



**WATERFRONT**Toronto



# *Waterfront Toronto*

## *Soil Recycling Pilot Facility*

Public Meeting, June 16, 2010  
Raffi Bedrosyan  
Director, Port Lands and Civil  
Infrastructure

# Project Team

## Waterfront Toronto

- David Kusturin
  - VP, Program Management
- Raffi Bedrosyan
  - Director, Port Lands and Civil Infrastructure
- David DuBois
  - Executive Director, Geo-Environmental Services
- Jane McGrath
  - Project Manager

## ENVIRON Soil and Groundwater Management

- Steve Desrocher
  - Senior Environmental Geoscientist/  
Project Manager



# Waterfront Toronto Vision

- Waterfront Toronto – a public agency and steward of waterfront revitalization
- Created by the federal, provincial and municipal governments in 2001
- Mandated to oversee and lead all aspects of waterfront revitalization
- Committed to creating a waterfront that:
  - ensures public accessibility at the water's edge
  - allows high standards for sustainable development
  - delivers design excellence
  - fosters economic development



# Waterfront Toronto – Sustainability

## Goal is

- long-term sustainable community outcomes that enhance the environment, provide economic benefits and produce social/cultural gain
- a qualitative improvement in human communities and ecological systems
- revitalization not redevelopment

## Aquatic Habitat Toronto

- Partners in aquatic habitat improvements include Fisheries and Oceans Canada, Ministry of Natural Resources, Toronto and Region Conservation, City of Toronto
- New aquatic habitat has been built under the Spadina, Rees and Simcoe WaveDecks



# A History of Waterfront Industrialization



- Industrial activity increased on the waterfront from the 1820s to the 1960s at a time when environmental standards were less stringent

- Much of Toronto's waterfront was constructed by filling with materials that are considered contaminated by current standards



# Remediation Requirements

- If soils do not meet standards for the intended land use, they require remediation
- Most of the soils within the Designated Waterfront Area are marginally contaminated and can be treated for reuse
- In the long-term 2,000,000 m<sup>3</sup> soil will require management
- Development of West Don Lands Pan Am Village, East Bayfront and the Naturalization of the Don Mouth will generate ~1,000,000 m<sup>3</sup> soil, requiring management
- In time the Lower Don Lands and Port Lands will generate an additional ~1,000,000 m<sup>3</sup> soil, also requiring management



# Waterfront Toronto's Soil Management Approach

Waterfront Toronto has developed an overall soil management strategy that includes:

- In place management of soil and groundwater where practical
- Removal, treatment and reuse of soil within the Designated Waterfront Area where possible
- Removal and disposal of soil to landfill where necessary



# Implementation

- Soil and Groundwater Master Plan
  - Catalogue soil and ground water characteristics for future management
- Soil Recycling Pilot
  - Evaluate treatment technologies and costs
- Soil Recycling Approvals
  - Secure approvals from Ministry of the Environment to implement soil recycling project
- Implement long-term soil management strategy
  - Treat impacted soil from Designated Waterfront Area for reuse





# Soil Recycling Pilot

Prior to committing to full-scale operation, Waterfront Toronto intends to conduct a smaller-scale recycling pilot test that may treat up to 50,000 cubic metres of soil

The Pilot will:

- Identify a range of treatment options and costs
- Confirm that impacted soil can be treated to standards established by the Ministry of the Environment Brownfield Regulation
- Showcase sustainable soil management



**Soil Recycling Facility, Zeebrugge, Belgium**

photo source: DEC Environmental

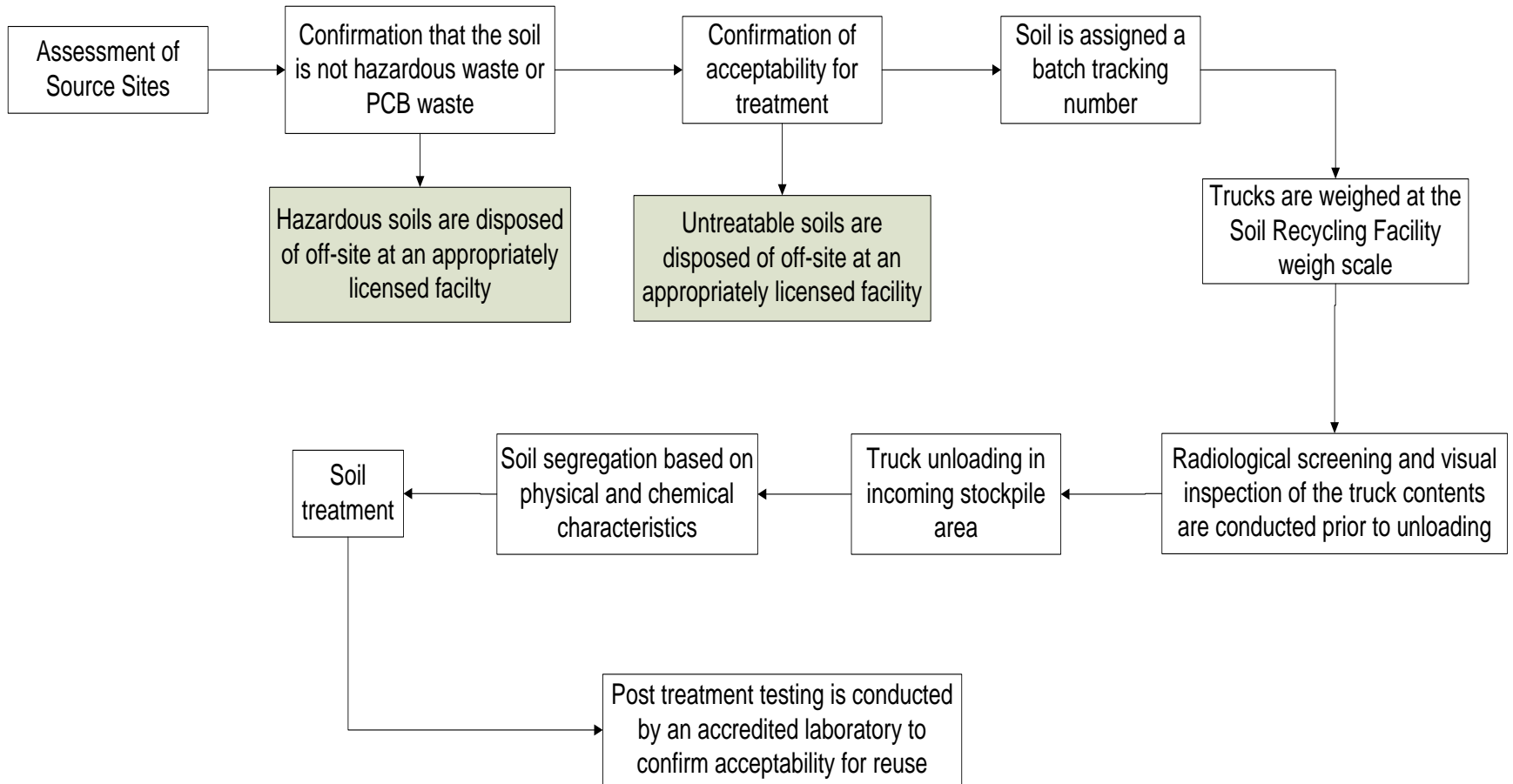
# Soil Recycling Facility Location



Pilot facility will be situated at 320 and 348 Unwin Avenue



# Material Flow Diagram



# Design and Operation Principles

- Pre-testing of incoming soil quality before receipt at facility
- No hazardous waste or PCB waste accepted

## Site Controls

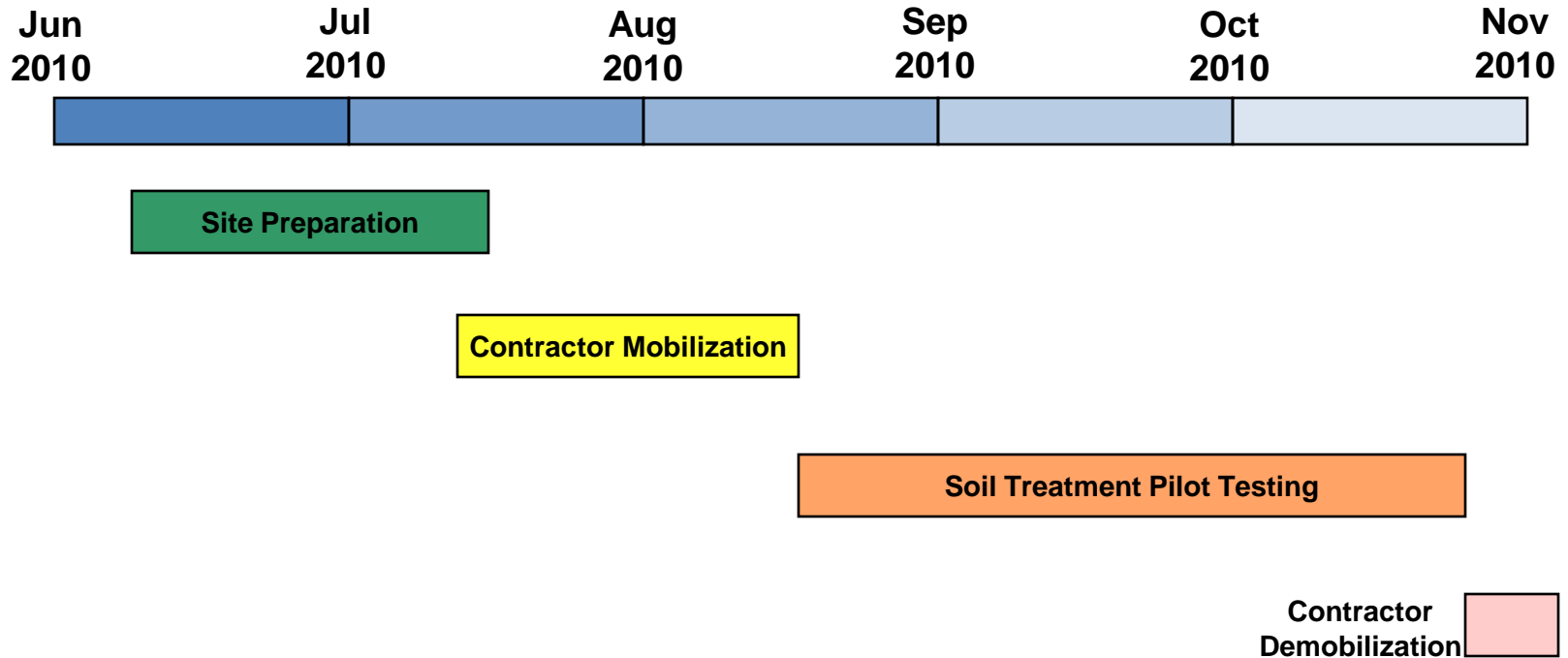
- Controlled access from Unwin Avenue
- Tracking of incoming soil
- Dust control and ambient air monitoring
- Stormwater control and reuse
- Truck washing
- Proponents delivering and operating self-contained treatment plants



# Soil Washing Technology



# Project Timeline





# Stakeholder/Technical Advisory Committee

- Purpose
- What's been done to-date
- Difference between Stakeholder and Technical Committees
- Current members
- Soliciting additional representatives



# Next Steps

- Establishment of Stakeholder Public/Advisory Committee
- Public meeting to showcase pilot results – Spring/Summer 2011
- Confirmation of long-term soil management strategy

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