Workshops "Alternative Means"

Workshops/Open Houses on ecological components, technical studies, etc.



Come visit Sandy Holmes at the Project Information Exchange. She's happy to discuss the issues and share information with you. **PORT GRANBY** June 25, 2002; 7:00 – 9:30 p.m. Call 905-885-0291 to register

PORT HOPE June 26, 2002; 7:00 – 9:30 p.m. Call 905-885-0291 to register

September to December 2002 (Watch for dates in the media or join our mailing list)

PROJECT INFORMATION EXCHANGE 110 Walton Street, Port Hope Open 10:00 a.m. to 5:00 p.m. Thursdays, Fridays and Saturdays

www.llrwmo.org

An opportunity to get involved

Contribute your knowledge and ideas to cleaning up low-level radioactive waste in our community. Keep in touch. Help our environment.

Here's how I'd like to be involved: O Include my name on the mailing list	WORKSHOPS ○ General/All
\bigcirc Discussion groups	\bigcirc Natural Environment
🔿 Open Houses	\bigcirc Technical (engineering) studies
○ E-mail newsletters	○ Social/Economic
\bigcirc Schedule a presentation to my group	○ Heritage/Cultural
Name	Please clip and send to:
Address	Low-Level Radioactive Waste Management Office P.O. Box 118, 110 Walton Street Port Hope, Ontario L1A 3V9
Town Prov Postal Code Tel: e-mail:	Fax 905-855-0273

Publié aussi en français

Low-Level Radioactive Waste Management Office



Ressources naturelles Canada

ACTIC Energy of Canada Limited



Low-Level Radioactive Waste Management Office

Environmental Assessments underway for Port Hope and Port Granby Projects

PORT HOPE AREA

NITIATIVE

The dialogue between area residents and the Low-Level Radioactive Waste Management Office continues with open houses, group presentations, Project Information Exchange visits, surveys, telephone conversations, municipal council briefings, letters and emails.

This public consultation, along with environmental and technical studies, has begun the environmental assessment work for the two projects under the Port Hope Area Initiative: the Port Hope Long-term Low-Level Radioactive Waste Management Project and the Port Granby Long-term Low-Level Radioactive Waste Management Project.

In This Issue

- Studies are underway
- Projected Timeline
- Answers to your questions
- Property Value Protection Program is up and running
- Opportunities to get involved

The Environmental Assessments (EAs) for each of the projects are being carried out under the *Canadian Environmental Assessment Act*. Public comments on the draft scope (terms of reference) of the EA for each of the Port Hope and Port Granby Projects were collected earlier this spring. Now the federal agencies referred to as Responsible Authorities are considering this input prior to issuing the final scope documents this summer.

Spring 2002

Please see the back page of this edition for opportunities to be involved in the process.



The Port Hope Area Initiative **STUDIES IN PROGRESS**

Planning, environmental and engineering studies have begun to examine the Port Hope and Port Granby long-term, low-level radioactive waste management concepts and alternatives. As the environmental assessment process unfolds, many more detailed studies will be conducted.

Public review will be part of the study process prior to completion of the draft Environmental Assessment report on each project.

The following studies have been contracted to specialist consultants and are managed by the Low-Level Radioactive Waste Management Office (LLRWMO) in Port Hope.

Shoreline Protection Assessment (Port Granby Project):

A technical evaluation of the shoreline stabilization design concept for the proposed Port Granby Longterm Waste Management Facility, focusing on its potential impact on nearby properties, effectiveness and durability over the facility's 500-year design life.

Consultant: W. F. Baird & Associates Coastal Engineers Ltd.

Thorium 230 Impact Assessment:

An investigation of the potential impacts of Thorium 230 – a component of the low-level radioactive waste. The study is reviewing concentrations in waste in Port Granby and Port Hope, ways in which the public and workers may be exposed, potential health effects and measures to alleviate impacts.

Consultant: Beak International Inc.

Port Granby Groundwater Modelling:

Existing groundwater quality and flow through the Port Granby Waste Management Facility will be examined with a special focus on the East Gorge to assess potential impacts on groundwater of longterm waste management concepts.

Consultant: Intera Engineering Ltd.

Community Socio-Economic Profile and Public Opinion Assessment of the Port Hope Area Initiative:

Information needs and preferences were collected in a study of the local

communities and people's attitudes about the Port Hope Area Initiative. A random telephone survey of over 500 households and discussions with stakeholders and focus groups were conducted.

Consultant: Haussmann Consulting

Characterization of Industrial Wastes:

Port Hope Harbour Centre Pier, Lions Recreation Centre Park, Chemetron Lagoon and former Port Hope Gas Light Company Coal Gasification Plant Site Site assessments of four historic industrial properties in the Municipality of Port Hope will provide detailed information about the types and quantities of industrial waste to be included in the Port Hope long-term waste management facility and provide suggested methods for cleanup and site restoration.

Consultants: Marshall, Macklin & Monaghan Ltd.; SNC-Lavalin Engineers & Constructors Inc.

Cleanup Criteria:

A comprehensive review of studies, applicable regulations, scientific research and past public input will assist in developing the criteria for determining when contaminated sites have been adequately cleaned up. **Consultant:** SENES Golder Partnership

Ecological Land Classification:

Mapping and classification of distinctive natural features using existing and new field data and aerial photography will provide important information on the study area. **Consultant:** Beak International Inc.

Technical Studies: Atmospheric, Aquatic, Terrestrial, Geophysical:

Various aspects of the existing natural environment, from air quality and climate to groundwater and habitat, will be studied. The data will be used to assess potential impacts and evaluate design concepts for the long-term waste management facilities and cleanup. **Contracts to be awarded**.

Airborne and roadway radiation surveys find no additional major waste locations

ast fall a major step was taken to Lidentify all locations requiring cleanup as part of the Port Hope Area Initiative. Airborne and roadway gamma radiation surveys were conducted in the Municipality of Port Hope and east Clarington to determine the extent of known locations containing low-level radioactive waste and determine if additional sites might exist. The airborne survey, done by helicopter, covered an area of 90 square kilometres. About 65 km of rural roads and 100 km of town roads were surveyed by truck.

Preliminary findings support the effectiveness of previous low-level radioactive waste clean-up efforts. Some additional areas with minor roadway contamination have been found. These areas are currently being investigated through intensive ground surveys.

Since 1989, a Construction Monitoring Program has addressed the safe, interim management of waste identified during building and roadwork in Port Hope. The new survey results will assist in these ongoing efforts. Starting next year, detailed surveys of Port Hope properties will be conducted to confirm and update information collected during previous investigations.

Consultant (Airborne survey): Fugro Airborne Surveys Corp.; **(Roadway survey):** Gamma-Bob Gamma Ray Solutions



Soil Sampling



2001

2002



Legal Agreement:

The Government of Canada, former Town of Port Hope, former Township of Hope & Municipality of Clarington agreed to proposed cleanup and long-term management of historic, low-level radioactive waste materials in the communities.



Port Hope Area Initiative (PHAI) launched:

Two separate projects for the long-term safe management of low-level radioactive waste were launched: the Port Hope Project and the Port Granby Project.



2002 - 2006

Property Value Protection (PVP) Program begins:

PVP compensates property owners in designated parts of the municipalities of Port Hope and Clarington who realize a loss in property value as a result of the projects. This program remains in operation until two years after the facilities are closed, around 2012.

Port Hope & Port Granby **Project Environmental** Assessments (EAs) start:

Two separate EAs, under the Canadian Environmental Assessment Act, review issues involved in the cleanup and development of the longterm waste management facilities. Alternatives, including proposed Port Hope, Welcome and Port Granby community concepts, are assessed.

Environmental Assessment Scopes issued:

Federal Responsible Authorities (RAs) incorporate public input into terms of reference for EA studies.



2006 - 2011



Cap & close facilities:

Layered system of earth, rock, clay or synthetic barriers makes mounds impermeable to the elements; facilities are closed.

Who's Involved:

- Local citizens & groups
- Municipality of Clarington
- Municipality of Port Hope
- Natural Resources Canada
- Low-Level Radioactive Waste Management Office
- Canadian Nuclear Safety Commission
- Fisheries and Oceans Canada
- Local, provincial and federal agencies

500 Years

Environmental Assessment process & decisions:

The public is consulted on technical, scientific and other studies. EA reports are reviewed by the public, local officials and provincial and federal agencies before submission to the RAs for review, consultation and finalization.

Facility design: If the EA is approved, designs are finalized for the long-term waste management facilities which will



isolate the waste.

Licence applications & decisions:

Canadian Nuclear Safety Commission (CNSC) licensing review process is open to public. Following approval, CNSC oversees public and environmental safety during planning, construction and long-term monitoring of the facilities.

Remediate sites, construct facilities, complete Port Hope cleanup:

Long-term waste management facilities are designed to safely manage waste for over 500 years. Historic low-level radioactive waste and specified industrial waste sites will be cleaned up and consolidated at the new facilities.



Ongoing monitoring & maintenance:

Ongoing monitoring results are reported to the communities and government agencies; maintenance as required.



4

You asked?

During discussions between project staff and members of the public, certain questions about the cleanup and long-term management of lowlevel radioactive waste in the Port Hope / Port Granby area keep coming up. Here are a few of those questions and answers:

How were the proposed long-term lowlevel radioactive waste management concepts at Highland Drive, Welcome and Port Granby chosen?

The conceptual designs were proposed by community committees in 1998 to 2000. A legal agreement signed between the municipalities of Port Hope, Hope Township and Clarington and the Government of Canada allowed the facility proposals to move forward into an environmental assessment and licensing process. During the Environmental Assessment, alternative means for cleaning up and storing the low-level radioactive waste in the local area for a minimum of 500 years will be considered.

Are the proposed locations final?

Not necessarily. All proposed conceptual designs must go through the rigorous process of environmental assessment and regulatory review prior to licensing by the Canadian Nuclear Safety Commission. As proponent for the Port Hope Area Initiative, the Low-Level Radioactive Waste Management Office has been directed to consider "alternative means" for carrying out each of the long-term low-level radioactive waste management projects in Port Hope and Port Granby. Alternate local sites are considered to be alternative means.

How do you clean up the waste without spreading the contamination around? What about dust, truck traffic and construction damage to roads and properties?

The Low-Level Radioactive Waste Management Office, since it opened in

International experience right here in Port Hope



Glenn Case, project director for the Port Hope Area Initiative, has lived in Port Hope since he arrived in 1976 to work on the first low-level radioactive waste cleanup. An environmental engineer, Glenn has been involved

Glenn Case, P.Eng.

in international projects from Madagascar to Malaysia, and in Canadian projects from Malvern in Toronto to the Northern Uranium Transportation Route in the Northwest Territories and Alberta.

Glenn and his family participate in a wide variety of volunteer community activities.



Malvern Remedial Project

Photo of McClure Crescent after low-level radioactive waste cleanup in 1995. 1982, has cleaned up many other sites in Canada, including the urban site at Malvern (known as McClure Crescent) in Scarborough. The expertise of our staff is widely recognized. It was applied in Port Hope during past cleanups and continues today with the interim management of historic low-level radioactive waste in the town.

The legal agreement which brought the Port Hope Area Initiative into existence was designed to protect the public in many ways, including Property Value Protection, construction methods and environmental safeguards. This initiative will be carried out with great care, applying advanced techniques and practices to improve the local environment.

Is low-level radioactive waste stored in aboveground mounds anywhere else?

Yes, long-term low-level radioactive waste mounds are in place in a number of locations including Lewiston, New York, and Cannonsburg, Pennsylvania. The communities of Fernald, Ohio, and

PVP: Here when needed

Just a reminder, the Property Value Protection (PVP) Program is up and running as part of the Port Hope Area Initiative. Property owners in designated areas of the municipalities of Port Hope and Clarington who realize a loss in value on the sale of their property, in rental income or encounter mortgage renewal difficulties as a result of the Initiative are eligible to file a claim for compensation.

Information sheets are available at the PVP office and the Project Information Exchange. To learn more, phone 905-885-2866, or drop in, Monday through Friday, to the PVP office at 38 Walton Street, Suite 3 (second floor). Weldon Springs, near St. Louis, Missouri, are currently involved in the cleanup of low-level radioactive waste sites and construction of longterm management aboveground mounds within their communities. Websites:

www.fernald.gov/community/community and www.em.doe.gov/wssrap.

How can the public be assured the facilities proposed for Port Granby, Welcome and Port Hope will not pollute the groundwater?

Safety and environmental protection are the most important factors in this initiative. The current environmental assessment process will evaluate all concepts on the basis of potential environmental effects, effective barriers, mitigation measures and contingency plans. Monitoring and contingency plans will be designed to protect the environment over the long term.

