



Moving Ahead

Radioactivity survey – no surprises

Last fall, residents of the entire area from Newtonville to the east end of Port Hope, south of County Road Two may have noticed a low-flying helicopter conducting an aerial radioactivity survey. Results presented to the public last weekend at Expo '02 showed no previously unidentified areas contaminated with historic low-level radioactive waste (LLRW).

A highly sensitive gamma radiation spectrometer was used to survey the five kilometre by 18 kilometre area in the southern portion of the Municipalities of Port Hope and Clarington. The airborne gamma survey was followed up by road surveys carried out using a van with similar equipment detecting radioactivity beneath and beside the vehicle, covering the width of the municipal road allowances.

These surveys were carried out on behalf of the Low-Level Radioactive Waste Management Office (LLRWMO) as part of the Port Hope Area Initiative to implement the community-initiated solutions for the long-term management of local historic low-level radioactive waste.

Data transferred to maps

Dr. Bob Grasty of Gamma-Bob Inc. has been conducting similar airborne surveys since 1968 for international clients such as the Government of Canada and the United Nations. "There is an advantage to flying as low as possible," says Dr. Grasty. The aircraft flew only 90 metres above the urban areas and 50 metres above rural areas. "Closer surveillance means more accurate measurements can be obtained and lower levels of radiation can be detected," he explains.

Through computer-aided technology, the data collected by the survey equipment was transferred to a map depicting the natural levels of potassium, uranium and thorium found on the land surveyed. Data from this survey were compared to a similar map of this area produced in 1976. Results revealed no previously unknown contaminated areas and the identified sites exhibited lower radiation levels than they had in 1976.

This reduction is due to clean-up and interim waste management activities conducted over the intervening years.

The road survey identified many small pockets of marginally contaminated material which will be incorporated into the final clean-up plans. Three areas identified on the road survey slightly exceed the allowable annual radiation dose limit set by the Canadian Nuclear Safety

Commission, but Dr. Grasty said that there was no cause for public concern since a person would have to be on the spot 24 hours a day, every day for a year, to receive a dose over the limit. The next step in completing the radiological surveys of the Port Hope Area will include the resurvey of properties in Port Hope as part of the Port Hope Area Initiative.



Dr. Bob Grasty and Mark Gardiner at Expo '02

Putting it in perspective

Mark Gardiner, Project Specialist with the LLRWMO, notes that we receive a radiation dose from naturally-occurring sources in the environment. Soil and rocks contain naturally radioactive potassium, uranium and thorium; cosmic radiation comes through the atmosphere from space; and we even receive a dose of radiation from naturally radioactive materials within our own bodies. For instance, he notes, "The data we collected recently indicate that places like Las Vegas and Denver exhibit natural background radiation levels that exceed any levels in the Port Hope Area."

Learn more about the survey data by contacting the LLRWMO Project Information Exchange at 110 Walton Street, Port Hope (905) 885-0291.



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This regular column is published by the Low-Level Radioactive Waste Management Office to inform local residents of progress on the clean-up and safe long-term storage of low-level radioactive waste in the area.

For copies of this column or additional information call 905 885-0291, or visit the Project Information Exchange at 110 Walton Street in Port Hope.

Visit the Project Information Exchange, 110 Walton Street, Port Hope 10:00-5:00 Thurs. to Sat.

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Low-Level Radioactive Waste Management Office