# Open Houses and Forum

Watch for dates and times in the new year.

Open houses on preferred alternative means concepts for the Port Hope and Port Granby Projects

Forum on Human Health and Safety

# The Initiative goes to the fair!

Hundreds of interested local residents and out-of-town visitors dropped in to the Port Hope Area Initiative's booth at the Port Hope Fall Fair September 12 to 14. LLRWMO staff talked with visitors as they viewed the displays, asked questions and offered comments about the cleanup and long-term management of historic low-level radioactive waste.







### Here's how to reach us:

Project Information Exchange 110 Walton Street, Port Hope Hours: Open 1:00 p.m. to 5:00 p.m. Monday through Friday Saturday by appointment Telephone: 905-885-0291 Toll-free: 1-866-255-2755

Fax: 905-885-0273 email: info@llrwmo.org

Publié aussi en français

Low-Level Radioactive Waste Management Office



Natural Resources Canada Ressources naturelles Canada







Low-Level Radioactive Waste Management Office
Fall/Winter 2003



## Year's activities move the projects forward

Investigating, collecting, reviewing, consulting – 2003 has been a year of intense activity for the Port Hope Area Initiative. Soon all of this work will come together to better define the Port Hope and Port Granby Projects.

The examination of new and existing environmental baseline data is yielding a greater understanding of the natural and social environment. The alternative means process has brought together the community values and technical expertise needed to evaluate potential waste management approaches. And public participation, through open houses, workshops and the Project Information Exchange, is helping the Low-Level Radioactive Waste Management Office (LLRWMO) integrate community input

into the environmental assessment process as the projects move forward.

Early in the new year, the LLRWMO will review alternative facility designs, components, sites and clean-up approaches with the municipalities and residents to identify the best alternative means for carrying out the projects. With the current environment described and more detailed project descriptions in place, the Initiative will move to the next step in the environmental assessments for the long-term management of historic low-level radioactive waste in Port Hope and Clarington – the detailed investigation of potential environmental effects.

Your participation will be as important as ever during 2004.

Port Hope High School Environmental Club, led by teacher Krista Coughler and student president Laura Tozer, tours low-level radioactive waste temporary storage areas and the proposed Ward 1 facility site with LLRWMO communications officer Sue Stickley.



### In This Issue

- Human Health and Safety Assessment underway
- Expo 03 showcases a year's activities
- New brochure answers Port Granby questions
- You asked?



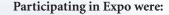


# **Expo 03 showcases year's activities**

For the several hundred students, teachers and community members who toured the displays, joined in the walking tours and discussed the issues, Expo 03 was an information-packed event.

Hosted by the LLRWMO at Port Hope High School on Friday, October 24 and Saturday, October 25, the trade show-style open house offered updates on the Port Hope and Port Granby Projects. The LLRWMO presented information on environmental baseline characteristics. alternative approaches for managing the historic low-level radioactive waste, human health and safety, property value protection and airborne gamma radiation surveys. A number of community groups and government agencies also joined in Expo to present information.

If you missed Expo and are interested in reviewing the information, drop in to the Project Information Exchange at 110 Walton Street, Port Hope, weekdays between 1:00 – 5:00 p.m. Display panels and handouts are



- · Municipality of Port Hope
- · Municipality of Clarington
- · Natural Resources Canada
- · Canadian Nuclear Safety Commission
- · Fisheries and Oceans Canada
- · Durham Nuclear Health Committee
- · Curve Lake First Nation
- · Cameco Corporation
- Port Hope Community Health Concerns Committee
- Southeast Clarington Ratepayers Association
- Port Hope Nuclear Environmental Watchdogs
- Community Awareness Emergency Response Group, Port Hope
- Port Hope High School
- · Dr. Hawkins Senior Public School

Rain didn't stop the guided walking tours of temporary low-level radioactive waste storage sites in the Highland Drive area. Initiative Project Director Glenn Case led this interested group.











# Reviewing reports: More than dotting the i's and crossing the t's

Praft technical reports, such as the environmental baseline studies for the Port Hope Area Initiative, make their way through an exhaustive technical review process – a series of checks, double checks and independent third-party review. The purpose of this extensive review process is to make sure that reports are accurate, satisfy their terms of reference and that the conclusions stand up to scrutiny.

The process begins when a consultant submits a draft working report to the LLRWMO. Members of the LLRWMO project team review and comment on the report. Revisions are made and the next draft is forwarded to a recognized professional in the field of study for internal peer review. Comments by the peer reviewer are incorporated in the draft report.

The report is then forwarded to the Municipality of Port Hope or Clarington for an independent third-party review. Each municipality has an allocation from the Port Hope Area Initiative to offset expenses related to the projects. Comments arising from the municipal peer review are incorporated into the report.

The next step in the process belongs to the public. The municipal councils, their committees and the public receive the report for comment. The study authors integrate this feedback into a final report.

Project Director Glenn Case says that although the process involves many steps, it's about "transparency, increasing the level of trust and ensuring the integrity of the reports."

2 3

# The Who? What? Where? Why? and How?... of the Human Health and Safety Assessment

What effects could the Port Hope Area Initiative have on the overall health of people in the community? It's a question the environmental assessments for the Port Hope and Port Granby Projects will answer. This summer, a Human Health and Safety Assessment began to collect information on potential changes the projects could have on the physical health and wellbeing of local residents and the people working on the projects.

Below, the who, what, where, why and how of the study are summarized.

#### Who's involved?

The international consulting firm, Golder Associates, is conducting the study on behalf of the LLRWMO, but the input of many more people is involved. Consultation on health effects involves a broad base of stakeholders ranging from specialists at the federal and provincial levels to local community members. The regional Medical Officers of Health, groups such as Durham Nuclear Health Committee, Port Hope Community Health Concerns Committee,

> Clarington Community Advisory Committee and other local residents are currently being consulted for the study.

#### What is the health and safety assessment?

The study defines health in the broadest possible terms – both physical and emotional well-being. It describes relevant environmental conditions and stressors.

The study considers radiological and conventional health and safety risks to workers and members of the public. Finally, it identifies ways to reduce potential risks and measure health effects during the life of the projects.

#### What is the study's time frame?

The study assesses potential changes to human health and safety over the short, intermediate and long terms. "Short" extends approximately five to seven years into the projects including site cleanup, construction and completion of the proposed long-term waste management facilities; "intermediate" extends several decades beyond the facilities' completion into ongoing management; and "long" extends into the monitoring phase of 500 years or more.

#### Where is the study area?

The study targets people in the places where they live. It focuses on residents living closest to the proposed waste management facilities as well as those living in the general area. It uses hypothetical people (one-year-old infant, 10-year-old child, adult male, THE RESERVE TO SERVE THE PARTY OF THE PARTY nursing mother) living in specific locations and engaging in specific

activities (such as drinking only local water) and assesses potential effects the projects may cause.

#### Why do a human health assessment?

The Port Hope Area Initiative is expected to have a beneficial effect

on the community's way-of-life. But do the projects also have the potential to affect human health, safety and well-being? Potential effects are being studied so stressors such as increased noise, dust or traffic during construction and radiological effects from material handling and management activities can be reduced or prevented so as not to

> affect people's health and sense of well-being.

#### **How is the study** being done?

The study integrates information from many facets of the environment. This includes existing human health information, data collected through environmental baseline studies (aquatic, terrestrial, atmospheric, socio-economic

and geology/groundwater) and radiological dose and exposure information collected as part of the consideration of clean-up criteria. This information is integrated to form a picture of the community against which potential effects can be assessed. Health risk factors identified in other Canadian and international studies have been used to develop the local study.

## **Groundwater survey goes to the users**

A survey conducted this fall collected information about the use and location of approximately 70 private wells in Port Hope's Wards 1 and 2 and the Port Granby area. The information forms part of the groundwater environmental baseline study that will be used to study and address potential effects of the Port Hope

and Port Granby Projects.

The LLRWMO surveyed residents with wells located within about 1km of proposed waste management facility locations. Staff followed up the mail-in survey with a personal contact by phoning or visiting residents to gather information on well type, location, depth and usage.

5

# You asked?

The above-ground mound design for the proposed waste management facilities uses liners to keep the waste from getting into the groundwater. How do you know the liners will last?

The LLRWMO asked the engineering and environmental consulting firm, Conestoga Rovers and Associates, to carry out a technical review of liner systems. The review describes the high level of confidence the international community has in the environmental protection provided by multi-layer liner systems. Technical understanding and confidence in the long-term performance of liner systems have grown over the more than 30 years they have been used in low-level

radioactive waste and hazardous waste management facilities around the world. The predicted service life of liners is now at least several hundred years. Multi-layer liner systems are now required in new waste management facilities in Ontario and the U.S.

# How will waste and construction materials be transported and what routes will be used?

Transportation methods and routes will not be identified until further along in the environmental assessment process when more detailed concepts for facility designs and locations are known. A traffic and transportation study, begun this fall, will assist in route planning by gathering information about the existing transportation environment within the Port Hope and Port Granby

Project study areas. There will be extensive public and municipal input into all aspects of transportation planning.

#### If the waste management facilities are intended to last for centuries, does the facility design take into account earthquakes or other future disturbances?

Yes. As part of the environmental assessments and safety requirements, engineers and geologists are working together to assess the potential effects of future seismic events. This involves using records of existing seismic events in this part of Southern Ontario to predict the rate of ground movement. The robust above-ground mounds will be designed to withstand severe natural events such as earthquakes and hurricanes with a wide margin of safety.

# The compliance letter I just received for my property includes information from the 1970s. Do I need to get a new survey to bring it up to date?

The confidential letter the LLRWMO sends to Ward 1 property owners is a concise summary of the information in our file detailing the radiological status of your property. A specialist reviews all the available data including relevant levels measured during the initial cleanup from 1976 to 1981, and any follow-up measurements that may have been taken on the property.

Most data are adequate, but if the letter indicates a need to verify the radiological status of your property through an additional survey, or if you have any questions, please contact the LLRWMO at 905-885-9488.

### Her experience offers valuable link to the past

The initial cleanup of low-level **I** radioactive waste in Port Hope had just begun when Sharon Pickering graduated from Sir Sandford Fleming College in 1977 and began work with the engineering firm overseeing the cleanup. By the early 1990s, after a 10-year break to raise a family, Sharon returned to join the LLRWMO. As an administrative assistant and working in the lab of the John Street Field Services Office, she divided her time between the Port Hope and Scarborough low-level radioactive waste remediation projects.



Today, working for the Port Hope Area Initiative, Sharon's involvement during the past 25 years provides a valuable link between the past and present.

Her multi-faceted knowledge keeps the office running smoothly as she coordinates responses to public inquiries, data management activities and other aspects of the office's organization.

A Port Hope native, Sharon enjoys nature, art and spending time with her family.

### Reaching new residents in Clarington

Communicating with prospective property owners about the Port Hope Area Initiative is important. A new brochure, produced this fall by the Property Value Protection (PVP) Program, is designed to help people who are considering moving to eastern

Clarington learn about the Initiative. The brochure is one of many communication measures the LLRWMO has developed to inform new and existing residents in the Clarington and Port Hope areas.

Have you heard of the Port Granby Project and Property Value Protection?

Have you heard of the Port Granby Project and Property Value Protection? answers questions about the existing low-level radioactive waste management facility at Port Granby and the proposal for a new environmentally safe, long-term management facility under the Port Hope Area Initiative. The PVP Program protects property

owners' investments if the selling price of their home or property is ever affected by the project.

Brochures are available from local real estate agents or at the Project Information Exchange at 110 Walton Street in Port Hope.

6 7