for up to a week to remove existing granular material.
- Once the existing roof is removed, a hot asphalt roof will be installed.
- Work will be completed between 7 a.m. and 5 p.m. Monday to Friday.
- Work is weather dependent