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February 29, 2008

Greg Malczewski  
Policy Adviser  
Ministry of the Environment  
Integrated Environmental Planning Division  
Air Policy and Climate Change Branch  
135 St. Clair Avenue West, Floor 4  
Toronto, ON M4V 1P5

Dear Mr. Malczewski,

I am pleased to provide comments on the recent posting on EBR entitled *Emission Limits for Internal Combustion Engines used for Non-Emergency Power Generation* (EBR Registry Number 010-2463).

As the Medical Officer of Health for Toronto, I am responsible for protecting the health of Toronto's residents by encouraging healthy public policy, including environmental quality. I believe that we must minimize reliance on fossil fuel power generation, and that our first priority must be efforts to reduce peak consumption and promote green power. I therefore do not support the proposal to allow internal combustion engines which burn fuels such as diesel to be used to meet peak demand for power.

These generators produce a mix of air pollutants which are harmful to health. Toronto Public Health estimates that 1,700 premature deaths and 6,000 hospitalizations occur in Toronto annually as a result of air pollution. Diesel generators operating in Toronto will aggravate local air pollution problems, often in densely populated areas where many people are exposed.

During peak times, coal-fired and natural gas power plants generally operate at or near full capacity, contributing to air pollution in the City. As well, maximum demand often occurs on the hottest days of the year, when the weather conditions intensify air pollution problems in the city. If the generators are used to meet peak electricity demand, their emissions will add to air pollution in the city at times when the air quality is already at its poorest.

The notice indicates that the proposed limits will assure that emissions from generator sets are similar to those from natural gas combustion turbines. It is not clear that this is the case.

The proposed limits are mostly based on U.S. Environmental Protection Agency standards for all combustion engines, rather than for natural gas combustion turbines specifically. The MOE's proposal would limit NO<sub>x</sub> emissions from diesel generators to 0.4 kg/MWh by 2011, which is higher than what is possible for natural gas: the Canadian Gas Association suggests that emissions of NO<sub>x</sub> from natural gas can be as low as 0.04 kg/MWh. In addition, diesel generators are likely to emit more sulphur dioxide, carbon monoxide, particulate matter and greenhouse gases than natural gas combustion turbines per unit of energy produced.

The Province of Ontario has made a commitment to phase out coal-fired power plants in the province, to improve the quality of our air and the health of our citizens. For maximum health benefits to be realized, we should strive to decrease emissions as much as possible and as soon as less polluting sources of power become available. Some of the gains achieved by phasing out coal could be reversed if coal-based power is replaced by diesel-powered generators.

The Province should focus its efforts on energy conservation and efficiency, and set targets to reduce peak day demand. I support the "Turndown" component of the Emergency Load Reduction Program which reduces total demand for electricity. Consumers must also be encouraged to shift use to off-peak periods. The provincial smart metering initiative is an excellent example of the kind of programs that should continue to be promoted. The Government must also continue to focus on renewable power, building on recent initiatives such as the procurement of wind power and investment in the solar roofs project.

The Province must continue to strive to meet its energy needs through a combination of conservation, efficiency, and green power. Internal combustion engines which rely on fuels such as diesel should only be an option in case of emergency.

Sincerely,

*Original signed by Dr. David McKeown*

David McKeown, MDCM, MHSc, FRCPC  
Medical Officer of Health