Cameco Corporation
Port Hope Conversion Facility
Vision 2010
Presentation to
Workshop on Fuel Cycle Safety
Past, Present and Future
Wilmington, North Carolina, USA
October 16th – 18th, 2007
Aldo D’Agostino, Project Manager Vision 2010
Port Hope is celebrated as having the best preserved 19th century streetscape in Ontario.

Port Hope was the seventh incorporated town in Ontario.
Cameco Corporation

- World’s largest uranium producer, accounting for 20% of the world’s uranium production
- Mines in Canada, the United States and Central Asia
- Uranium refinery in Blind River
- Uranium conversion and fuel fabrication in Port Hope

- 32% partnership in Bruce Power
- 53% of Centerra Gold Inc.
• A site remediation plan to be carried out in conjunction with Port Hope Area Initiative, including
  – removal of contaminated soils, drummed materials, old structures (~150,000 m³)
  – new construction (buildings, additions, renovations)
  – site and environmental improvements (traffic, noise, dust, stormwater mgt., etc.)
• Vision 2010 reflects Cameco’s commitment to principles of sustainable development
  – a safe, healthy and rewarding workplace
  – a clean environment
  – supportive communities
  – financial performance
1932  Radium refinery started
1942  Uranium refining started
1970  UF₆ production started
1978  New UO₂ plant built
1984  New UF₆ plant built
1988  Cameco formed
Vision 2010 & Port Hope Area Initiative

- Vision 2010 is possible because of the PHAI, a $260 million federal government cleanup of low-level radioactive waste in Port Hope and Clarington.
- PHAI EA complete, currently in licensing phase.
• About two-thirds of existing buildings are to be removed
• A phase 2 and supplementary environmental site investigation identified the location and quantity of contaminated soil
The project developed four master plan concepts and consulted with the community on all four options.
Gartner Lee conducted community consultation Nov. 2005 to Jan. 2006

Key consultation recommendations:
• Vision 2010 to be a high quality project
• Continue to update community on Vision 2010 design
• Set up process to deal with non-Vision 2010 issues
• Adopt community ideas into preferred concept, where feasible
• Explore further the visitor/information centre concept
Cameco’s Consultation Program

Cameco launched followup consultation program in May 2006 to improve outreach on non-Vision 2010 issues related to health, safety and security, the environment, social responsibility and the economy.

- Community liaison forums were established
  - Forum 1: prioritize future forums
  - Forum 2: introduction to PH health studies
  - Forum 3: economic impact of Cameco in PH
  - Forum 4: the regulatory process
  - Forum 5: a health panel
  - Forum 6: environment
  - Forum 7: radiation
  - Forum 8: building 50 and emergency response
  - Future forums
Visitor Centre / Entrance Building

- Entrance point for visitors and employees
- Primary security screening point
- Space for public displays
- Meeting areas
- Linked by pedestrian bridge to Administration Building #29
Receiving Building / ERT Garage

- Truck receiving docks and unloading space
- Material and parts storage
- Associated offices and amenities
- Dimensional and receipt inspection rooms
- ERT vehicle garage and associated offices
• Designed to handle and store up to 8,000 drums in a stacking array 7 pallets high
• Radiation shielding to be incorporated to protect office workers and pedestrians
• Building also houses vehicle maintenance and storage garages
Research Centre & Technical Services

- Basement expansion area
- Flexible laboratory space
- Office space, library, meeting rooms
- Atrium divides offices from laboratories
Cylinder Storage Building

- Will store over 1,200 cylinders in stacked array 4 cylinders high
- Overhead crane for indoor truck loading and offloading
- Automatic guided vehicles to be used for cylinder movements
A number of sustainable design features already included in Vision 2010 plans

Additional features to be added based on Cameco’s four pillars for sustainability: health/safety, clean environment, supportive communities, financial performance

Some buildings may be eligible for LEED certification (Leadership in Energy and Environmental Design)
Remediation plans were prepared during schematic design:

- Health and Safety
- Emergency Response
- Quality Assurance
- Excavation and Sampling
- Site Restoration
- Hazardous Materials Abatement
- Building Dismantlement, Decontamination and Demolition
- Environmental Monitoring
- Accumulated Waste Disposal
- Waste Management
- Transportation and Receiving
- Personnel Management

- Peer review by CH2M Hill
- Remediation plans to be fully developed during final design and licensing phases
Liaison with Port Hope Area Initiative

Coordination with the Port Hope Area Initiative regarding:

- Waste acceptance criteria for the long-term waste management facility
- Delivery schedule of waste materials to the long-term waste facility
- Coordination of activities including:
  - Remediation around harbour area
  - Transportation and receiving
  - Environmental monitoring
Cameco intends to divert wastes away from the LTWMF where practical and possible

Initiatives include:

• Locating alternate outlets for some of the accumulated waste materials
• Decontamination and recycling of scrap metal
• Use of clean demolition materials such as brick, concrete block and concrete slabs for backfill in excavated areas
• Extensive monitoring to release materials to conventional landfill
• Release of items such as light bulbs, electronics, wood and plastics for material utilization through the existing facility waste management program
• Cameco Vision 2010 team
• Architecture (Zeidler )
• Engineering, Remediation Plan, Schedule, Cost Estimate, Risk Management Plan (SNC-Lavalin)
• Environmental Assessment (SENES)
  – Vision 2010 has been classed as a Comprehensive Study
• Community Consultation (Gartner Lee + Cameco)
• Others
  – Code Compliance (Leber Rubes)
  – Sustainable Design (Halsall)
  – Landscape Architecture (Ferris)
  – Floodproofing Assessment (AMEC)
  – Remediation Peer Review (CH2MHill)
Questions?

Vision 2010: a world-class project with positive environmental impacts

Existing Site

Vision 2010 Site