

November 7, 2014

**VIA EMAIL**

Ms. Agatha Garcia-Wright  
Director, Environmental Approvals Branch  
Ministry of the Environment and Climate Change  
2 St. Clair Avenue West, Floor 12A  
Toronto, Ontario M4V 1L5

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File No. T949325

Dear Ms. Garcia-Wright:

**Re: Town of Ajax**  
**Duffin Creek Water Pollution Control Plant Outfall Class EA**  
**MOECC File: ENV1283MC-2007-364**

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In February 2014, the Town of Ajax (“Town”) submitted a Part II Order request in relation to the Regions of York and Durham’s Schedule C Class EA to Address Outfall Capacity Limitations at the Duffin Creek Water Pollution Control Plant (“Outfall EA”).

Subsequently, over the spring and summer of 2014, additional field and laboratory studies were undertaken by Dr. Auer and a team of scientists from the Michigan Technological University in relation to the *Cladophora* problem plaguing the Ajax waterfront. These studies included:

- Offshore sampling of SRP concentrations up to 22 km offshore of the Pickering-Ajax shoreline;
- Additional and more extensive plume tracking to characterize the impact the Duffin Creek WPCP, and other sources, discharge have on soluble reactive phosphorus (SRP) concentrations in the Pickering-Ajax nearshore; and
- Laboratory studies of cladophora nutrition, including stored phosphorus and phosphorus uptake rate, on algae samples taken from the Ajax nearshore.

The results of these studies, set out in the enclosed report titled “Phosphorus Provenance and Cladophora Growth in Lake Ontario” (the “Provenance Report”), strongly support the conclusion set out in Ajax’s Part II Order request, namely that the Duffin Creek WPCP is the proximal cause of the Cladophora problem along the Ajax nearshore. In particular,

- The Duffin Creek WPCP discharge creates a plume of SRP enriched water within the area of the nearshore where Cladophora growth occurs;

- The offshore waters of Lake Ontario do not exhibit SRP concentrations at levels capable of supporting nuisance-level growth of *Cladophora*. As such, local sources of SRP to the nearshore, are the drivers of nuisance conditions. Given that the Duffin Creek WPCP discharge is by far the largest and most constant local source of SRP to the nearshore, it should be the primary focus of future management efforts; and
- The stored-phosphorus concentrations and phosphorus uptake rates of *Cladophora* samples taken across the Pickering-Ajax nearshore indicate that algae in the vicinity of the Duffin Creek WPCP outfall is being exposed to more SRP than elsewhere in the Ajax nearshore. This pattern indicates that the Duffin Creek WPCP discharge is feeding the *Cladophora* with SRP and causing the excessive rates of growth associated with high stored-phosphorus concentrations and low uptake rates.

Ajax requests that the findings and conclusions outlined the Provenance Report be considered by the Minister when making a decision in relation to the Town's Part II Order Request.

In addition to the enclosed report, the Town will be providing the MOE with comments in relation to the Regions' submissions, on or before the November 28, 2014 deadline.

Yours very truly,

**GOWLING LAFLEUR HENDERSON LLP**



Jennifer Danahy, C.S.  
Partner



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cc: The Honourable Glen Murray, Minister of the Environment and Climate Change  
Joe Dickson, Member of Provincial Parliament for Ajax-Pickering  
Chris Alexander, Member of Parliament for Ajax-Pickering  
His Worship Mayor Steve Parish and Council, Town of Ajax  
Dan Orr, Manager, Technical Support Section, MOECC  
Dorothy Moszynski, Project Evaluator, MOECC  
Gord Miller, Environmental Commissioner of Ontario  
Brian Skinner, Chief Administrative Officer, Town of Ajax  
Paul Allore, Director of Planning & Development Services, Town of Ajax  
Cliff Curtis, Works Commissioner, Durham Region  
Erin Mahoney, Environmental Services Commissioner, York Region  
Tanya Nayler, Ecojustice