

Port Hope Project Noise Impact Assessment Update

The *Noise Impact Assessment in Support of the Environmental Assessment for the Port Hope Project* provides updated information on the potential for increases in noise levels associated with major project activities and project traffic in Port Hope. This fact sheet summarizes the overall findings of the study. Copies of the complete report are available at the Project Information Exchange at 115 Toronto Road in Port Hope.

Why was this update undertaken?

The 2014 noise impact assessment was undertaken to update data in the 2006 Environmental Assessment (EA) for the Port Hope Project. The EA included predictions of the potential noise impacts from the project's activities over the course of the construction phase. These predictions were based on the assumptions that the landscape is flat and that noise travels equally in all directions. Shielding (noise reduction) effects of urban features, such as buildings or roads, were not taken into consideration. In addition, the EA noise modeling used only peak construction activities and peak traffic volumes to assess "worst-case scenario" impacts. Together these assumptions resulted in predictions that were very conservative and, in some cases, over-predicted noise impacts.

The updated noise impact assessment uses more advanced modelling techniques that include the effects of the actual landscape as well as shielding, recognizing that sound does not travel equally in all directions. Based on this, these techniques produce more accurate predictions of potential noise impacts.

How was the study conducted?

Continuous noise monitoring was conducted along the designated project transportation routes and at various locations in neighbourhoods around Ward 1 in Port Hope to establish typical noise levels currently experienced by residents. Increases in noise levels were then determined by comparing those levels to predicted future noise with and without the addition of noise associated with the project. Noise modelling considered scenarios that included changes in local road and rail traffic over the course of the project and the influence of major industrial noise sources, in addition to the noise from project-related construction equipment at each major clean-up site.

How have the predictions for noise impacts changed?

The updated data predict that project-related noise increases at most residential locations are likely to be substantially less than previously predicted in the EA. In most residential areas, noise impacts associated with major project activities are expected to be low to moderate. Although the maximum zone of influence – that is, the farthest distance that project-related noise will travel – is predicted to increase in some directions from clean-up activities at the Highland Drive Landfill area and Centre Pier, the impact of this noise remains moderate. In all other cases, the updated noise assessment predicts that project noise will have far less of an impact than previously thought.

Criteria used in noise update:

The updated study employed a set of generally accepted criteria to assess noise impacts within the maximum zone of influence:

- Noise levels that exceeded background by three decibels or less were not considered to be perceptible;
- An incremental change of four to five decibels was considered noticeable, but low impact;
- Incremental changes between six and 10 decibels were considered moderate to high and would be clearly audible.



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