Toxic dirt dumped in Ontario’s prime farmland

With lax rules and no tracking system, Ontario sits idly while Toronto’s contaminated dirt is dumped in the countryside.

Dale Brazao / THE TORONTO STAR

Peterborough County farmer Ruco Braat said he was promised clean fill but ended up with truckloads of contaminated soil.
Toronto’s construction boom is unearthing massive volumes of soil contaminated with dangerous heavy metals and petroleum, but it’s nearly impossible to know where the dirt is going because Ontario doesn’t track it.

Instead, thousands of tonnes of toxic earth taken to prime farmland from downtown condominium projects are usually discovered accidentally — by neighbours who report bad odours from soil that is supposed to be “clean.”

Long-term, experts warn of contamination of agricultural land and groundwater, often in the Greenbelt or Oak Ridges Moraine.

Landfill operators say the final destination of the tainted soil is a mystery. At a time when excavation projects have spiked, there’s been a dramatic drop in the number of trucks taking the dirt to the special landfill sites that can safely manage toxins, said Rob Cook, executive director of the Ontario Waste Management Association.

That leads to the “potential for large amounts of contaminated soil being improperly managed,” Cook said.

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.
The Star asked the province and various agencies to provide an accounting of where all the soil from big dig projects like the Pam Am Athletes’ Village and downtown condominium sites was dumped. Neither the province nor any other agency could provide the information.

Environment Minister Glen Murray told the Star in an interview that better controls are needed to deal with what he termed a “serious issue” that for him is at the “top of environmental and economic concerns” in Ontario.

Years of lax oversight infuriate country residents, from Schomberg in the west to Lakeridge in the east, who fear their health is being sacrificed in the rush to finish big Toronto projects.

Carmela Marshall, of Lakeridge Citizens for Clean Water, said the drive to build infrastructure in Toronto and surrounding area will leave a dangerous legacy. “How many years before it gets in our groundwater? Five years? People are afraid.”

Here’s what we know: In peak construction years, up to 50 million tonnes of dirt are excavated in Ontario projects, most from the greater Toronto region, at an annual cost of $1.7 billion, according to the Residential and Civil Construction Alliance of Ontario. Industry experts say that roughly 15 per cent of that soil, as much as 7.5 million tonnes, is contaminated and should go to approved landfill or remediation sites. How much of those 7.5 million tones went to approved sites is unknown.

So where’s all that dirt going? It’s impossible to miss the dump trucks. They thunder across country roads to the north, east and west of Toronto, leaving sleepy towns in their dust. Talk to truck drivers at the Tim Hortons in Schomberg and they all say they’re carrying fill from downtown Toronto construction sites. They all say their dirt is clean, but most don’t know what they are carrying.

Sheep farmers Ruco and Kimberly Braat agreed to accept loads of soil in the summer of 2011. The couple and their two children live in the Peterborough County hamlet of Bailieboro (renowned for its butter tarts) and needed earth for the base of a barn.

Two men were offering free soil to farmers and Braat said he agreed to take hundreds of truckloads — with the strict proviso that it was clean. Later, a neighbour who wanted some for his property had it tested. The results were horrifying.

The pile of dirt their kids had been sliding on a few days earlier was steeped with polyaromatic hydrocarbons and heavy metals like barium, cadmium, copper and lead. The family complained to the provincial environment ministry.

After an investigation, the ministry filed Environmental Protection Act charges against soil contractor Green For Life (the company is also Toronto’s garbage collector) and a soil broker called Earthworx. No one from Earthworx would comment.
GFL’s president and CEO, Patrick Dovigi, said his company was not to blame for the toxic soil on the sheep farm. He said another contractor dumped the bad soil. The case is still before the courts.

According to Dovigi, GFL has been unfairly ensnared in several ministry investigations because it relies on the “hit and miss” accuracy of soil contamination tests done at the construction site by the “qualified persons” (called QPs) hired by developers. Dovigi’s point is that his company is paid to haul dirt, not conduct scientific tests.

“The QP,” said Dovigi, “is the kingpin. It’s not our fault if they say the soil is clean and it turns out they’re wrong.”

Activists like Marshall agree the soil tests are open to interpretation. The results of these tests are included in the developers’ “soil management plans,” documents that critics say the ministry could collect and analyze. Currently, the ministry is only required to oversee “adverse” impacts under the Environmental Protection Act.

With limited provincial rules, individual municipalities are left to oversee fill operations, creating an ineffective patchwork enforcement system.

If it’s confusing for country residents, the operators of landfills that were supposed to get the soil are equally perplexed. The circuitous path of tainted dirt from the Pan Am Athletes’ Village provides one example.

Once an industrial dumping ground, the 32-hectare site near the Don River has been transformed by glass condominiums that will be home to 10,000 athletes and coaches during next summer’s Pan Am and Parapan Am Games. The buildings will later be sold at market value by the private developer.

Infrastructure Ontario said GFL started the village job on Oct. 16, 2011, taking 248,000 cubic metres (depending on soil density, that’s as much as 500,000 tonnes) to ministry-approved sites. The dirt was either tainted (with petroleum and metals) or needed extra tests to determine contamination levels, said an official from Infrastructure Ontario.

Here’s the conundrum: Walker Environmental’s Mike Watt said GFL’s Dovigi told Walker it would get roughly 200,000 tonnes from the village dig. Instead, Watt said only 25,000 tonnes arrived at his landfills. In an interview, Dovigi said he strongly disputes those figures.

As the Star continued asking questions, Infrastructure Ontario offered the names of six sites where it claimed the dirt was taken. Two landfills were owned by Walker and two were owned by a company named Newalta, which said it got 8,930 tonnes. The fifth site was a soil treatment facility called Green Soils, but its owner, Ashley Herman, said he’s never directly received dirt from the village.

The final site named is a GFL-owned soil remediation facility in Pickering that can clean out hydrocarbons (from oil or diesel) and identifies (but doesn’t remove) heavy metals.
During a series of interviews, emails and text messages, Dovigi told his story to the Star. He said about 100,000 tonnes of the Pan Am dirt was taken to his remediation facility and later was mixed with municipal garbage and trucked across the U.S. border to the Pine Tree Acres Landfill in Michigan. A Michigan landfill official said the soil met state standards. Dovigi also said that some of the Pan Am dirt at the Pickering site was mixed with soil from other jobs, making it difficult to know where it ultimately landed.

Environmental groups say the confusion over the Pan Am dirt illustrates the challenge of tracking soil.

Now, groups like Lakeridge Citizens for Clean Water, Earthroots and Save the Oak Ridges Moraine are demanding the tough regulations of a “clean soil act.” They’re seeking rigorous laws that include soil tracking, a definition for “clean” dirt and rules to govern where contaminants are taken.

“The GTA is surrounded by the best farming land and drinking water sources and we will be polluting it for generations if the government continues to turn a blind eye to this problem,” said Earthroots’ Josh Garfinkle.

Clean or dirty, Toronto’s excess dirt ends up in quarries, farmers’ fields or “aerodromes,” the federally regulated landing strips in the country that offer some landowners a loophole to circumvent municipal soil rules. Many of these so-called airways take in hundreds of truckloads of dirt each day, transforming rolling green meadows into barren hectares of dirt.

Some landowners who take the soil are getting rich. They get between $30 to $50 for each load. With at least 150 trucks a day, the annual earnings can be $2 million or more.

A stone’s throw from Port Perry, Greenbank Airways advertises itself as a country air strip. But the regular arrival of dump trucks provides far more action than a few small planes.

Greenbank is owned by Ajax resident Robert Munshaw, the previous owner of the Pickering site where GFL built its remediation facility. Greenbank pays a “qualified person” to test for contaminants on its site and a January 2014 report by the consultant noted that 385 tonnes of tainted dirt were found at Greenbank in 2013. The report, obtained by the Lakeridge Citizens for Clean Water, said the dirt in question was removed and “returned” to GFL’s site in Pickering.

Munshaw wouldn’t speak to the Star, but Dovigi said this finding shows that Greenbank’s system works. He also said that the tainted dirt likely came in one load and was spread around the Greenbank site.

The environment ministry didn’t investigate this contamination case, saying that’s the role of the local government.

Toxic dirt investigations by the ministry are few. The Star asked for all inspections, investigations and enforcement for the last five years, which coincided with the construction boom. There were fewer than 20 in the greater Toronto region.
In the ministry’s list, most companies were named just once. For example, Trillium Recycling, of Etobicoke, is in mediation with the ministry over “table three” soil (considered to be a waste) found on old rail lands in Haldimand County.

Trillium’s lawyer, Mauro Marchioni, said his client had the misfortune to be the last company to drop dirt on the site, despite years of dumping by others. “If the property has gone through six sets of hands and (the ministry) gets the last guy, that’s who they go after,” Marchioni said.

GFL was named six times in the ministry records. Two follow-up inspections west of Toronto found no outstanding issues. East of Toronto, the ministry named GFL in four cases involving contaminated soil, most of which has since been removed. Ministry documents said the tainted dirt came from GFL’s remediation facility where soil mixing made it “difficult to determine” the site where it originated.

Dovigi said GFL is targeted because its remediation facility in Pickering is subject to strict government rules. Other soil contractors just pick up the dirt and drop it off, so they don’t face the same scrutiny, he said.

The government oversight of the Pickering facility is part of GFL’s defence in the case of the sheep farmers, who are now suing GFL and Earthworx for nearly $5 million. In GFL’s statement of defence, it says that contaminated soil is treated and tested by third parties to “confirm” that it complies with ministry standards. (The current system, which critics say can be loosely interpreted, uses contamination levels set out in “tables” that range from low to high.)

In the end, the Braats estimate that at least 700 truckloads were dumped on their farm. Dovigi said GFL only dumped 192 loads. Under ministry orders, GFL removed all of the soil. GFL is now countersuing for $600,000 in removal costs, alleging the Braats benefited from GFL’s “good deed.” The Braats said they were not enriched “in any way” by GFL’s actions.

The farmers have since sold 100 of their 450 sheep to pay for soil tests, legal fees and other expenses. “I feel like we’re starting all over,” Braat said.

Cook, of the Ontario Waste Management Association, warns that one day the province will take a similar financial hit for this “environmental travesty.”

“When the birds come home to roost and somebody needs to clean up these sites, it’s going to fall on the taxpayer’s back.”