



Water and Waste Department • Service des eaux et des déchets

Our File No: W-961

**RFP 84-2019 Concrete Assessment at the WTP
Questions and Answers from May 2, 2019 and May 14, 2019 Site Investigations**

Q1. Is the concrete degradation occurring throughout the entire treatment process?

A1. The concrete is suspected to be degrading in the processes between the pH adjustments (after the addition of sulphuric acid and before the addition of sodium hydroxide).

Q2. When was the concrete degradation first noticed?

A2. The Water Treatment Plant went into operation in December 2009 and the first signs of degradation were noticed in 2010.

Q3. Do the water nozzles/sprinklers at the end of the DAF tank work?

A3. Yes, these sprinklers are on a timer.

Q4. In the DAF tank, is the rinse water treated?

A4. Yes, the rinse water is treated and comes from the Deacon Booster Pumping Station. This water is process water that does not have fluoride and orthophosphate added.

Q5. How big are the channels after the DAF tanks?

A5. The channel off the back side of the DAF basins is approximately 2.9m x 2m x 100m. Exact dimensions are on the drawings.

Q6. How many ozone contact tanks are there?

A6. There are two ozone contact tanks.

Q7. Is the concrete degradation in the filter tanks consistent all the way down?

A7. Typically, the degradation is worse at the bottom.

Q8. Who was the supplier of the concrete used in the tanks?

A8. During the site investigation, the supplier information was not available.

Post Meeting Note: The supplier of the concrete used in the tanks was Lafarge. The City never received the mix design for the concrete foundation and concrete structures. However, the City does have the cylinder test reports and these will be provided to the successful Proponent.

Q9. Does the city have the engineering specs for the concrete?

A9. Yes, the specifications for the concrete are referenced in the confidential drawings and documents that were released after signing the non-disclosure agreement.

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Q10. Where does the water go after passing through the filters?

A10. Immediately after leaving the filters, the water enters common filter effluent piping, but discharges back into concrete channels immediately upstream of the chlorine contact chamber. The chlorine contact chamber is a long concrete channel which runs the length of the filter four times.

Q11. Are there tanks that can be taken out longer?

A11. The shutdown windows are included in the RFP.

Q12. Is there a lockout procedure when doing repairs?

A12. The WTP uses common locksets for lockout tagout (LOTO) work. This means all points requiring energy isolation will be locked using a set of common keyed locks. The single key that opens these locks will be placed into a group lockbox and locked. All individuals performing tasks associated with the LOTO work will apply personal locks to the group lockbox, ensuring that the key in the lockbox cannot be removed until all personal locks are removed.

Q13. Can we use chalk to mark the concrete in the tanks during inspection?

A13. The City will investigate available products.

Q14. Would the City provide top support during the inspections?

A14. Yes, the City will provide top support, including the safety hoists and ladders to get in and out of the tanks. All of the tanks and channels are considered confined space and appropriate confined space certification is required.

Q15. Can the City provide the scaffolding?

A15. Yes, the city can provide scaffolding for the inspection of the tanks if it is determined that it is required.

Q16. Will the City provide air monitoring and air supply?

A16. Yes, the city will provide air monitoring during the inspections. There is no self-contained breathing apparatus (SCBA) requirement for the inspections.

Q17. Is there a requirement for ventilation?

A17. If there were an issue with air quality, the City would ventilate the space prior to entry.

Q18. Have some tanks experienced a higher amount of degradation than others?

A18. It has been observed that some tanks have exhibited more degradation than others.

Q19. Was the concrete initially coated at construction?

A19. No, the concrete was not initially coated at construction.

Q20. Have any repairs been made since the initial build?

A20. No substantial repairs been made since the initial build. Small areas were patched in the washwater recovery tanks.

Q21. Does the assessment include the entire tank?

A21. Yes, the entire tank needs to be assessed.

Q22. Some of the tanks external walls (mostly within the hallways) have small leaks and the paint coating is blistering/weeping. Are these walls part of the scope of work?

A22. No, these walls are not part of the scope of work. Only the internal walls of the tanks and channels that are in contact with the process water are part of the scope of work.

Q23. Who is responsible for cleaning up the mess from core samples etc.?

A23. The Consultant will be responsible for returning the test site to original conditions. City employees will ensure that the tank is properly disinfected before it is put back into operation.

Q24. Will a list of Proponents who attended the site investigation be provided?

A24. No, the list of Proponents who attended the site investigation will not be provided.