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April 11, 2013

The Hon. Kathleen Wynne, Premier of Ontario Room 281, Main Legislative Building Queen's Park Toronto, ON M7A 1A1

Hon. David Orazietti, Minister of Natural Resources Suite 6630, 6<sup>th</sup> Floor, Whitney Block 99 Wellesley Street West Toronto, ON M7A 1W3

Hon. James Bradley Minister of the Environment 11<sup>th</sup> Floor, Ferguson Block 77 Wellesley Street West Toronto, ON M7A 2T5

Dear Hon. Premier Wynne, Ministers Orazietti and Bradley:

The Association to Protect Amherst Island is a registered Association of 350 members formed to benefit Amherst Island and its residents. Its principal objective is to stop the installation of 33-37, 50-storey industrial-scale wind turbines proposed by Algonquin Power for Amherst Island. This project is opposed by more than 80% of Island residents who have said clearly, and often, that Amherst Island is NOT a 'willing host'!

Algonquin is required to prepare an REA report on 'Decommissioning' turbines, their takedown and removal of turbines at the end of their useful life. Algonquin's report is severely deficient.

- 1. Algonquin says it may sell the Amherst Island project to another developer before completion.
- 2. Few details are given about HOW Algonquin would undertake the 'decommissioning' and nothing is said about recycling turbine components.
- 3. Algonquin has offered NO money to take down or remove aging turbines on Amherst Island.

# SOME RECENT U.S. EXPERIENCE:

A report from Falmouth, Massachusetts, in March 2013 estimates \$9 million to \$12 million to take down two turbines the Community does not want.

It has been estimated that there are 14,000 abandoned turbines standing in place in the U.S. today.

#### EUROPEAN EXPERIENCE:

Europe has banned wind-turbine blades from landfills and any cut-up turbine blades from secondary use because of the PCB and BPA components in the blades.

One European estimate states that within 20 years there will be, in Europe, a 225,000-tonne mountain of unrecyclable turbine blades.

#### LIFE EXPECTANCY OF TURBINES:

OPA's 'supply' contracts with developers are for 20 years. Evidence suggests:

- a) At 7 to 10 years, heavy maintenance is expected. (Turbine fires are the second most frequent turbine accident. Note the recent turbine fire in Goderich.)
- b) 12-15 years seems a more realistic average 'end-of-life' age for turbines. The oldest Ontario turbines are 7 8 years old and costly maintenance looms.

# PROVINCIAL READINESS TO RECYCLE OUT-OF-SERVICE TURBINES:

Wind turbine blades are constructed of carbon fibre, which contains epoxy resins made from Bisphenol A (BPA) and PCBs. In Canada, BPA is banned as a toxic substance, so end-of-life turbine blades will not be allowed in Ontario landfills and cannot be economically recycled. Cutting them up on site, which must be done in preparation for disposal and renewal no matter WHO is responsible, releases toxins into the surrounding air and water? This will severely impact Amherst Island residences, churches and the island school.

Abandoned turbine blades degrade over time, releasing BPA into soils and water systems. A 1.5 MW industrial wind turbine contains approximately 10 tons of BPA-based polycarbonate and epoxy resins. The turbines proposed for Amherst Island are MUCH LARGER than 1.5 MW. BPA is also present in the wiring insulation, high voltage insulators, circuit boards and even in the paints used. (For 'health effects' see: <u>http://en.wikipedia.org/wiki/Bisphenol\_A</u>)

# ONTARIO MUST BE READY:

Decommissioning huge turbines with all their parts, including steel masts, turbine blades, machinery and nacelles, which contain hundreds of litres of hydraulic fluids and rare-earth elements, represents an enormous cost and one that the Province must face as its turbines age.

How will the Province finance this if the developer does not plan to pay and the Township cannot afford it?

Neither the Province nor the developer has provided for safe recycling centres or safe landfill sites for disposal of these dangerous components. Wind developers' claim that decommissioning of turbines actually represents an opportunity to make money from turbine scrap is false, particularly on small Amherst Island. One estimate from a recent study done in Arlington, Virginia shows that a wind turbine developer underestimated decommissioning costs by 50%.

#### THE AMHERST ISLAND CASE:

If the proposed wind-turbine project were to be approved:

- Algonquin may sell the project before completion.
- Algonquin offers no security money.
- Decommissioning costs will exceed the capability of the Township.
- There are no landfills or recycling centres in Ontario where discarded turbines or their parts can be taken.
- Are local landowners who contracted for turbines financially liable for turbine removal?

The Algonquin proposal predicates the abandonment of toxic waste on Amherst Island and the destruction of a vital, environmentally pristine heritage Community. Island children, some from five-generation families whose homes, school and daily lives will be threatened by these turbines deserve a better future from our elected representatives.

We urge the Premier and her Ministers to stop Algonquin's proposal on an Island too small and too vulnerable to absorb, not only the construction of this project, but its inevitable decommissioning.

Peter G.S. Large, P.Eng, President, APAI In partnership with SAVE AI

P.P. RG

C.C.

- Mr. Randy Hillier, MPP
- Hon. Jeff Leal, Minister of Rural Affairs
- Mr. Eric Prevost, MNR
- Mayor Bill Lowry and Loyalist Township Council
- Mr. Eric Gillespie, LL.B
- Mr. Paul Schliesmann, The Whig Standard
- Mr. Peter Hendra, The Whig Standard
- Ms Doris Dumais, Director, Environmental Approvals Access and Service integration Branch
- Mr. Ian Robertson, CEO, Algonquin Power Co.
- Wind Concerns Ontario