

## Straight Talk On...

### Air Quality Assessment

Air quality is one of seven evaluation factors that are being assessed as part of the DRIC environmental assessment (EA) study. Our air quality specialists are working in consultation with provincial and federal agencies to not only identify the air quality impacts for crossing, plaza and access road options but to also identify how these impacts can be mitigated.

A detailed work plan, reviewed by the Ontario Ministry of the Environment (MOE), Health Canada (HC) and Environment Canada (EC), outlines how the DRIC study team will assess air quality. The Government of Ontario takes the concerns of the Windsor community very seriously. In response to public input, the DRIC study team has added a field measurement component to the existing Air Quality work plan. This new component will improve our understanding of the current air quality conditions adjacent to the Huron Church/Highway 3 corridor. This is an extraordinary measure that is being taken only in Windsor, directly in response to the community. It is not a normal part of the Ministry of Transportation's Environmental Assessment studies.

Also included in the work plan is the use of air quality prediction models, or computer modelling. Accepted by EC, HC, and MOE, as well as various U.S. government agencies, these proven, state-of-the art, computerized air quality prediction models are widely used across North America for transportation projects.

Models will allow the DRIC study team to make informed and reliable decisions about the air quality impacts of the access road options. The models will use background information on pollutants collected at the existing MOE monitoring stations in Windsor, as well as the information gathered from the refined field measurement component.

The air quality prediction models are reliable tools that take into account:

- Ambient concentrations of airborne pollutants;
- Meteorological data from Windsor;
- Current traffic conditions;
- Future traffic conditions;
- Changes in emissions regulations;
- Changes in contaminant levels in fuels;
- Differences in Canadian and U.S. vehicles and fuels; and
- Load dispersion characteristics due to different climatic conditions.

As part of the Environmental Assessment process, it is important to understand future conditions associated with the various alternatives. Only modelling can reliably predict future conditions. The modelling approach allows for the comparative assessment of the five different access road options (including at-grade, depressed and tunnelled). If modeling indicates that future conditions would be unacceptable, mitigation measures will be developed.

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