



Thames - Sydenham and Region
c/o Upper Thames River Conservation Authority
1424 Clarke Road, London, ON, N5V 5B9

June 18, 2010

Ian Smith, Director
SOURCE PROTECTION PROGRAMS BRANCH
8th Floor,
2 St Clair Ave W,
Toronto, ON, M4V1L5

Dear Ian

Re: Wind power development in Intake Protection Zones

Through consultation on the LTV proposed Assessment Report a concern was raised that a proposed wind power development in Lake Erie may be a threat to drinking water sources. We understand that this same concern was raised to the Essex Region Source Protection Committee who has been considering the impacts of this development on drinking water sources in their region. The Thames-Sydenham and Region Source Protection Committee has requested that I write to you to express its interest in this type of activity and how it might affect drinking water sources.

Recently I passed along the committee's concern over geothermal energy development and its potential impacts on groundwater sources of drinking water. Similarly, the committee is concerned that other types of energy development under the Green Energy Act may have an impact on Source Protection. It will be important that all development of energy sources consider the impact on the environment and in particular drinking water sources. Source Protection is intended to be precautionary in nature and therefore it is important to consider the potential impact of these types of activities in the vulnerable areas, even if the proposed development is not proceeding in the Thames-Sydenham and Region at this time.

At its last meeting the committee discussed concerns related to wind turbine which included the following:

- construction
 - sediment re-suspension from the construction of the foundation and laying cables to the turbines
 - fuel storage/use and refuelling activities during construction
 - hydraulic oils and solvents in the generation equipment as well as the construction equipment.

Lower Thames Valley Conservation Authority
100 Thames Street, Chatham, Ontario,
N7L 2Y8

St. Clair Region Conservation Authority
205 Mill Pond Cres., Strathroy, Ontario,
N7G 3P9

Upper Thames River Conservation Authority
1424 Clarke Road, London, ON
N5V 5B9

phone 519-354-7310, fax 519-352-3435

phone 519-245-3710, fax. 519-245-3348

phone 519-451-2800, fax 519-451-1188



- physical damage to the intake from marine vessels during construction;
- operation and maintenance
 - storage of hydraulic and lubricating oils (or other chemicals)
 - boat traffic changes
 - changes in wave and wind action on the sediment transportation in and around the intake protection zone; and
- decommissioning
 - Construction activities similar to the construction phase.

While the oils and lubricants in the equipment may be considered through one or more of the provincially prescribed threats, construction and decommissioning activities do not seem to be able to be considered in this manner. Temporary activities, such as this, need to be considered in Source Protection Planning. Further, re-suspension of sediment through construction activity is of greater concern in an intake protection zone where turbidity or suspended solids are identified as issues.

Our committee does not wish to duplicate the efforts of the province or other Source Protection Committees. As such we will watch with interest how other committees are dealing with these types of considerations. We have informed the Essex Region Source Protection Committee and ERCA of our interest in their work related to this. If you are aware of other Source Protection Committees who are considering this type of activity please let us know. We would also ask that you keep us informed as to the province's efforts in considering threats related to these activities and advise how threats related to temporary construction activities may be considered. Also, please continue to keep our committee informed as to similar future developments.

Yours truly,
THAMES-SYDENHAM and REGION

Robert Bedggood, Chair
Source Protection Committee

cc Thames-Sydenham and Region Source Protection Committee
Stan Taylor, ERCA
Tom Fuerth, ERSPC
Eric Boysen, Director - RENEWABLE ENERGY PROGRAM, MNR
Sue Lo, ADM - Renewables and Energy Efficiency, Ministry of Energy and Infrastructure
Dan Thompson, Department of Fisheries and Oceans