

February 23, 2018

The Honourable Chris Ballard, Minister of the Environment and Climate Change
Ministry of the Environment and Climate Change
11th Floor, Ferguson Block
77 Wellesley Street West
Toronto, Ontario M7A 2T5
minister.moecc@ontario.ca

Dear Minister Ballard,

RE: PACT POW's Response re Part II Request, the Minister's Order and the PRAP

We are writing to you as the Pickering Ajax Citizens Together Protecting Our Water (PACT POW) to formally request that you require the Duffin Creek Water Pollution Control Plant (WPCP) to implement seasonal tertiary treatment in order to significantly reduce the phosphorous load of its effluent. This request follows from our February 2014 request for a Part II Order under s. 16 of the *Environmental Assessment Act*, RSO 1990, c E18, your subsequent Order in April 2016 (the Order), and the resulting Phosphorous Reduction Action Plan (PRAP) Study completed in January 2018 by the Regional Municipalities of Durham and York (Regions). In the proposal put forward in the PRAP Study, the Regions have failed to comply with the Order.

The proposal does not address the current algae problems plaguing the Ajax shoreline. The overgrowth of algae is preventing citizens from enjoying their lakeshore, causing families to avoid its waters, preventing cyclists and pedestrians from using its trails, and barring nearby residents from using their backyards or even opening their windows in the summer months due to the stench from rotting algae. This is the situation at current levels of phosphorous load from the WPCP, which has been demonstrated to account for 98% of the phosphorous being discharged into Ajax's nearshore. The PRAP Study demonstrates that tertiary treatment has the capacity to reduce effluent phosphorous load to the levels required to remedy the algae problem nearshore. However, the Regions have deemed tertiary treatment "not necessary" to the solution. Instead, the Regions have recommended little more than the status quo. With the Duffin Creek WPCP forecasted to double its flow in the near future, the Regions' recommended approach of secondary treatment optimization and diffusers will only serve to increase the phosphorous load by over 2.5 times the current levels and aggravate the already nuisance-levels of algae growth. Optimization and diffusers are a short term fix to meet the 20:1 dilution rates in the ECA. The algae bloom will spread into Pickering to the west and beyond Whitby to the east. This fails to meet the Order requirement to prepare a study that determines "how phosphorous concentrations and loads in the effluent from the WPCP can be reduced to the lowest achievable level prior to entering the outfall...".



Figure 1: Photos of nuisance algae growth along Ajax's shoreline.

We know what the solution is, we know how to implement it, and there should be no reason not to require the Regions to implement it now. The Great Lakes Quality Agreement (GLWQA) of 1978 and Provincial Water Quality Objectives set in 1979 did a great job of cleaning up offshore pollution in our lakes. Now the focus has shifted to fully rehabilitating our nearshores. The new 2012 Great Lakes Water Quality Protocol (GLWQP) amending the GLWQA mandates new phosphorous reduction targets for nearshore waters with the goal of avoiding nuisance levels of algae growth. We are already taking this approach here in Ontario, with Lake Simcoe as an example. We now have to follow suit with respect to the nearshore surrounding the WPCP. In requiring the Regions to comply with the Order, we ask you to lead by example and protect Lake Ontario nearshore as we have protected Lake Simcoe.

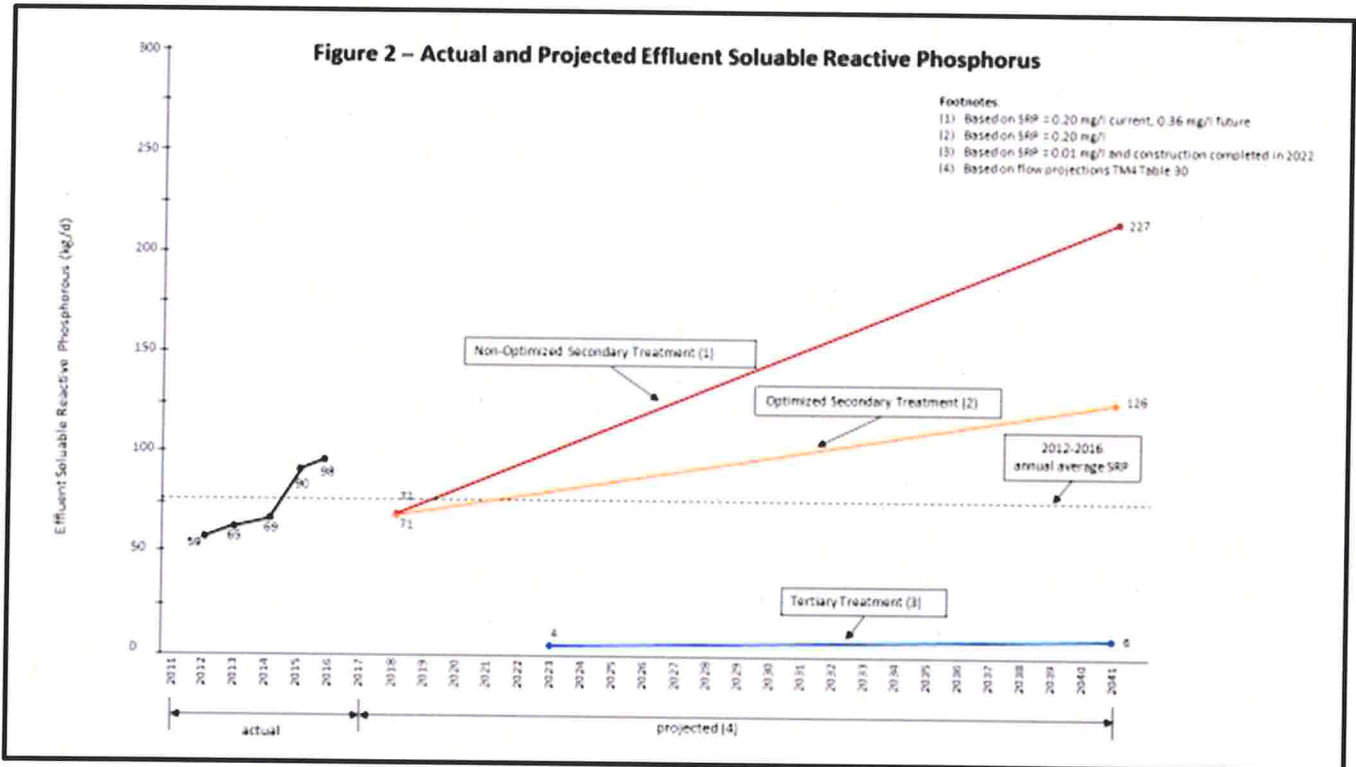


Figure 2: Graph showing the success of tertiary treatment (blue line) in reducing phosphorous levels compared to optimized secondary treatment (yellow line).

Furthermore, reclaiming and restoring our waterfront will likely cost less than \$200 Million between now and 2041. Over a 25-year lifecycle, the Regions have found that ballasted flocculation as a tertiary treatment will cost \$218 Million, using a decentralized construction. However, a centralized design would be just as functional and more cost-effective. The Town of Ajax's wastewater expert, Alan Saikkonen, confirms that the Region's cost estimate of \$206 Million for a centralized design is correct, already making it \$12 Million less. In addition, this number is likely over-estimated as the Regions calculated the cost based on a peak-load scenario of 1070 Million L/Day flowing through the WPCP. The average is only 630 Million L/Day, which is the number the Regions used to cost tertiary treatment options in their own Environmental Study Report, resulting in a lower cost estimate. There is no justification for using the higher flow estimate to calculate costs. A tertiary treatment capturing only average flow loads would have a vastly greater impact than proceeding under the current secondary treatment model under which zero litres of water undergo tertiary treatment. Finally, the Regions have added a 30% contingency to the cost estimate without justification. This is out of line with typical contingency rates and artificially inflates their cost estimates for tertiary treatment.

The Regions' own report demonstrates that Actiflo has "the potential to provide the lowest achievable [total phosphorous] and [soluble reactive phosphorous]" and that it is one of "the most cost-effective options when considering...lifecycle costs" (PRAP, s. 7.7). Durham and York already have the funds available to fund this option. Financial constraints should not be a reason for them to avoid taking this critical action, particularly as the identification of a method to *reduce* phosphorous in the effluent over the short, medium and long term was precisely what was mandated under the Order. The "polluter pays" system in place in Ontario additionally puts the onus on the Regions to rectify the destructive environmental situation that their own operations have caused.

We look to the Ministry to protect our waters for swimming, drinking, recreational pursuits, quality of life, and the health of all residents. The Towns of Ajax and Pickering have made their shorelines on Lake Ontario a public park for the enjoyment of all locals and visitors. The growth and smell of algae along the shoreline reduces the use and enjoyment of the beautiful lakeside park and nearby residences. The management of effluent by the Regions at the Duffin Creek WPCP should not be permitted to override the benefit the local municipalities seek to provide and into which millions of dollars of taxpayers' money has been invested over many years. We need your help to require the Regions to implement tertiary treatment in order to protect our waters.

Action is required now and a pro-active approach must be taken to remedy the situation. Over the years that the capacity upgrade to the WPCP has been under consideration, the phosphorous and algae problems have worsened. The status quo must not be permitted to continue. Change is required.

We ask that your decision be guided by the impact the effluent has on the natural environment around it. Currently, and under the Regions' proposed approach, that effluent has and will continue to have a significant negative impact to the water and shoreline habitat and to the resident of Ajax, Pickering and Whitby if tertiary treatment is not implemented now. This is not acceptable to residents, visitors, and the local municipalities, nor is it reflective of today's regard for environmental sustainability and the precautionary principle of environmental management. We ask that you require the Regions to implement tertiary treatment and help restore our waterfront.

Sincerely,


Paul Wealleans
Co-Chair


Joanne Dies
Co-Chair

Pickering Ajax Citizens Together to Protect Our Water

cc: Ms. Kathleen O'Neil, Director, Environmental Assessment and Permissions Branch, MOECC
Dr. Diane Saxe, Environmental Commissioner of Ontario
Mr. Roger Anderson, Regional Chair and CEO, The Regional Municipality of Durham
Mr. Barry Laverick, P.Eng., The Regional Municipality of Durham
Mr. Wayne Emmerson, Chairman and CEO, The Regional Municipality of York
Mr. Wayne Green, P. Eng., The Regional Municipality of York
Mr. Joe Dickson, MPP, Ajax-Pickering
His Worship Steve Parish, Mayor of the Town of Ajax
Members of Ajax Town Council

His Worship, David Ryan, Mayor of the City of Pickering
Members of Pickering City Council
Mr. Don Huff, Ecostrategy
Ms. Rebecca Harrison, Swim Drink Fish
Mr. Shane Schofield, Swim Drink Fish
Ms. Kristina Jackson, Sierra Club
Ms. Nancy Goucher, Fresh Water Future
Mr. Paul White, President, Fairport Beach Ratepayers Association
Mr. Andre Pilon, President, Pickering West Shore Community Association