



The Dirt: Province Moves to Regulate Excavated—and Toxic—Soils

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In Toronto's skyline of cranes and concrete, it's almost impossible not to notice the impact of development. With a decade-long boom showing little sign of slowing down, ours is a city under construction. Yet, while the sea of glass and rebar often seems unavoidable, an equally ubiquitous element of new development seems to disappear right beneath our feet. To carve the excavation pits that precede the buildings, tonnes of soil are removed from sites across the GTA. According to the Residential and Civil Construction Alliance of Ontario, an estimated 20 million cubic metres of soil are excavated per year, but where does it all go?

Unfortunately, we don't really know. Once excavated soil is removed from the source site, it's often very difficult to find out where it ends up, even though environmentally sensitive solutions exist. Soil can either be sent to an approved/engineered landfill, a clean fill site, or a treatment facility—where it can be safely remediated and re-used. Unfortunately, this is not always the case, as contaminated soil has frequently ended up on [prime farmland and private property](#), posing a significant environmental—and health—risk.

Like many jurisdictions around the world, Ontario lacks a regulatory framework to manage excess soils. While regulations exist to ensure soil from brownfield sites is treated safely—with full documentation of soil content and disposal sites mandated—no unified policy exist to regulate excess soil from construction sites. However, with a Provincial "[Excess Soil Management Policy Framework](#)" proposal now in the works, new oversight could provide clearer guidelines and greater accountability to what has proven to be a significantly under-regulated industry.

As it stands, most of Ontario's excavated (or 'excess') soil is difficult to keep track of. Although construction and infrastructure—including transit projects—produce millions of excavated soil per year, the companies that handle the waste can be tight-lipped about their disposal sites and practices. "The dirt guys are very secretive about what they do," Walsh Construction's Tom Sims [told the](#) National Post in 2013. "If they find a location that is paying for dirt, they don't want their competitor to know where that is," said Sims, discussing the dig for Toronto's Line 1 Subway Extension.



The launch shaft for the Crosstown LRT at Brentcliffe and Eglinton in 2015, image by Jack Landau

According to the Post, the total soil excavated for the Line 1 Subway Extension and the Crosstown LRT adds up to over 2.5 million cubic metres. In regards to the 815,000 cubic metres excavated for the Crosstown LRT, TTC and Metrolinx representatives were not able to provide the Post with exact locations for the excavated soil, with numerous sites in Peel region cited. However, the Post's investigation revealed that the excavated soil "would not go to Peel but to

Technicore Underground in East Gwillimbury. When a reporter visited Technicore, a woman gave out another address for the soil: 5338 Wellington Road 125, Erin. This is the address of Mulmur Aggregates."

A representative of Mulmur Aggregates was able to tell the Post reporters that the soil would likely end up at several sites, though without specific details of how—and where—the excavate would be treated. Meanwhile, similar ambiguity surrounded the soil from the Line 1 Subway Extension. (For their part, a representative of Mulmur Aggregates told the Post that greater attention needs to be paid to soil excavation during the design stage of infrastructure projects, with the company finding it "burdensome and risky to always be weighted down at the contractor stage.")

In bygone decades, huge quantities of dirt were used to create the Humber Bay Parks, Ashbridges Bay Park, and the Leslie Street Spit—or dumped in ravines. That era is now behind us. Now, as recent provincial growth policies (including the *Places to Grow Act* and the Greenbelt plan) encourage a more urban development model, the excavated soil often comes from Downtown sites.



Development in the urban core has dramatically increased in the 21st century, image by Jack Landau

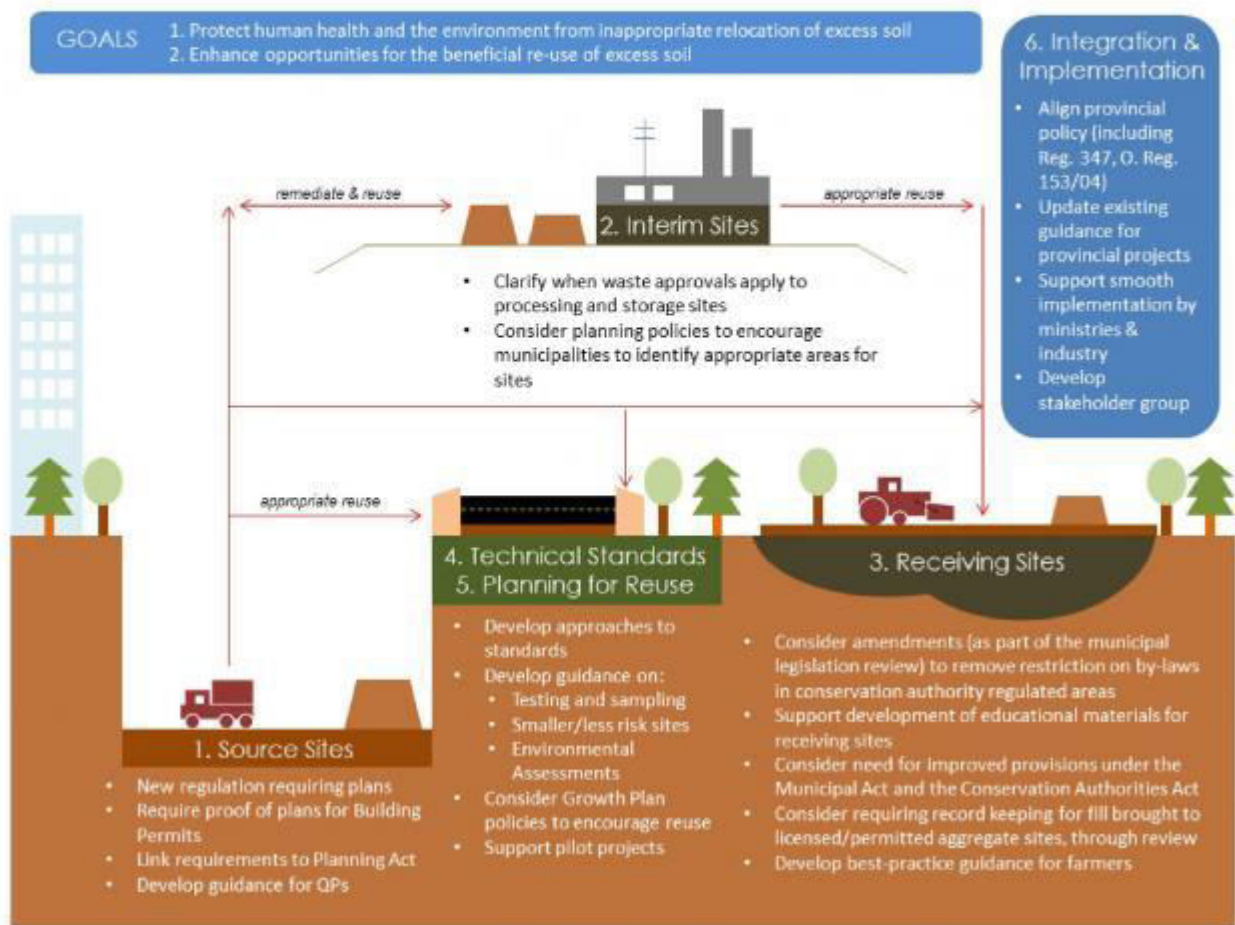
In Toronto's Downtown, many "sites sit on partially contaminated land, especially those created by lake fill operations," John Lorinc writes in [a 2012 piece](#) for the Globe and Mail. Unregulated and potentially toxic, the excavated soil is sometimes inappropriately disposed of. Highlighting the lack of accountability—and subsequent moral hazard—of the industry, Lorinc points to a

Pickering landowner who was offered "\$8,500 to dump and grade about 500 truckloads of fill on his land" in 2010. Unfortunately, the excavated soil (sourced from Downtown Toronto) turned out to be highly toxic. The rancid-smelling earth was contaminated with gasoline, containing "up to seven times the provincial limit."

The April 2016 issue of *Environmental Science & Engineering Magazine* reports that another "Ontario farmer accepted 'free' soils in the summer of 2011, only to find out later that it contained polyaromatic hydrocarbons and heavy metals." Across the Province, [similar instances](#) of contaminated soils abound, with the Township of Scugog recently voting to take legal action in order to launch a long-standing remediation plan for contaminated soil—some of which [comes from Toronto construction sites](#)—at the Greenbank Airport.

5.0 POLICY NEEDS AND ACTIONS

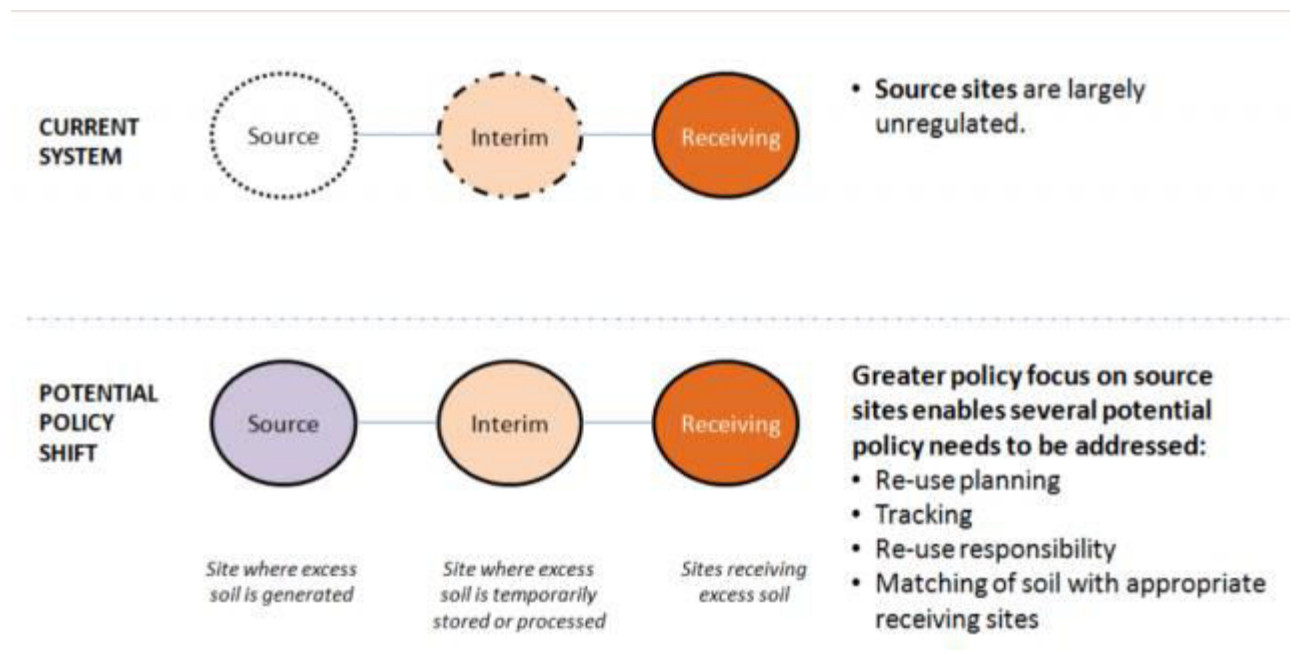
The figure below is an illustration of the proposed provincial framework – including its overarching goals and actions to strengthen oversight of *excess soil management*. Actions are described in greater detail in the next sections of the document.



An outline of the proposed framework, image courtesy of the Province of Ontario

As the Toronto Star's Moira Welsh [puts it](#), "Ontario's lucrative soil industry operates with little government oversight. There's no regulated tracking system, no proper definition for 'clean' soil and not enough rules to govern where the soil is taken." To close these gaps in provincial policy, the Ministry of the Environment and Climate Change (MOECC) is moving ahead with the new policy framework.

Though subject to further evolution, the proposed policy would mandate increased oversight of the process, focusing on the source site—where soil is removed. While the majority of existing regulations concern receiving sites, the proposed framework would require source sites to "be responsible for characterizing their excess soil, tracking it, and verifying that their excess soil reaches an appropriate destination." With the source sites—whether condo towers or infrastructure projects—holding greater legal responsibility, the MOECC hopes that greater accountability can be brought to the industry.



Comparing existing regulations with the proposed framework, image courtesy of the Province of Ontario

In addition, soil management strategies could come to be included in "relevant approvals," making the treatment of excess soil a much earlier priority on some sites. The MOECC framework would also "[e]nhance opportunities for the beneficial re-use of excess soil," providing guidance and regulation for interim sites while encouraging new pilot projects for the decontamination (or remediation) of hazardous soil. According to the Province, municipalities would also "be encouraged to develop strategies for re-use of excess soil as part of planning for growth and development."

Following the example of jurisdictions like Quebec, the U.K., and the Netherlands, a strong policy framework could make Ontario one of the global leaders in bringing oversight to a dangerously unregulated field.

As the "Excess Soil Management Policy Framework" evolves, a more defined regulatory proposal is expected to emerge in the coming months. In the meantime, more information about the process thus far is available on the Province's official website, including a [detailed overview](#) of the proposal so far.