

November 13, 2013

Ontario soil matching now possible thanks to SOiL

ANDY MANAHAN

contributing columnist

RCCAO has just launched its soil matching service, [Supporting Ontario Infrastructure Investments and Lands](#) (SOiL). The idea for SOiL is based on the successful matching service being applied in the U.K. by an organization known as [CL:AIRE](#) (Contaminated Land: Applications in Real Environments).

SOiL Inc. is a new service that has been created to further support efforts by Ontario's Ministry of the Environment (MOE) and the construction industry to implement Best Management Practices (BMP's) for the responsible handling of excess "clean" soil that has been generated from infrastructure and development projects in both the public and private sectors.

By way of background, in September 2012, RCCAO hosted an excess construction soils workshop and invited Nick Willenbrock of CL:AIRE to speak about the British experience to a mix of industry and government representatives. Those who attended were most impressed with the CL:AIRE approach and thought that BMPs, combined with a matching service, would be an excellent way to move away from current 'dig and dump' practices.

Related:

[Ontario construction soil matching tool unveiled](#)

[raft Ontario soil practices use U.K. experience](#)

[Clarington, Ontario excess soil bylaw a concern for construction: RCCAO](#)

As a follow-up to find out more directly from British and European practitioners, a three-person delegation attended the annual Sustainable Land Management conference hosted by CL:AIRE in conjunction with The [Geological Society](#) in London, England. Over 110 delegates joined in two lively sessions and an evening panel debate held on Sept. 26, 2013.

CL:AIRE has released its Version 3 of "Definition of Waste: Development Code of Practice" which provides fundamental guidance to the SOiL approach.

In 2012 there were over 250 projects that were registered through DoWCoP and this figure is likely to be surpassed in 2013. Mr. Willenbrock advised delegates that "since 2009 there have been 771 declarations to date." More recent data shows that the average amount of soil per project is 20,000 cubic metres.

Principles and best practices are set out for demonstrating or achieving non-waste status to allow for the beneficial reuse of material.

A key feature of this approach is that reuse of soils can occur without an environmental permit or exemption, as long as the following is in place: a characterisation of the site, a materials management plan, a tracking system, a declaration by a qualified person and a verification report.

While a preferred course of action would be to reuse soils or materials at the site of origin such as a road right-of-way, a pipeline or a development site, this is not always possible. Many times, excess soils must be transferred to another site directly or a "cluster" approach is taken where brownfield (contaminated) soils are sent to a hub site or facility for treatment.

What is fascinating about CL:AIRE is that demand for clean soils through the soil registry outstrips supply. Donor sites have posted availability of nearly 3.0 million tonnes while receiver sites (those looking for clean soils) are listed at 6.9 million tonnes.

Delegates heard about the advantages of a cluster approach to aid in the remediation of sites that are in close proximity to one another. For example, a complex multi-site project in Northwest England enabled a large developer to reuse 60 per cent of all excavated material, including contaminated and uncontaminated soils.

Although there were many engineering consultants involved, having just a single contractor responsible for the overall project resulted in greater control and efficiencies to determine how materials were moved around. For more information on this case study, go to www.claire.co.uk — CSB 11.

In MOE's soon to be released BMP Guide, there will be allowance for the creation of temporary soil banks. While the purpose would be to hold "clean" soils for a period of up to five years, once a new home is found for these soils, it could be sent to what is termed in the U.K. a "receiver" site. Over time, Ontario will have to consider the hub site model where contaminated soils are sent to a treatment facility.

At the end of the conference, Al Durand, project manager for SOiil provided comments on how the lessons learnt are going to be applied in Ontario through a replication of the U.K. soil matching service and complementary approaches.

Following the conference, a representative from the U.K. government's Environment Agency (EA) confirmed his support for the DoWCoP. The EA's stated position is that "if materials are dealt with in accordance with the Code of Practice we consider that those materials are unlikely to be waste at the point when they are to be used for the purpose of land development."

A responsible system has evolved using the COP which is supported by a network of qualified persons. In this way, the EA is able to focus its resources on more strategic environmental initiatives.

For those who are looking to donate or receive soils, please go to www.soil.com.

Andy Manahan is the executive director of the Residential and Civil Construction Alliance of Ontario and is a member of the Daily Commercial News Editorial Advisory Board.