A Cooperative Approach to the Management and Remediation of a Former Oil Refinery Site on the Banks of the Bow River

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Imperial Oil Refinery, facing south, circa 1960.
Utilities & Environmental Protection
Site History

- **1924-1975** Imperial Oil Refinery Operations

- **1977** The City purchases main refinery site for Deerfoot Trail Construction

- **1980** Lynnview Ridge Phase IV subdivision development
Site History

- **1989** Partial remediation of Beaver Dam Flats by AENV, Imperial, and The City

- **1997** Province obtains ownership of Deerfoot Trail and 100m ROW from the City

- **2001-2007** Imperial delineates and remediates Lynnview properties
Site History

- **2007** Imperial and The City successfully negotiate a Risk Management Agreement (RMA) and future ground lease for the site

- **2007** Memorandum of Understanding between The City, Imperial, and Alberta Environment
Ownership Distribution
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- **City-owned**
- **Province and CNR owned**
- **Devon Estates owned**
- **Devon and private ownership**
Risk Management Lands
City of Calgary © 2008
The Agreement

- Immediate priority is to perform site investigations and develop a Risk Management Plan:
  - protect the Bow River
  - recover liquid hydrocarbons
  - remove hot spots
  - place a protective soil cap

- Imperial will be the project manager

- Imperial will be responsible for first response for environmental emergencies
Risk Management Lands
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The Agreements

- Cost Sharing Allocation on $22 million project (City Lands):
  - 60% Imperial
  - 40% City

- Imperial is 100% responsible for RMP costs on all Imperial lands

- Liability risks & emergency response cost-sharing parallel responsibility for project costs
The Agreements

- The City will lease Imperial’s lands for 99 years for $1/year.
- Leased lands will be redesignated, redeveloped, and operated by The City for community benefit including parks, trails, natural areas, and a public golf course.
- Land uses must support RMP provisions and operational needs.
- Potential LRT expansion can be accommodated.
The Agreements

- Steering Group
  - 3 IOL members, 3 City members
  - Quarterly project review meetings
  - Approves annual budget and workplan
  - Can amend the RMP
  - Requires unanimous decisions
The Agreements

- Dispute Resolution
  - Escalating process
    - Senior manager review
    - Technical review
    - Mediation – Arbitration
    - Expedited arbitration
Working Together
Government Partners

- Municipal Government – The City of Calgary
- Provincial Government – Alberta Environment
- Federal Government – Environment Canada; Fisheries and Oceans Canada
Working Together
Stakeholder Involvement

- CN Rail owns a right-of-way which crosses the site and was used to service the refinery
- Millican – Ogden Community Association
- Citizens of Calgary
The Bigger Picture

- Represents the first of many sites to be reinvigorated
- Triple bottom line drivers
The Bigger Picture

- The City considers economic, social, and environmental results of decisions
- Cooperation among interested parties contributes to successful projects
- Benefits to everyone
Project Timeline

- **Already Completed**
  - Historical review and EM survey

- **2008**
  - Site characterization & hydrogeological modelling
  - Land use re-designation process initiated

- **Spring 2009**
  - Approval of Risk Management Plan by AENV

- **2009**
  - Site remediation fieldwork underway

- **2011**
  - Site redevelopment

- **Spring 2012**
  - Community use
Land Use Conceptual Design
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Groundwater Monitoring Network
O'Connor Associates © 2008
Metallic & Non-metallic Anomalies

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