

**Residential and Civil Construction Alliance of Ontario
Comments and Recommendations on
Draft Ontario Ministry of the Environment
“SOIL MANAGEMENT – A GUIDE FOR BEST
MANAGEMENT PRACTICES”**

The following detailed comments have been prepared by the Residential and Civil Construction Alliance of Ontario (RCCAO) in response to the Ontario Ministry of Environment’s request for comments and inputs related to the most recent draft (April 19, 2012) of the MOE’s proposed ‘Soil Management – A Guide for Best Management Practices’.

1. INTRODUCTION

For several years, the Residential and Civil Construction Alliance of Ontario (RCCAO), together with other construction industry associations, has become increasingly concerned with growing costs, liabilities and administrative burdens associated with the management of excess fill and soil like materials from Ontario construction sites.

On May 8, 2012 the Ontario Ministry of the Environment circulated a revised and updated version of their June 2011 draft guideline document entitled ‘Soil Management – A Guide for Best Management Practices’ as a means of addressing the concerns expressed by RCCAO and other organizations. This draft dated April 19, 2012, is open for further stakeholder comments through to May 31, 2012,

RCCAO is pleased to respond to the Ministry of the Environment with the comments and recommendations noted below.

2. BACKGROUND

In 2004, the Ministry of the Environment published a guideline document that includes a series of tables pursuant to Part XV.1 of the Environmental Protection Act (*Soil, Ground Water and Sediment Standards for Use under Part XV.1 of the Environmental Protection Act*, dated March 9, 2004). Under that guideline, the term “inert fill” is generally regarded by the environmental management and consulting community as soil meeting Table 1 criteria.

Part XV.1 of the Environmental Protection Act was intended to facilitate the rehabilitation of brownfield and other contaminated sites. In the absence of any overall soil management laws or clear rules regarding beneficial reuse of excess soils. Municipalities, conservation authorities and the financial industry have adopted a

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BACKGROUND – Cont’d

cautious approach of setting Table 1, the table with the highest standards as the “default” standard threshold, in situations where the landowner is requesting a zoning change, the registration of a plan of subdivision or seeking new or renewed financing of the property. Regulation 511/09, among other changes, was a revision of the characterization tables as well as sampling methods originally established in O.Reg. 153/04 intended to clarify clean up criteria and promote the remediation of contaminated sites commonly referred to as Brownfields. This regulation, in conjunction with Part V of the Environmental Protection Act, RSO 1990 c. E.9 and the General Waste Management Regulation, O.Reg. 347 is the primary underpinning of the provincial regulatory framework associated with the movement of excess construction soils in Ontario. Fundamentally this existing legislative framework is not based on the current need for the sustainable beneficial reuse of excess construction soils in Ontario. Accordingly, at the provincial level, the proposed draft ‘Soil Management – Guide for Best Management Practices’ is an interim measure to start to address and encourage improved excess soil handling, reuse and disposal requirements.

Since 2009 the construction industry in Ontario has been faced with rapidly escalating costs for the management of excess fill and soil materials that cannot be used at construction sites. In some cases the management of this material constitutes as much as 18% of the capital cost of the overall construction project, including vital municipal infrastructure. As trucking fuel costs increase and the availability of placement sites for excess construction soil decrease or become more remote, the management of excess construction fill will be a growing cost to the Province as a whole and will shrink the quantity of infrastructure that can be invested in with limited funds. In addition to needlessly reducing limited available landfill capacity and literally “wasting” better spent infrastructure dollars there are additional societal costs. The shipping of excess soils is also a significant health and safety concern and an environmental concern resulting from the increased production of greenhouse gas (GHG) emissions. Lastly, by today’s accepted environmental practices, landfilling is not a sustainable option or practice. It does not encourage the beneficial reuse of excess construction soils and materials.

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3. MANAGEMENT SUMMARY

RCCAO recognizes and commends MOE’s continued stakeholder engagement approach. Recognition of the need for more sustainable soil management approaches in dealing with excess soils is to be lauded. Development of industry soil management supporting best management practices, within the proposed BMP framework, will align with the Ministry’s fundamental environmental position that the beneficial reuses of excess construction soils will not have the potential to cause an adverse effect to the natural environment.

As observed in other jurisdictions, where excess soils are beneficially reused, the critical component in the process is the establishment of appropriate protocols for receiving locations at the local level. This will require hands-on provincial guidance to municipalities and a shift from just a regulatory enforcement regime to an enabling, more proactive, role in managing excess soils. Accordingly, the Ministry is encouraged to develop in-house knowledge and expertise to assist industry and municipalities in continuously improving practices for the handling and reuse of excess construction soils.

The following is a brief summary of the key comments and suggestions compiled by RCCAO members for further consideration by MOE pertaining to this draft BMP.

Under the General Section:

- There should be further considerations for Municipalities and Conservation Authorities to adopt consistent practices encouraging the beneficial reuse of excess construction soils, particularly ensuring that there are available placement sites within their jurisdictions.
- Further detail is required to determine what the Ministry would consider as appropriate abatement actions to ensure there are no adverse effects or possible environmental impairment at receiving sites.
- Further Ministry clarification is required to develop expanded excess soils and material definitions beyond the current limited soils definitions under O.Reg.153/04 in order to complement and support recognition of best industry practices involving non-brownfield, non-RSC source and receiving sites.
- Recognition within BMP of reasonable efforts by contractors to address adverse impact concerns in the course of smaller construction projects and emergency-type situations.
- Recognition by MOE of the need to recommend and encourage local municipalities to establish soil placement, soil banking and recycling depots in strategic geographic locations to support smaller civil construction projects in dealing with excess soils in a timely manner.

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Under Excess Soil Management Section:

- Recognize at source sites, particularly smaller civil construction projects (vs. sites), the role of Qualified Professionals (QP’s) has to be addressed in terms of appropriate level of site sampling, testing and administrative supporting detail related to fill management plans.
- Further direction required on the protocols for establishing source and receiving site soil quality and testing requirements for non-RSC sites and smaller construction project. Recognition that QP’s should be able to use best professional judgment in determining appropriate, risk based sampling requirements.
- With reference to the preceding point, the cost and duplication of general sampling and testing requirements at generating and receiving sites remains a major concern at RSC and non-RSC sites.
- Need to address current municipal procurement practices such that civil construction projects are tendered on the basis of fair and appropriate QP sampling and fill management plans encouraging the beneficial reuse of excess soils.
- The construction sector requires provincial support in ensuring that local municipalities have readily available receiving sites for excess construction soils.
- RCCAO requests that the BMP should extend the maximum storage time for so called “temporary soil banks” from two to five years through a performance-based type of approval with an extension capability of up to ten years.
- The standard operating procedures covering “temporary soil banks” requires further research and clarification such as appropriate tracking and auditing from each source site, soil mixing, and composite sampling protocols.
- Reference by Ministry within BMP on how local municipalities can/must incorporate industry-based best practices into local site alteration bylaws to encourage beneficial reuse of excess construction soils.
- Particular concern remains with respect to appropriate level of public consultation surrounding municipal fill receiving sites both for RSC and non-RSC sites.

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4. SPECIFIC COMMENTS AND RECOMMENDATIONS

Specific comments and recommendations regarding the April 19, 2012 MOE draft ‘Soil Management - Guide for Best Management Practices’ are listed below referenced to applicable section and page numbers.

Page 1 Acknowledgements

RCCAO agrees with the acknowledgement that infrastructure renewal, intensification of urban areas and the redevelopment of brownfield sites are activities that generate large amounts of excess soil.

Page 1 Management Options

Given the high cost of fuel, labour and machinery most construction contractors advocate reusing the excess soil at the construction site or on nearby lands where possible.

Disposal of soil at a ministry-approved landfill site is often the last resort for most site owners and contractors. Use of a landfill for the placement of Table 2 or Table 3 soils constitutes a poor use of a limited resource (landfill space) unless the soil is so severely contaminated as to preclude any other option. The ultimate disposition of excess soils should be risk-based and determined by the real risk of an adverse effect or possible groundwater contamination at the final receiving destination.

What is needed are not just guidelines and policies, but regulatory and legislative changes of definitions and requirements so that there are an adequate number of low cost and conveniently located fill sites for soils that meet Table 1 or Table 2 criteria. At the provincial level, there should be leadership and available technical expertise across involved ministries, to cohesively support municipalities in establishing sustainable soil management model by-laws and practices including siting and permitting.

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Page 1 Purpose of Document

Municipalities, conservation authorities and the financial industry will likely assume that the guideline document is intended for construction contractors retained to undertake infrastructure renewal and larger scale ICI and residential construction projects. Effective planning and minimization of costs, liabilities and administrative burdens requires the active participation by site owners, most notably municipalities, well before any invitation to bids are issued to the construction industry.

Page 2 Purpose of Document

The guide includes a disclaimer that it is not intended for smaller scale projects such as municipal road repair work or sewer and watermain construction. These activities however do generate large quantities of excess soil by virtue of the large number of these smaller projects. Soils and fill originating from within municipal road allowances and other rights of way often exceed Table 1 criteria, but the industry, including RCCAO stakeholders, are faced with increasing costs and fewer options for where to place such excess material. Given these preceding project type limitations, it is incumbent on the ministries involved, to further support the development and implementation of industry appropriate practices and procedures dealing with the sustainable, beneficial reuse of excess soils on and off site.

Page 2 Considerations for Municipalities and Conservation Authorities

While municipalities and conservation authorities are encouraged to consider these best practices when issuing permits or approvals or passing by-laws, there is no statement to suggest that these organizations should take any steps to ensure that there is any consistency, standardization or that there are even available placement sites within their jurisdictions for excess soil and fill. Certain municipalities have gone so far, or are considering, a ban on the importing of any soil or fill materials from outside of its municipal boundaries. If this measure is replicated by other municipalities, it will dramatically increase the costs of municipal, provincial and privately-owned infrastructure.

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Page 2 General

It would be helpful if some examples were listed of what an environmental concern at a site might include and what type of abatement actions that the Ministry would consider to be appropriate to ensure that there are no adverse effects and possible groundwater contamination at receiving sites.

Page 3 General

The section includes a definition of soil as particles smaller than 2 millimetres in size. Most construction site excavations will usually include naturally occurring aggregate larger than that size and might also include other components such as residual traces of road salt from the preceding decades of de-icing activities as well as trace quantities of motor vehicle lubricants and other fluids. If materials with particle sizes larger than 2 millimetres or small residual traces of road salt or automotive fluids, unpainted wood fragments are part of the soil, what does the Ministry consider that combined material to be? Ministry support for developing and establishing excess soils and material definitions and specifications, where possible, would further support beneficial reuse of excess soils and materials. Material definition clarification is essential to properly categorize excess materials and facilitate beneficial reuse in a safe, cost-effective and environmentally responsible manner.

Excavation activities associated with smaller construction projects; road and utility repairs often result in some noise, dust or increased road traffic notwithstanding the best reasonable efforts of the construction contractor. Suspending emergency excavation activities in the event of a sinkhole, natural gas line leak or broken electrical line is typically not an option.

There should be a recommendation to municipalities and conservation authorities to take reasonable measures to encourage the establishment and operation of soil placement, soil recycling depot sites in their geographical areas to address local and regional requirements. The ability to compile excess construction soils, particularly from smaller projects, provides over time a cost-effective source location encouraging the sustainable, beneficial reuse of appropriate materials where fill is required.

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**Page 4 Excess Soil Management
Best Management Practices for Source Sites**

Unless the owner of the site, e.g. municipality, undertakes this measure, it may be difficult for the construction contractor to assume the cost and administrative burdens associated with retaining a QP and undertaking extensive soil sampling and testing. The problem is that other prospective contractors competing on the lowest price tender may not include such costs in a bid resulting in unsuccessful bids by prudent contractors who have included such costs. Longer term this creates an uneven playing field and may result in inappropriate disposal of excess construction soils.

Current municipal tendering procurement practices and timeframes set by the owner may make it difficult, if not impossible, to undertake the sampling, testing and dialogue activities prior to the time at which excavation must commence.

**Pages 4-6
Excess Soil Management
Best Management Practices for Commercial Fill and Other Large Receiving Sites**

While these practices are well-intended to protect the interests of local residents and other stakeholders, the significant costs and burdens associated with undertaking public consultations, retaining a QP and designing a fill management plan will reduce the number of potential receiving sites to the point where there may be no available receiving sites at all within a particular municipality or any nearby municipalities.

The recommendation that a receiving site not receive any excess soil from a source site without confirmation of a soil management plan from the source site will eliminate that potential receiving site for use by construction contractors working on smaller road and utility repair and construction projects. RCCAO submits that municipalities and other local authorities should ensure that there is a readily available, legal and cost-effective receiving site for local construction of residential, ICI and infrastructure projects.

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Page 6 Procurement Practices

As previously stated, unless all bidders for a prospective construction project are required to retain a QP and develop a fill management plan, or the owner of the site assumes those burdens and responsibilities, any construction contractor that adds the cost of sampling, analytical and QP retention costs will be at a price disadvantage against other prospective contractors that choose to exclude some or all of these measures.

Pages 6-7

Best Management Practices for Temporary Soil Banks

While temporary soil banks may reduce costs for owners, there is nothing within the description of these soil banks that would make them available to other site owners. The requirements to have sampling protocols, a management plan, financial assurance, record keeping, obtain a waste management certificate of approval and limit storage for not more than two years will all but guarantee that this mechanism would be suitable only for the largest of road, transit or other infrastructure projects.

In order to enhance the utility of temporary soil banks, the management practices should extend the maximum storage time from 2 to at least 5 years, if not 10 years. Many larger or long term construction projects, such as transit projects or residential subdivision developments, are undertaken in phases over a period of up to 10 years. Temporary soil banks should expressly authorize the placement and mixing of soils from multiple sites, e.g. excess Table 2 soil from the construction of a replacement gas line in London, Ontario could be mixed and amended with excess Table 2 soil from a new water main in St. Thomas. That soil would then be available for other uses and owners, e.g. sound berming.

Page 8 Civil Construction and Other Development Activities

While encouraging reuse of excess soil generated by small construction projects is a positive suggestion, it still does not encourage or address how municipalities can introduce and incorporate required industry-based best practices in local site alteration bylaws. Nor does it fully address the growing need for soil placement sites that would be readily available at a reasonable cost. Emergency road and utility repair projects are now common place occurrences and the burden to find a placement site often falls upon a construction contractor that might otherwise be

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focused on expediting the repairs and allow normal activities to resume as quickly as possible.

Page 8 Ontario Regulation 153/04 Considerations

While the crafting of a soil guideline document for excess construction soil is a positive step by the Ministry of the Environment, a viable solution for the majority of infrastructure and residential construction projects will certainly require changes in key definitions associated with soil and fill like materials to encourage the establishment of legal and cost-effective placement facilities for excess soils and materials from construction sites. Recognition should be clearly made in BMP that O.Reg. 153/04 soil movement requirements apply only where source and receiving site may be involved in the filing of a Record of Site Condition (RSC). There should be clarification within the BMP that for non-RSC source and receiving sites, particularly for smaller construction and emergency infrastructure projects, that QP-approved appropriate industry best management practices involving excess soil movement for beneficial reuse will be permitted where applicable.

Until such policy and regulatory changes can be made there is a need for all the involved ministries to establish recognized, acceptable excess soil definitions and promote their adoption in ministry best management practices, inter-ministry directives and at the municipal level.

5. CONCLUSION

RCCAO appreciates the opportunity to provide its comments and recommendations to the Ministry of the Environment on this issue of growing importance to the provincial and municipal governments in Ontario. RCCAO would be pleased to continue to work with the Ministry and other stakeholders to encourage the establishment and operation of safe and effective placement sites for excess construction fill and similar materials.

Please contact RCCAO, attention Andy Manahan, below should you wish to discuss any of the preceding points and comments in more detail or wish to arrange a follow-up meeting.

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