



Memo

To Chris Mroczek, P.Eng., Toronto Water

From Konrad Oporski, P.Eng. - Wardrop Engineering Inc. DBA Tetra Tech

Date April 15, 2011

Document No. 1060300100-MEM-V0002-00

Project Name Rehabilitation of Primary and Secondary Clarifiers at ABTP

Subject Structural Condition Review of Primary Clarifier Tanks

Following my recent inspection of the Primary Clarifier Tank No. 4, I wish to confirm that its structural condition is very similar to the condition of the already reviewed and repaired in year 2010, Primary Tanks No. 5 and 6.

These tanks, although serviceable as a whole, exhibit severe structural deterioration at various areas including ceiling and walls above water level at the effluent end of the tank, scum collector troughs and the effluent weir beams.

As I indicated in my previous report of May 11, 2010, these areas require thorough restorative work involving replacement of deteriorated concrete cover to reinforcing bars in the roof slab, replacement of almost completely disintegrated effluent weir beams, sealing the water leaking cracks in walls and roof slab, and cleaning/repairing of the existing expansion joints.

The above work is necessary to inhibit the progress of deterioration and to reinstate structural capacity of the affected elements that is lost due to corrosion of reinforcing steel and deterioration of concrete cover to the reinforcing bars. Due to possibility of structural failure, at this stage of structural deterioration, the above deficiencies should be addressed as soon as possible.

Konrad Oporski, M.Eng., P.Eng. | Senior Engineer
Infrastructure & Environmental, Tetra Tech
Phone: +1.519.624.7223, ext. 23 | Fax: +1.519.624.7224
konrad.oporski@tetrattech.com