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ALLIANCE OF
ONTARIO**
Constructing Ontario's Future

The Soil Management Challenge



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An Independent Study Commissioned by



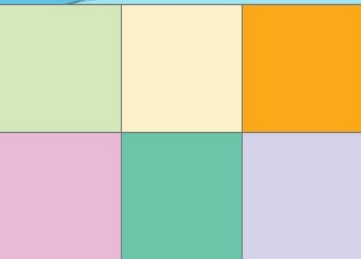
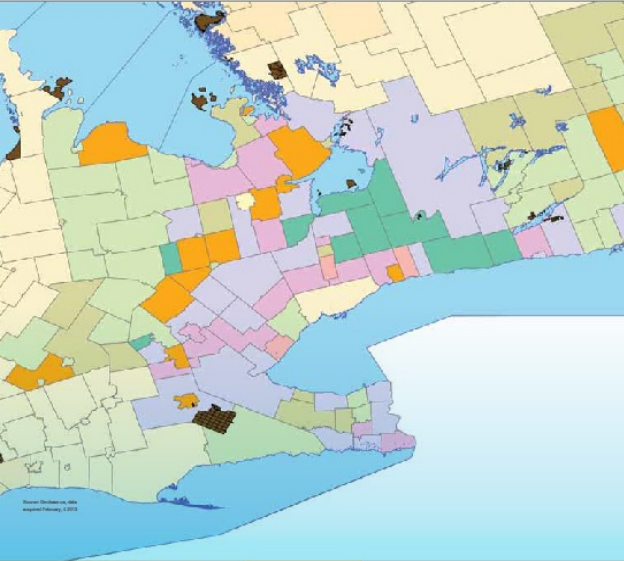
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Survey of Municipal Soil By-laws

March 2013



Best Management Practices for Handling Excess Construction Soils in Ontario

Version 1



Eglinton LRT Project: Estimated Costs and Impacts of Addressing Excess Construction Soils

Al Durand
SOiIL Project Manager
Nov. 26, 2015



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MEETING the SOIL MANAGEMENT CHALLENGE In ONTARIO

ONEIA Conference November 26, 2015

Westin Bristol Palace

Toronto, Ontario

Al Durand



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Discussion Outline

- Backgrounder to SOiil (Supporting Ontario Infrastructure Investments and Lands)
- The Key Issues
- Emerging Issues and Opportunities
- Next Steps



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Backgrounder to SOiil

- RCCAO has been a key stakeholder in excess soil handling issues working with industry, the MOECC and with the municipal sector
- RCCAO works with other jurisdictions - in the UK the CL:AIRE (Contaminated Lands: Applications in Real Environments) organization (www.claire.com)
- The UK has a very successful model **Definition of Waste Code of Practice (COP)** based on a “Smarter Regulation” approach
 - COP approach similar to BMP
 - Includes training, certification of COP Qualified Professionals
 - Management of a supporting electronic soil registry system
- SOiil is an electronic soil management database to support and facilitate the implementation of MOECC’s Soil Management – A Guide for Best Practices
www.soil.com



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The Key Issues

- Lack of clear policy framework creates uncertainty and liability concerns
- The large number of players involved – government, industry, local municipalities
- Level of understanding and comfort at the local municipal level
 - Model site alteration by-law, procurement practices
- Translate a complicated subject into appropriate outreach, education and training
 - Municipal, Qualified Professionals, industry, media
- Take pilot project outcomes and adopt as standard BMPs - metrics
- To be environmentally progressive:
 - Reduce “dig and dump” landfilling
 - Utilize risk based approaches, soil matching
 - Support soil depots, temporary storage facilities
 - Link with climate change program – GHG emission reductions



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Emerging Issues and Opportunities

- Lack of clear policy framework creates uncertainty and liability concerns
 - Outcomes of EBR Excess Soil Policy Review
 - Need for multi-Ministry leadership with industry Working Group
- Implementation of current MOECC Best Management Practices
- Integrate BMP approaches into current industry and municipal development and infrastructure project approaches
 - OSPE survey pilot findings and metrics
- Promote greater awareness of BMP Guide with municipalities
 - Town of Whitby Site Alteration By-law example, others
 - City of Toronto fill management plan
- Adopt BMP approaches in support of climate change objectives
 - Beneficial soil reuse, soil matching
 - GHG reductions, traffic congestion, safety and fossil fuel savings



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End of Presentation

QUESTIONS ?



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What is Required to Better Handle Excess Soils in Ontario (2014)

- A timely, supporting, integrated soil policy framework across government and Ministries recognizing Ontario development and construction industry needs
- Effective implementation of new Ontario Soil Management Guide for Best Management Practices – municipal outreach and education
- Action on putting in place BMP supporting elements:
 - Municipal BMP training and Centre of Excellence type support
 - Development of a model site alteration by-law covering excess soil
 - Pilot testing of BMP applications (effectiveness, metrics)
 - Development of standardized municipal procurement practices will result in better outcomes and solutions
 - Development of soil recycling centres or depots (temporary storage)
 - Promote and support for soil matching initiatives



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Soil Matching – Supporting Ontario Infrastructure Investments and Lands (SOiil)

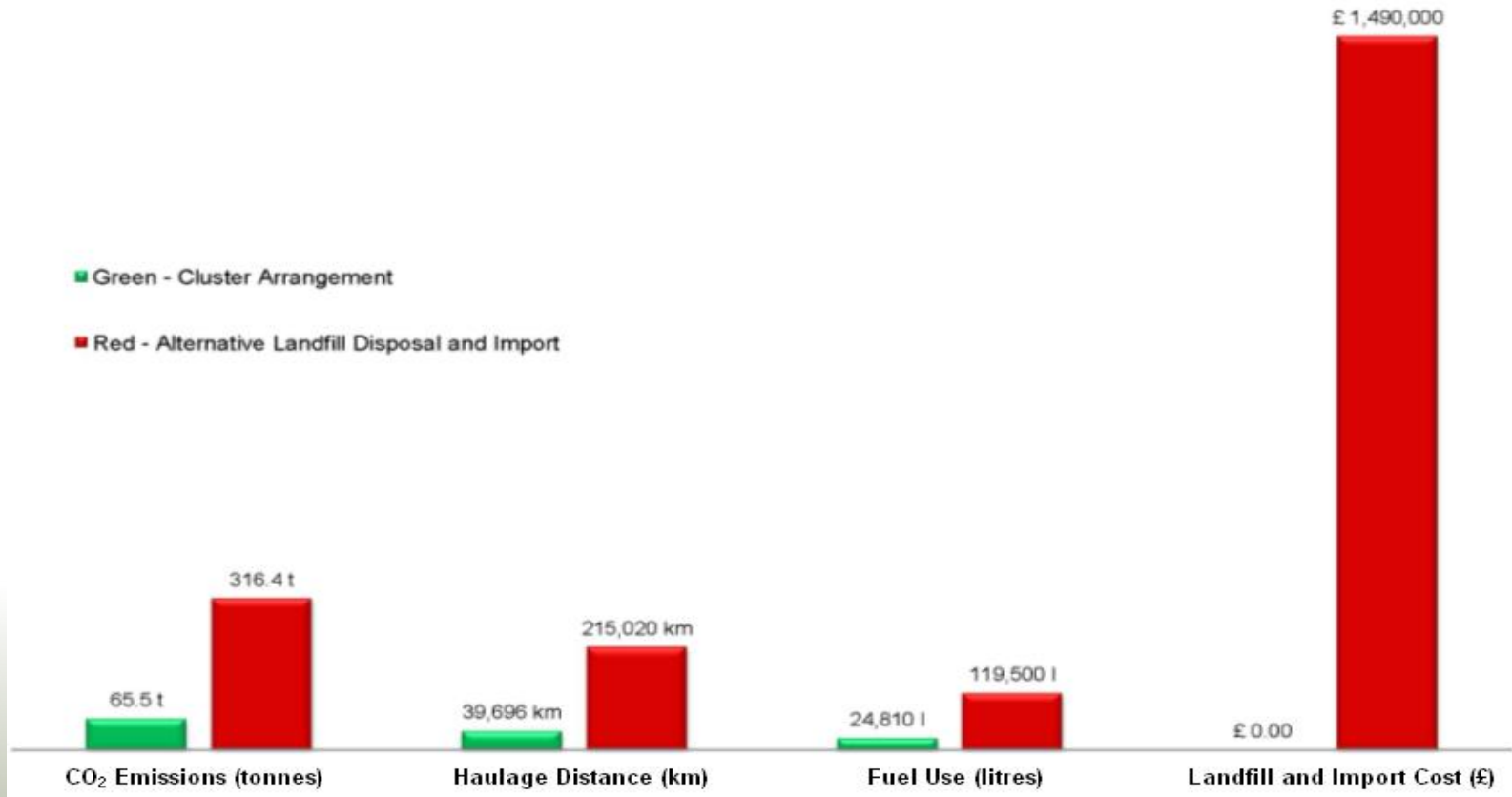
- Based on very successful UK model developed by an organization called CL:AIRE Contaminated Land: Applications in Real Environments (www.claire.com)
- SOiil launched in October 2013 (www.soil.com)
- Both excess soil “donors” and “receivers” register and the post soil requirements based on volume, quality, timing for matching
- SOiil users agree to follow Ontario Soil Management BMP requirements
- Key component is requirement for a Material Management Plan (MMP) that establishes a transparent, documented process



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Benefits of Best Management Practices and Soil Matching – UK Experience





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Ontario Historical Perspective (2014)

- Excess “clean soil” handling is a complex issue in Ontario
- Accepted local handling practices tied to local (regulatory) requirements
- Jurisdictional and local municipal challenges escalate
- Regulatory focus historically on contaminated soil and Brownfield redevelopment
- Issues involving “inert fill” handled on a case by case basis
- By default O.Reg. 153/04 Table 1 criteria and RSC requirements applied
- Significant public concern and media scrutiny – dig and dump, landfilling
- Need for clear soil handling policies, practices and appropriate enforcement
- Need for sustainable approaches to beneficially reuse excess soils
- Soil Management – A Guide for Best Management Practices (January 2014)