



Meridian East Quarry Expansion – Air Quality Assessment Problems

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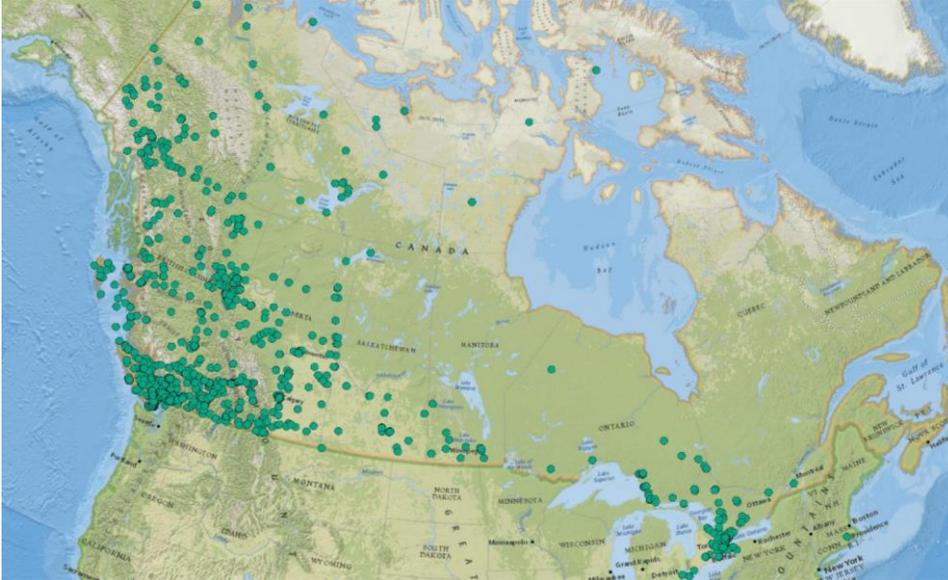
About Hemmera

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With a reputation for integrity and technical excellence, Hemmera offers progressive environmental services in Site Assessment and Remediation, Environmental Planning and Ecology, and Community Engagement and Social Sciences.



Our Projects Across Canada



Franco DiGiovanni

- Expert in Air Quality
- Author IAIA Guide on AQ Assessments
- Joint author of OPJ paper critiquing MECP D-series for Compatibility Assessments
- BSc(HONS) Geology, PhD Dispersion Modeling
- Qualified before OMB re air quality and gravel pits
- Senior Manager of Air Quality Services for Eastern Canada



Work for City of Burlington



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- Review of Air Quality aspects of Nelson Quarry Expansion
- “Land Use Compatibility (Environmental) 101” – provided to Planning, 18 April 2016 [Leah Smith]
- Currently represent Region and Municipalities in case against CN Milton Logistics Hub
- Town of Oakville HPAQ bylaw

Re-zoning Requirements – City Responsibilities

- PPS requires no “adverse effects” (s.1.2.6.1)
- D-series of guides
- Municipal responsibility (since 1995)
- Air/noise impacts of entire site and all proposed uses (even future ones) are responsibility of proponent.
- Municipality is required to impose that responsibility



Air Quality Impacts of Quarries and Gravel Pits

- Sources – dust from site preparation, extraction, gravel road traffic; Internal Engine Combustion emissions from vehicles
- Contaminants – dust (TSP/PM10/PM2.5), crystalline silica, ?other minerals?; B(a)P, benzene
- Potential health effects of these contaminants at high levels – cancer, respiratory problems, premature death



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Was the original subdivision proposal appropriately dealt with?



- Reviews of original reports and gap analysis required
- Have gaps been appropriately filled by Meridian's current reports?
- What legal responsibility does Meridian (or the City) bear for the re-analysis?

Problems with Current Meridian Air Studies

- Meridian admits exceedances of AQ guidelines (HIA requires 3rd party review)
- Copy of models and emissions calculations required to allow full review
- Study: (i) dust not speciated, (ii) prep and rehab activities ignored, (iii) auditing claimed maximal operations?, (iv) no basis for water control effectiveness, (v) baseline uncertain and lacking hotspot analysis



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Land Use Compatibility PPS (2014, p. 1.2.6.1)

“Major facilities and sensitive land uses should be planned to ensure they are appropriately designed, buffered and/or separated from each other to prevent or mitigate adverse effects from odour, noise and other contaminants, minimize risk to public health and safety, and to ensure the long-term viability of major facilities.”

- *adverse effects* = EPA definition

MECP Review

- Limited review (OReg 419 “compliance”, etc.)



- Issues not recognized

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Unsuitability of “OReg 419” methods

Guidance on Site-specific Study: Permitting procedures not suitable [MOE’s draft revised “Procedure” document] (see also OPJ 30:3)

Procedure for Preparing an ESDM Report	draft Version 4.0
1.0 INTRODUCTION	
<p><u>Ontario’s local air quality regulation (O. Reg. Ontario Regulation 419/05: Air Pollution – Local Air Quality (the Regulation) made under the Environmental Protection Act (EPA) is the regulation that is intended to protect communities against adverse effects from local sources of air emissions¹.—419/05: Air Pollution – Local Air Quality) works within the province’s air management framework by regulating air contaminants released into communities by various sources, including local industrial and commercial facilities². The regulation aims to limit exposure to substances released into air that can affect human health and the environment, while allowing industry to operate responsibly under a set of rules that is publicly transparent.</u></p>	

Gap Analysis



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- Review original LUCA decision, and responsibilities
- Confirm current responsibilities of MECP
- Work: (i) re-assessment, (ii) cessation?, (iii) mitigation?, (iv) who pays (liability)?

Protecting Burlington's Residences and The City

- Health and safety of residents top priority
- Have the City's liabilities been identified and managed?



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City of Burlington: A “Best Practise” Leader



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@SQLSailor

- Downloaded LUCA responsibilities have continued to be a problem
- City of Burlington can “do it right” and be an example

An aerial photograph of a railway track cutting through a dense forest. The track is surrounded by green trees and a rocky embankment. A white pipe lies on the ground near the tracks.

Thank You. Questions?

Contact Us

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