

Ministry  
of the  
Environment

Environmental Programs Division  
135 St. Clair Avenue West  
Toronto ON M4V 1P5

Ministère  
de  
l'Environnement

Division des programmes environnementaux  
135, avenue St. Clair ouest  
Toronto ON M4V 1P5



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August 28, 2009

Isra G. Levy  
Medical Officer of Health  
Ottawa Public Health  
100 Constellation Crescent  
Ottawa, ON K2G 6J8

Dear Mr. Levy:

Thank you for your letter of July 14, 2009 to Deputy Beggs with regard to wind turbine health effects. I have been asked to respond on her behalf.

The Ministry of the Environment (MOE) is committed to ensuring that renewable energy generation facilities are sited and operated in a manner that is protective of human health and the environment. Our goals are to provide certainty with respect to provincial standards and to ensure transparency and public review as projects proceed.

It is proposed that wind turbines would not be permitted less than 550 metres from the nearest dwelling and this minimum noise setback would increase with the number and loudness of the turbines. This setback is consistent with the existing MOE Noise Guidelines for Wind Farms (October 2008) and the noise level limit of 40 dBA at the point of reception, taking into account conservative assumptions, such as a clustered wind farm design. There would also be ongoing requirements to monitor and address any perceptible infrasound (vibration) or low frequency noise as a condition of the Renewable Energy Approval.

Before adopting the 40 dBA limit for wind turbines, Ontario conducted a jurisdictional review – and Ontario remains a leading jurisdiction with fairly conservative standards. Ontario is the only jurisdiction, to our knowledge, that is setting a provincial standard for minimum wind turbine setbacks on land from residences. Some jurisdictions use 35 dBA but many have limits at 45 dBA or higher. The World Health Organization (WHO) recommends 30 dBA or less of continuous noise. The Ministry of the Environment's limit of 40 dBA applies at the outside of a house or other Point of Reception. Depending on the type of structure and the walls and insulation, there are sound transmission losses of about 15-20 dBA which would make Ontario's 40 dB limit comparable to an indoor limit of 25 dBA.

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Office of the  
MEDICAL OFFICER OF HEALTH  
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The Ministry of the Environment will also establish and fund an academic research Chair in renewable energy technologies and health. As part of the Chair's work, she/he will conduct literature reviews on the current scientific understanding of renewable energy health effects and best practices for siting renewable energy projects to ensure human health is protected.

Thank you for bringing your concerns to our attention.

Sincerely,



Paul Evans  
Assistant Deputy Minister  
Environmental Programs Division

c: Gail Beggs  
Deputy Minister  
Ministry of the Environment

Mr. John McKinley  
Deputy Minister (A)  
Ministry of Health and Long-Term Care

Dr. Arlene King  
Chief Medical Officer of Health

Dr. Vivek Goel  
President and Chief Executive Officer  
Ontario Agency for Health Protection and Promotion

Mr. Steve Kanellakos  
Deputy City Manager, Operations  
City of Ottawa