



association to protect AMHERST ISLAND

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January, 15th, 2015

Ms. Sarah Paul,
Director Environmental Approvals
Ministry of the Environment and Climate Change
2 St. Clair West, Floor 12A
Toronto, ON M4V 1L5

Dear Ms. Paul,

In October I wrote to your predecessor, Ms. Garcia-Wright, concerning the groundwater issues with the Windlectric wind energy proposal for Amherst Island. A copy was sent to the Technical Review team. To summarize:

- STANTEC's Construction Plan Report describes plans for extensive excavation over much of Amherst Island.
- No mention is made of 3 professional groundwater studies that included Amherst Island
- In STANTEC's Report Section 'Potential Environmental Effects and Mitigation Measures', (Section 3), no mention is made of groundwater, its vulnerability due to the fractured limestone base of the Island, the shallow wells, and the closeness to the surface that 'first water' levels are.
- No mention or awareness is indicated of the vulnerability that the Island groundwater supply is to the widespread construction proposed.
- No mention is made in Section 4 of the Construction Environmental Management Plan of groundwater vulnerability, the risk to the shallow wells widespread on the Island; no mention is made of any possible mitigation or protection of the groundwater from pollution-carrying surface water flowing into the groundwater aquifer through the extensive project excavations.
- The Report indicates no awareness that the Island is made of fractured limestone and of the potential threats from new contamination as described in the Trow report in the section '*Potential Threats For New Contaminants*'; particularly from 'surficial activities', meaning construction, excavation, blasting etc. and development that does not take the vulnerability of the aquifer into account when planning construction activities.

Ms. Garcia-Wright replied in a letter of October 10th. In part, she wrote:
“Windlectric has confirmed that geotechnical investigations of all proposed turbine locations have been conducted and that the results will dictate the foundation design for the turbines. In Appendix B of the Construction plan Report, Windlectric Inc. considered the potential effects to groundwater during construction and developed mitigation measures and monitoring plans. Windlectric Inc. has also committed to have a detailed construction plan that includes site procedures based on regulatory requirements and accepted site practices. The plan incorporates mitigation measures, monitoring plans and management plans identified in the REA reports, including an Emergency Response and Communications Plan containing procedures for spill contingency and response plans.”

I followed up with a detailed response (letter of October 15th, 2015) noting a number of concerns, including:

- Windlectric concluded that the soil and bedrock are conducive for design and construction of the proposed project. As is known, from the professional groundwater studies, the bedrock is fractured limestone and not suitable.
- There is need before the project is approved for a detailed geotechnical plan for the impact on groundwater and mitigation measures in the event of reaching groundwater. The geotechnical plan needs to be signed by a professional hydro-geologist and made available to the Ministry and public for comment.
- As you will know, there is no Emergency Response and Communication Plan for the project.

The bedrock is totally vulnerable to shocks from blasting, hoe-ramming and excavation. Windlectric appears to remain unconcerned about this 'vulnerability', which is the vulnerability of the Island's groundwater supply.¹ (See the attached Volume 1 of the 2007 Trow Report, made public well before Windlectric's contract with the OPA.) Windlectric continues to ignore the fact that 450 people and hundreds of livestock depend upon clean groundwater for their ONLY source of potable water. Windlectric's proposal:

- makes no mention of well and aquifer locations on Amherst island.
- makes no mention of the number of active wells on the Island, their flow rates and water quality which must be preserved.

Regarding the implication that detailed design is not required by the REA, then where does the responsibility for oversight of the “detailed design” lie?

Ms. Garcia-Wright's only response to the groundwater issue in her November 7th, 2014 letter is: “Your concerns have been sent to the Ministry's “technical water reviewers”.”

¹ The map from the Western Cataraqui Regional Groundwater Study is shown as an Appendix. Shaded in red is “very high sensitivity” and in tan is “moderate to high sensitivity”

We asked, (and are asking again) that you ensure that detailed geotechnical studies be made available for review by all agencies and the public, particularly residents on Amherst Island.

Please ensure that those studies include ALL well and aquifer locations on the Island, their flows and water quality along with their proximity to proposed turbine foundation excavations, access roads, lay-down and dumping areas, foundations for proposed buildings etc.. This time, please ensure that Algonquin Power and Stantec recognize that there is an active, vibrant farming and rural community already long-established here whose very existence relies upon clean groundwater and for which the proposed project is a VERY REAL THREAT.

Once again, we point out that Amherst Island is the WRONG place a 75 MW wind energy development and that the Algonquin/Windlectric proposal and must not be approved.

Peter G.S. Large, P.Eng, President,
The Association to Protect Amherst Island (APAI)

cc: Minister Glen Murray, Environment and Climate Change.
Ms. Susanne Edwards, MOECC
Ms. Sue Lo, ADM, MOECC (Drinking Water Management)
Dr. Eric Hoskins, Minister of Health
Mayor Bill Lowry and Loyalist Township Council.
Cataraqui Region Conservation Authority.

APPENDIX

