

# Open Houses

**Thursday, April 1, 2004:** 6:00 - 9:00 p.m.  
Port Hope Lions Centre, 29 Thomas Street, Port Hope

**Monday, April 5, 2004:** noon - 8:00 p.m.  
Port Hope Municipal Building, Council Chamber, Port Hope

**Tuesday, April 13, 2004:** 6:00 - 9:00 p.m.  
Welcome United Church Hall, 4651 County Road 2, Welcome

**Wednesday, April 14, 2004:** Noon - 8:00 p.m. Canton Municipal Hall, (lower level) 5325 County Road 10, Canton

**Thursday, April 15, 2004:** 6:00 - 9:00 p.m.  
Campbellcroft Lions Hall, County Road 9, Campbellcroft

## WANTED: Public comment

Over the next month, the LLRWMO will be gathering feedback. All comments received by April 19, 2004, will be reviewed before the recommendation is finalized. Here are some of the consultation opportunities underway:

**Open Houses:** Over the first two weeks of April (*see top of page*) five Open Houses will be held across the municipality.

**Municipal Review:** The Municipality of Port Hope, its technical review team and numerous government agencies are reviewing the results and discussing key issues with the LLRWMO.

**Community Consultation:** The LLRWMO is consulting directly with community groups such as local environmental groups, service clubs, home and school associations and business groups. Before the consultation is completed, residents living closest to the recommended site and along the proposed transportation routes will be personally contacted to discuss the project.

**Focus Groups and Telephone Survey:** Small group discussions followed by a telephone survey will provide even more input about the community's comfort with the recommendation for a long-term waste management solution.

*Come visit us at the Port Hope Home and Trade Show April 23, 24 and 25, 2004.*



## 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

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Low-Level Radioactive Waste Management Office

Winter/Spring 2004

# News

SPECIAL PORT HOPE PROJECT EDITION

## The results are in Process recommends one waste facility

This is a special edition of the *News*, devoted entirely to the Port Hope Project. After a year-and-a-half of intensive technical studies and community input, an evaluation of alternatives by the Low-Level Radioactive Waste Management Office (LLRWMO) has identified the best option for the safe long-term management of the historic low-level radioactive waste located in Port Hope.

Findings of the extensive process show that relocating all of the Port Hope waste to a single new state-of-the-art facility just south of Highway 401 and west of Baulch Road is the best way to safely manage the waste for future generations. The new site would be located on the existing waste management facility and adjacent auto recycling yard. The Municipality of Port Hope and its technical advisors are carefully reviewing the LLRWMO's recommendation. Their input, along



*Northumberland MP Paul Macklin reviews the recommendations with Port Hope Deputy-Mayor Linda Thompson and LLRWMO Project Director Glenn Case.*

with comments from you, the public, federal and provincial agencies and other interested groups will be considered as the project moves into the next steps of the environmental assessment.

Many local residents have taken part in the public workshops and Open Houses that played a crucial role in bringing the project to this stage. Your input continues to be important. Open Houses are being held throughout the municipality during April (*see back page*). The recommendation report (Qualified Concept Report) is available at both Port Hope public libraries, the Project Information Exchange and on CD-ROM.

### In This Issue

- Understanding how we got here
- Why a one-site solution is best
- Questions and Answers
- Opportunities to comment



# Intensive environmental assessment in progress

## Findings reflect year-and-a-half of studies and public input

The process to select the best solution to Port Hope's historic waste management problem began two years ago with the launch of the environmental assessment for the Port Hope Project.

On the table were community-developed concepts – one proposed by the former Township of Hope and its ad hoc advisory committee in 1998, the other by the former Town of Port Hope and its advisory committee in 1999. (The two municipalities amalgamated in January 2001.) Each called for construction of a new, engineered aboveground mound. Port Hope's facility would be built



Project Manager Gary Vandergaast and Port Hope resident Karen Burkimsher were hard at work at an alternative means workshop last spring.

behind the sports complex on Highland Drive, in an area where about a third of the town's low-level radioactive waste is temporarily located. Hope's proposal would locate the facility at the existing Welcome Low-Level Radioactive Waste Management Facility. In its 1998 report, the Hope Township committee advised that a one-site solution could be feasible. The report indicated the Welcome site was large enough to accommodate all the historic waste.



### Investigating Alternative Means

To make sure the best long-term solution was found, the Scope, or terms of reference for the environmental assessment, directed the LLRWMO to investigate alternative ways of carrying out the project, including construction of a new facility for all of the waste at the existing Welcome Waste Management Facility.

A step-by-step approach to identify a wide variety of options and involve the community was developed. The *Alternative Means Process* began in June 2002 with a series of public workshops. Participants proposed ideas, helped define the project's goals and provided input to develop criteria the technical team would use to analyze and evaluate the ideas.



### Assembling Feasible Concepts

By using information from various studies underway and ongoing community input, the LLRWMO's project team narrowed down the ideas to three potential concepts for managing the waste. These *Feasible Concepts* (see box above right) were presented to the public at an Open House in June 2003 and in the Spring 2003 edition of the *News*. Each concept assembles ideas for dealing with specific issues such as groundwater protection, waste handling and site compatibility.

1<sup>st</sup>

### Concept D – Highest ranking solution

All waste managed at a single new facility near Baulch Road

2<sup>nd</sup>

### Concept B

Only Highland Drive area marginally contaminated soil at a new long-term facility near Highland Drive; all other waste managed at a new facility near Baulch Road

3<sup>rd</sup>

### Concept C

All Highland Drive area waste managed at a new facility near Highland Drive; existing waste at Welcome facility managed at a new facility near Baulch Road; rest of Port Hope waste managed at "more appropriate" site, to be determined by space and transportation considerations

Note: Concept A, based on the community-developed concepts to manage all urban Port Hope waste at a new facility near Highland Drive and all existing waste at the Welcome facility at a new facility near Baulch Road, was eliminated earlier in the process because of an anticipated lack of space at the Highland Drive site.



### Comparing the concepts

To zero in on the leading solution, the team evaluated and ranked the concepts. Each concept was scored according to how well it satisfied specific issues identified by the project team and participants at the public workshops. For example, to what extent would the concept enhance the local environment and leave a positive legacy? What effects might the concept have on air, soil and water during construction?...after construction? Weighting factors, reflecting the importance the community placed on the issues, were applied before each concept's scores were totalled. Issues that related to the environment were weighted highest, followed by human health and safety concerns, ability to meet community needs, technical factors and, finally, economics. The result of the scoring ranked consolidating all of the waste at one new long-term facility the highest (Concept D). It was followed by building a relatively small above-ground mound at Highland Drive with the rest of the waste going to the proposed site near Baulch Road (Concept B). Building a large facility at each site ranked lowest (Concept C).



### Triple-checking the comparisons

To check the validity of the scoring, the team used three additional tests. *Advantages and Disadvantages* highlighted the broader characteristics of each concept and considered the pros and cons; *Issues and Trade-offs* focused on how effectively the highest-ranking concept (D) addressed key issues. *Sensitivity Analysis* gauged the impact of individual scores on the overall results.

Each time, Concept D came out on top. This triple-check confirmed the strength of the findings.



### Where does the process go from here?

As the municipality, federal and provincial agencies, public and other interested groups review the outcome of the process, work on the environmental assessment continues. All comments will be considered before the results are finalized. Detailed engineering studies on the recommended concept and an effects assessment to develop measures to minimize potential negative effects of the project will begin soon.

# Port Hope solution: One facility for future generations

Consolidating all of Port Hope's historic low-level radioactive waste in a single, engineered aboveground mound is recommended as the best long-term waste management solution. This concept (D) includes construction of a new facility just south of Highway 401 and west of Baulch Road, on the site of the existing waste management facility and the adjacent auto recycling operation. The concept ranked highest in all evaluation categories: technical reliability, protection of the environment, minimizing risk to human health and safety, meeting community needs and cost effectiveness.

## What is the proposed concept?

The recommended concept calls for excavation and secured transportation of Port Hope's historic low-level radioactive waste, marginally contaminated soil and non-radioactive historic industrial waste to the new waste management facility. The engineered mound design would safely isolate the waste using an engineered base liner and cover system. It would be covered, closed and monitored over the long term. Its design would not permit ongoing waste disposal. The proposed facility would include:

- ◆ All waste currently managed at the Welcome Waste Management Facility;
- ◆ Historic low-level radioactive waste located throughout the urban area of Port Hope including Highland Drive area storage sites, inner harbour basin, other major licensed and unlicensed sites, numerous small scale sites and some historic Cameco waste;
- ◆ Non-radioactive historic industrial waste from Lions Recreation Centre Park, Chemetron Lagoon, the Centre Pier and the Coal Gasification Plant.

## Why the single facility concept is the best solution

- ◆ Site's geologic and topographic features offer a greater degree of natural protection for waste management than the Highland Drive site;
- ◆ Larger 50-hectare site has ample space to hold all of the waste;
- ◆ Larger setbacks from neighbouring properties reduce potential effects on current and future land uses;
- ◆ Relatively isolated location with few surrounding residences minimizes potential disruption and health and safety risks from construction;
- ◆ Closer proximity to Highway 401 and dedicated access road into the facility reduce the impact of truck traffic on local residents;
- ◆ Consolidation of waste at one site allows Highland Drive area to be restored to beneficial and unrestricted use, consistent with neighbouring land uses in the centre of the community;
- ◆ Single facility solution has lower capital, operational, maintenance and long-term monitoring costs, reducing the burden on future generations.

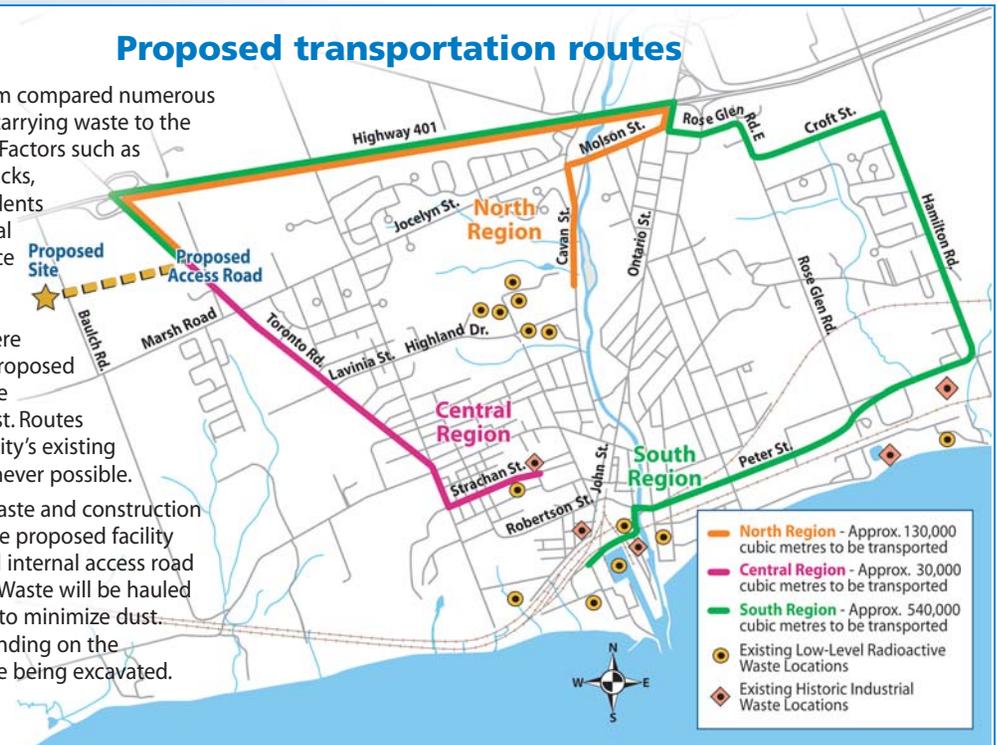


Barry Ferguson photo, 2001

## Proposed transportation routes

The technical team compared numerous routes for trucks carrying waste to the proposed facility. Factors such as the number of trucks, potential for accidents and environmental effects, disturbance to residents and cost of roadway improvements were considered. The proposed routes shown here ranked the highest. Routes use the municipality's existing truck routes whenever possible.

Trucks carrying waste and construction materials enter the proposed facility along a dedicated internal access road off Toronto Road. Waste will be hauled in covered trucks to minimize dust. Routes vary depending on the location of the site being excavated.



# Questions & Answers

## How will Port Hope Harbour be cleaned up and how long will it take?

The LLRWMO's technical team evaluated and compared two approaches for cleaning up historic low-level radioactive waste from the harbour's inner yacht basin.

Dredging ranked higher than the alternative approach of draining the basin and excavating the sediment in the dry. The comparison showed that dredging would provide better protection of the aquatic environment, be safer for the public and workers, cause less disruption to adjacent properties and cost half as much as the alternative. Dredging is the more proven technology.

Dredging the inner basin is expected to take between 12 to 18 months. Under the approach, the dredged sediments would be drained before transporting them to the proposed waste management facility.

## Why aren't the original concepts proposed by Hope Township and Port Hope being recommended?

The environmental assessment of the Port Hope Project was launched on the basis of the community-developed concepts. The scope for the environmental assessment directed the LLRWMO to consider alternative means. The alternative means process concluded that the Port Hope community concept was

not technically feasible – all of the waste currently located in the urban area of the municipality will not fit at a new Highland Drive facility. The single-site facility now being

recommended was put forward by the Hope Township advisory committee in 1998 as being a technically and environmentally feasible alternative. The alternative means evaluation has concluded that this concept will provide the greatest benefit to the community.

## When will you start cleaning up and trucking the waste to the proposed site?

Cleanup and trucking of the waste is at least three years away. As the environmental assessment continues and the project moves into the facility licensing phase, the LLRWMO will continue to develop schedules and sequencing for the various construction activities. The schedules will determine when specific locations will be cleaned up and when the corresponding truck routes will be needed.

Port Hope harbour, Centre Pier



Computerized visualization of the proposed low-level radioactive waste aboveground mound facility looking north from Marsh Road

## What will the aboveground mound look like?

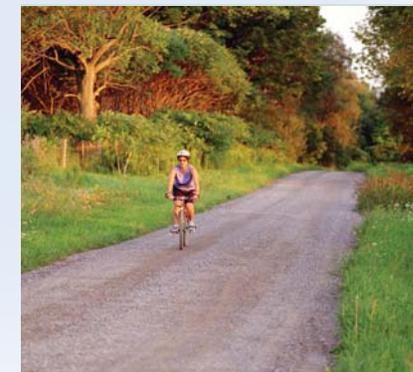
The proposed aboveground mound will sit on approximately 13.5 hectares (33 acres) in the eastern portion of the site currently occupied by the existing waste management facility and the adjacent auto recycling yard, just south of Highway 401. The grassed mound will blend in with the natural surroundings, gradually rising about 15 m to a plateau.

## How can we be sure the new facility will not be used to store waste from other communities in the future?

The Legal Agreement that defines the Port Hope Project clearly identifies the waste that will be managed at a new long-term facility. No waste from outside of the Municipality of Port Hope is included in the project. The engineered aboveground mound will not be designed to accept waste on an ongoing basis; it will be covered and closed. The application to the Canadian Nuclear Safety Commission for the facility's licence will also restrict the waste to the quantities in place at the time the project is completed.

## Can the proposed facility site be used by the community once the project is built?

An end use for the new facility has not been decided, but based on public input and preliminary evaluation, the technical team concluded that the completed facility site could be used as parkland or a sports field. As the environmental assessment progresses, discussions about an appropriate end use will continue with the public, municipality and Canadian Nuclear Safety Commission, which would license the facility.



## What happens next? When will the project finally be completed?

A detailed effects assessment on the highest-ranking concept – Concept D – will begin soon. This assessment will recommend measures to reduce potential adverse effects from the project. Comments will be addressed and detailed engineering studies will begin. The environmental assessment is expected to reach a conclusion in about two years. Licensing, construction and commissioning of the new facility are expected to take about another five years.