

## **Ont construction alliance pushes for UK model to reuse excess soil**

*Costs could hit \$1.7B per year for managing excess soil*

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Used Ontario soil is so valuable it deserves its own Internet matchmaking service to help it get a new lease on life. At least that's the vision of the Residential and Civil Construction Alliance of Ontario (RCCAO), which hopes to end the perception of certain soils as waste.

Besides costing taxpayers and contractors money (not the good kind of paydirt), excess soil takes up lots and lots of space. In fact, RCCAO says the estimated annual volume of excess construction soils in Ontario would cover an area one kilometre long by one kilometre wide and up to 25 metres in height.

It's the reason the alliance wants to develop a soil "dating service" that mirrors the one in the UK — just one of a number of changes it hopes to bring to the industry with its new best management practices (BMP), expected to be released publicly the week of November 5, 2012.

"Someone says, 'I have x-cubic metres of soil. Is anyone looking for this soil?'" Andy Manahan, executive director of RCCAO, told *EcoLog News* with a laugh, following his description of the online matchmaking bulletin board.

The soil can find a new home, leaving only transportation costs, he says.

Another benefit of the online soil matchmaking bulletin board is that it generates a record of the types and locations of soils, including which areas are generating large quantities of soil.

Records of excess soil in Ontario are virtually non-existent, the RCCAO says.

In an advance copy of the 2012 report, Best Management Practices for Handling Excess Construction Soils in Ontario, the RCCAO says four factors are critical when dealing with soil reuse:

- (1) protection of human health and the environment,
- (2) the suitable reuse of excess materials without further treatment
- (3) the certainty of reuse
- (4) the quantities of excess materials involved is accomplished through the production of a materials management plan (MMP).

The RCCAO says it will first field test the BMP with workers in the sewer/watermain and road building sectors to ensure the “system has the potential to be workable.”

Feedback from the field tests will help to improve the BMP, the RCCAO says, and be used to support effective provincial and municipal regulations.

While a “dig and dump” approach is no longer sustainable, Manahan says municipalities are concerned about liability issues from using soil from brownfields. The soil needs to be treated. Also, there is the need to deal with salt and oils from soil in road beds. But this type of soil isn’t heavily contaminated, Manahan says.

An October 2012 RCCAO study, [Quantification of Excess Construction Soils in Ontario](#), says cost estimates could reach \$1.7 billion per year for the management of excess construction soils.

Soil remediation costs for Ontario’s Eglinton Light Rail Transit project alone could soar to \$120 million, according to the construction alliance.

In Ontario case study projects from 2011, the RCCAO says soil movement costs represented between five per cent and 16 per cent of the capital cost of infrastructure projects. Contractors have indicated to the RCCAO that since 2010 soil management costs have increased significantly.

Manahan says Ontario taxpayers could end up paying up to 15 per cent more for disposal and transport of excess construction soils for standard municipal road, sewer and water projects. In some cases, he says, more restrictive municipal bylaws have been applied that limit the disposal of soils and further drive up costs.

Under current regulations, RCCAO says construction soil is treated like it was taken from a brownfield site, which makes reuse challenging. It's why the construction alliance says it has been pushing for the CL:AIRE model, which divides construction soil into classes for reuse, cleansing or disposal.

The Ontario Ministry of the Environment (MOE), in consultation with several stakeholder groups, developed a draft document entitled Soil Management – A Guide for Best Management Practices (MOE BMP) dated April 19, 2012 ([see related article on EcoLog's EHScompliance.ca.](#))

The MOE addressed large commercial projects, but didn't cover projects in the civil sector, Manahan says.

To fill the gap, the RCCAO set up a steering committee, which included a rep from the MOE. The alliance developed a BMP system based on the CL:AIRE model, which actually uses the online soil matchmaking bulletin board as just one measure.

A CL:AIRE rep led a workshop for the RCCAO on September 21, 2012.

"It was supported by both government and industry and CL:AIRE kind of sat in between both sectors," Manahan says of CL:AIRE.

"The big difference between what they're doing in the UK and the current rules in Ontario..." he adds, "is that soil has almost automatically been viewed as waste product, whereas in the UK it's a risk-based approach where they're thinking how to reuse something."

UK has significantly less space, so it has been a more pressing concern, Manahan says. The UK can't afford to fill up its landfills.

A primary focus, he says, was to increase landfill tipping fees to force companies to find alternatives for excess soil.

According to a May 2011 CL:AIRE case study, project cost savings (converted to CDN dollars) under the system ranged from \$160,000 to more than \$1.6 million.

In moving ahead with its own BMP, the RCCAO says it's focused on a non-regulatory approach for the civil construction industry until provincial regulations can eventually catch up.

In the interim, Manahan hopes the MOE will endorse the RCCAO's BMP.

According to a spokesperson for the MOE, "The ministry is developing a Best Management Practices Guide. The intent of this work is to clarify the rules and requirements for managing soil to assist construction companies and municipalities and conservation authorities that permit fill sites."