How ‘Clean Fill’ Became a Dirty Word

By Tim Shuff

September 11, 2015

With a proposal to flatten his farm fields, a Mono farmer stepped squarely into the centre an environmental hornets’ nest.

When you look across Doug Cox’s farm from the corner of Mono Centre Road and 5th Line, all you see are gently rolling green fields, not the two gullies hiding in the back corner of the property. They’re not much bigger than a rural building lot, but these hollows are deep, steep and all but bare – a pox on the otherwise pastoral property, and a persistent stress on the mind and pocketbook of this sheep farmer.

The sandy slopes do not hold topsoil. Grass grows in thin patches. They’re too steep to work with machinery, and too dangerous for grazing sheep. The forest on the other side of the property line that cuts through the gullies hides opportunistic coyotes who steal ewes and lambs under the eyes of the patrolling sheepdogs. On a property that’s only 43 acres – small for a working farm – these seven acres sit idle.
So when someone came to Cox, 68, with the idea of filling them in, he was keen. After 35 years of living with these worthless hollows, he was enthused by the possibility of filling and grading them flat enough that he could work the land with machinery and grow hay. The plan would allow him to increase his sheep herd and make his farm more profitable. He would also net a payoff for taking the fill. All he needed was approval from Mono town council.

It was at that point Cox planted both feet squarely into a hornets’ nest of an issue that is bedevilling rural municipalities across the Greater Golden Horseshoe – how to deal with the vast and increasing quantities of fill being generated by the region’s building boom.

The volume of excess soil, what most of us call “dirt,” excavated from construction sites across the province has grown to as much as 25 million cubic metres a year, according to the Residential and Civil Construction Alliance of Ontario. That represents about 3 million truckloads, enough soil to fill the Rogers Centre 15 times over. Disposal of the soil costs about $1.7 billion annually.

Of all that soil, about 15 per cent, or about 7.5 million tonnes, is contaminated. In theory, the contaminated soil is directed to an approved site, but according to the Ontario Soil Regulation Task Force (OSRTF), “There is no federal or provincial regulation that specifically tracks, assesses and enforces the movement and disposal of this dirt” – which is raising serious concerns about how much contaminated fill is making its way into the countryside.

A shaky proposal from a rookie broker

Cox brought his first plan to council in March 2014, seeking an exemption from the town’s fill bylaw. It said fill projects could be no bigger than 250 cubic metres – about 30 truckloads – and use only locally sourced fill. In a one-page letter, Cox announced his intentions to import up to 20,000 truckloads over six months – roughly 300 truck trips in and out a day, six days a week.

He attached a letter of intent from his contractor Itolo Mallozzi of Construction Logistics & Technologies Group Inc. that was unsettling in both its poor grammar – “We accept Grade “A” Clean File only….We estimate 15 to 20-thousands loads over six month period” – and its utter lack of technical detail – “We understand that we are free to proceed without Permits or Surveys (not required).”

Council was alarmed by the size of the proposal and couldn’t access CLTGI’s website or confirm the company even existed. It refused to consider the proposal without more information.

That shaky first exchange sent both council and Cox racing off to do their homework – Cox to compile a more robust application and the town to completely revamp its fill bylaw.

With the Mallozzi connection, Cox may have had a run-in with the opportunism the booming and poorly regulated industry has begun to attract. He says Mallozzi told him the project would have been his first.
Fill brokers, the middlemen who take excess soil from contractors and find a place to dump it, can reportedly make as much as $20,000 a week. According to OSRTF, disposing of contaminated soil at an approved landfill site costs $750 or more a load, while clean fill costs $50 a load, creating a huge incentive to flout a weak regulatory system and turn a blind eye to details like dumping permits and soil tests.

The result is that in a growing number of cases, instead of being properly disposed of at an approved site, contaminated soil is ending up in the countryside, masquerading as clean fill.

In a growing number of cases, instead of being properly disposed of at an approved site, contaminated soil is ending up in the countryside, masquerading as clean fill.

**A revised proposal meets a revised bylaw**

For his part, Cox had long since grown frustrated with Mallozzi’s evasive answers about the source of his fill and moved on to work with an established soil contractor called SoilCan, a company with several successfully completed farm fill projects on its resumé, including a 40-acre fill project on a farm in Tottenham.

SoilCan brought in an engineer to survey Cox’s property and came up with more specific numbers that were about a third of Cox’s earlier plan: 56,263 cubic metres or about 7,000 to 7,500 truckloads in “Phase 1” to fill the two holes in the back of the property totalling 2.7
hectares (6.8 acres). Critics hear “Phase 1” and wonder what’s next, but Cox says the only other project in his sights if phase 1 goes well is a smaller depression behind his house that would take about another 1,000 loads.

Meanwhile, looking at similar issues arising in other municipalities within trucking distance of the GTA, and seeing Cox’s impending application as the tip of the iceberg of potential new fill projects, Mono council scrambled to amend and update its fill bylaw. It removed the old 250 cubic metre limit, but introduced a $2,000 application fee plus a $20,000 security deposit to cover the cost of hiring expert reviewers. Another $20,000 performance bond is required once a permit is issued (though any residue from the initial deposit can be applied against it).

The same day the new bylaw came into effect, August 27, 2014, SoilCan contacted council to file Cox’s new fill application and was informed of the new fees. The timing was too perfect. It seemed to Cox as if the bylaw was amended specifically to stop him, by either making it unaffordable to file, or requiring him to put down money to hire the experts required to defeat him.

“For some reason they’ve got a hate on for me,” Cox says. “I’m the villain in this situation. I’m just a farmer trying to make a living. They’re going to have all the farmers out of business with these regulations.”

Mono’s director of planning Mark Early defends the new fees as standard practice for such large-scale developments. “You’re putting in probably clay soils on top of sand and gravel soils, so you’ve got a change in hydrology and hydrogeology. There’s a lot of issues we have to look at, not just a grading plan that we’ve received from Mr. Cox. That’s the same as any development application. You put up an application fee and whatever it costs us to review it is what you’re going to pay, and there’s no guarantee that you’re going to get an approval. We’re not putting the cost of a development application on the general taxpayers.”

Carmela Marshall, director of the OSRTF, says the municipal bylaw needs even further strengthening to deal with ongoing oversight of fill operations. “The operator should follow best practices to ensure the soil they are accepting is clean. However, there is no provincial legal requirement for them to do so. So if the municipality has not ensured, through requirements in their bylaw and a compliance monitoring regime that this is being done, there will be no motivation for operators to follow any sort of best practices.”

Marshall says Mono needs to implement tipping fees to cover costs such as independent soil testing. The township of Scugog, for example, charges a tipping fee of $2 per cubic metre, an amount that would ratchet up disposal costs on Cox’s property by another $100,000.

What’s normal on a farm?

Cox and SoilCan balked at the town’s $22,000 up-front cost and thought maybe they could find a way around it. Instead of submitting their application to Mono, in early 2015 they appealed to the Normal Farm Practices Protection Board, a provincial authority with the power under the Farming and Food Production Protection Act to protect farmers from nuisance complaints and
exempt them from local bylaws that interfere with anything that can be deemed a “normal farm practice.” After a pair of prehearings earlier this year, the NFPPB agreed to hear Cox’s case this November.

Sheep farmer Doug Cox says filling the gullies on his property to increase his herd and improve his profits is a normal farm practice. But in the absence of regulatory oversight, neighbours fear soil and water contamination. Photo by Pete Paterson.

Cox’s critics worry that Cox and SoilCan may have found a loophole to circumvent local bylaws and get the project approved without addressing legitimate community concerns. Spearheading this dissent are Cox’s immediate neighbours to the east, Elaine Kehoe and her husband Lewis Baker.

The fill wouldn’t be visible from the Kehoe’s house, which is sheltered behind trees on the 25-acre property they call “Sanctuary,” but the fill site abuts their property line. Standing there in a few years, you might have to crane your neck to look up at Cox’s newly levelled fields.
Kehoe says the community was not adequately notified or consulted about the project, or about the NFPPB hearing. She also worries about truck traffic on Airport Road. But her primary concern is contamination and water supply. “When you’re putting 7,000 truckloads of soil down on a property, unless you’re putting the proper culverts and doing everything necessary, that’s going to pack down. Our well is 285 feet down. Any diversion whatsoever and I’m going to end up dry,” she says, adding that owners of other neighbouring properties have similar concerns.

Kehoe says she’s spoken with 300 to 400 people in the community and most are worried about soil contamination based on reports of fill contamination elsewhere in the province. She has collected 185 signatures on a petition opposing Cox’s project, and says the NFPPB has received 125 letters of concern.

“We’re definitely not against farming. That should be clearly understood. We love the community. We love the people who are in it. This is about the potential contamination of Mono. The possibility is very real and we can’t take a chance,” she says.

Stories of receiving sites like Cox’s getting paid handsomely to accept fill heightens suspicions about whether the fill really is clean, and whether the project might be as much about the money as remediating the landscape. Some of the rumours may be the result of confusing overall disposal charges with the portion landowners receive.

Cox says the maximum he expects to make is $20 a load. “I’ll get enough out of it hopefully to replace the fencing and then fertilize and seed some fields. I’m not going to make a million bucks. I’ve heard rumours of $50 a load, but that’s not happening. And if I can make a couple bucks, so what?”

Critics also question the merits of altering the characteristic rolling hills of Mono. “Cox’s application was to ‘rehabilitate’ his land, but under the Oxford dictionary ‘to rehabilitate’ means to bring back to its original condition,” argues Kehoe. “Those hills and valleys have always been there.”

At council’s first meeting about the issue, councillor Bob Mitchell expressed the same sentiment in a statement that Cox still recounts resentfully: “I would really question that we’d want to take the landscape we have around here and try to level it out. I don’t think we want to try and start making farmland out of what we have here. I think we’re blessed the way it is.”

Cox does not feel so much blessed as besieged. “There’s no more common sense on council, not enough farmers,” he complains. “What farmer in his right mind is going to pollute his own property?” he asks, noting that if his neighbours’ wells are affected, his would be too.

Cox questions why in the heart of the Greenbelt, where the land is supposed to be preserved for farming, he must fight so hard for project that will make it more agriculturally productive. “A few years ago I applied for a severance. I wanted to sell a lot and they said, no, this is prime agricultural land. So if you can’t build houses on it then let me farm it. You can’t have it both ways. What’s wrong with creating farmland for future generations?”
The key question for the NFPPB is whether creating farmland through large-scale filling constitutes a normal farm practice. The OSRTF is recommending that the ministry of agriculture shut down the debate for good by issuing a statement that it’s not. More likely, “normal” will be considered on a site-specific basis.

A 2012 court case ruled that a 30,000-load fill project on the Oak Ridges Moraine was not a normal farm practice because it was evident the landowners had recently bought the land as a fill site. The Niagara Escarpment Commission is considering a recommendation that would require an agrologist to certify the agricultural merits of any fill plan claiming to be for farm improvement. Under these terms, Cox may have a case – he’s been farming the land for four decades and it’s hard to argue that flatter fields wouldn’t make his job easier.

**Girding for the showdown**

The November NFPPB hearing promises to be dramatic. Elaine Kehoe and the Mono Murmur Citizens’ Coalition (MC2) have been accepted as interested parties representing the concerns of local residents. The OSRTF’s Carmela Marshall will appear as a witness. So will Robert Iachetta, the owner of SoilCan. The town of Mono will be there with its lawyer.

Cox will be represented pro bono by Justin Stein, a self-described excavation contractor and business associate of Iachetta, who says he got involved “by accident” and would “rather be digging dirt.”

Stein is bracing for an epic “five-day court battle.” He paints himself and Cox as the David to the town’s Goliath with its high-priced lawyers and consultants. His position on the benefits of the “sustainable reuse” of excess soil could be lifted right from a Ministry of the Environment position statement.

“It’s very appropriate when a farm in Brampton grows houses. Everybody loves it. A guy wants to use that fill to create some extra farmland, that’s no good,” Stein says. “It’s really about food. When they hire lawyers, it gets blown out of proportion.”

But to the proposal’s critics who take the big picture view, the possibility that a large fill project could be deemed a normal farm practice and exempt from municipal bylaws sets a dangerous precedent that must be challenged.

“There is a major jurisdictional issue here that this is not what was meant by protecting ‘normal farm practices,’” says MC2 president Don MacFarlane. He thinks the NFPPB’s authority over fill will have to be settled before any of the finer details of the Cox case even become relevant.

“If the NFPPB has the authority to authorize what we believe are fundamentally commercial fill operations, we would see a massive influx of fill into our communities. They’re going to have probably 50 to 100 cases a year coming to them, and in the end, just as the Ontario Municipal Board has become the regulator of aggregate projects, [the NFPPB] would become the regulator of fill dumping cases,” MacFarlane predicts.
Municipalities could incur huge costs fighting at these hearings – MacFarlane estimates Cox’s case will cost the town $100,000 – and they could lose their power to turn down projects despite community concerns about dust, noise, traffic, soil and water contamination, falling property values or the inherent value of leaving rolling hills be.

“This is a big issue in our community, as aggregate has been,” says MacFarlane. “This is the new chapter in that book.”

Contaminated fill and illegal dumping

Contaminated fill and illegal dumping are two growing problems that highlight the need for better regulatory oversight of soil excavation and fill operations.

In theory “fill” or “excess soil” destined for reuse refers to clean soil, soil that is tested and determined – although there is no enforceable technical standard of what is “clean” – to be least as uncontaminated as the pre-existing soils in the place where it’s going to be dumped.

The Ontario Soil Regulation Task Force puts some of the blame for the increasing supply of contaminated dirt on the 2001 Brownfields Act, which accelerated the development of former industrial and commercial lands. Describing itself as “a coalition of citizens’ groups and other interested parties seeking solutions to the problems of excess construction soil,” and with no other centralized monitoring authority, OSRTF has taken on the task of diligently tracking cases of questionable dumping practices.

In Peterborough County, for example, sheep farmers Ruco and Kimberly Braat gladly accepted hundreds of truckloads of free fill in 2011 as part of a barn construction project. It was only when a neighbour had some of the soil independently tested for his own use that it was found to be contaminated with polyaromatic hydrocarbons and heavy metals. The Braats are now in a $5-million lawsuit against the waste management company and the soil contractor.

Until this spring the Greenbank Airways site in Scugog Township was receiving 200 truckloads of soil a day – part of a 2.5 million cubic metre project. After local council approved spending up to $50,000 to have the site independently tested – an example of the high costs municipalities can incur to properly oversee fill operations – results showed unacceptable levels of lead and benzene, as well as bits of wood, asphalt, plastic, rubber and glass (which are also considered contaminants and not part of “clean” soil). The township has stopped Greenbank’s fill deliveries until remediation is assured.

Other examples from the OSRTF include a dump site in Lakeridge where cyanide was found at 3,000 times the acceptable limit close to a vulnerable groundwater aquifer and a “natural core area” of the Oak Ridges Moraine. And an unpermitted fill operation in the City of Kawartha
Lakes, where soil that had been certified acceptable was found to greatly exceed limits for many contaminants.

The OSRTF says large-scale construction projects should be required to have a soil management plan that covers “cradle to grave” accountability. Right now, builder’s only care is to get the soil off-site. From there it can pass through fill brokers and end up anywhere.

“If you go and ask some developer in downtown Toronto where their excess construction fill is going, don’t hold your breath for an answer,” says OSRTF director Carmela Marshall. This makes it harder to keep tabs on contaminated soils and rein in the epidemic of illegal dumping all around the GTA.

Mono director of planning Mark Early says the town has investigated five or six illegal dumping sites already this year, and knows of another eight or nine across the county. He notes the number of such cases has been growing every year. “Landowners reach agreements with contractors to bring the fill in. We’ve had two instances where the landowners were unaware that it was, one, illegal, and two, potentially contaminated.”

This July, Mono landowner Hans Stiegert was issued a restoration order from the Niagara Escarpment Commission to remove 125 loads of fill he’d had dumped without a permit on his property at 7th Line and Airport Road. Stiegert has 90 days to remove all the fill to a government-approved disposal site, then landscape, stabilize and seed the land to restore it to its original condition.

The OSRTF has taken the lead in urging municipalities and the province to address the excess soils issue. It is providing guidance to municipalities in strengthening their bylaws, and has issued sweeping recommendations that involve five provincial ministries.

“Our group has identified key things that have to happen at the provincial level so municipalities are not left scrambling to figure out what to include in their bylaw, what soil quality standards are appropriate, what locations are safe for large-scale fill,” says Marshall.

The OSRTF is pushing for legislative change at the provincial level by issuing a Resolution for Clean Soil Act, based on a resolution passed by the Town of Erin last December and since endorsed by several other municipalities.

The resolution claims the province’s Places to Grow Act created the excess soils problem through its policy of urban development intensification, so now the province needs to legislate provincial standards for managing excess soil.

For more information about OSTRF recommendations, see osrtf.ca.

More Information

Who’s in charge?
In its proposal for the Cox property, SoilCan assured Mono council that the company would voluntarily follow the provincial best practices guidelines for soil disposal. However, part of the challenge of managing fill is that responsibility for the regulation and oversight required to ensure industry keeps such promises varies depending where the soil ends up.

Here’s an overview of who’s in charge where.

**Municipalities**

Municipalities are responsible for regulating fill within their borders through their site alteration bylaws, which results in an inconsistent patchwork of regulations across the province. While some municipalities have strong bylaws, others have none, or skirt the issue with a blanket ban.

Fill brokers quickly leapfrog to the municipalities with the weakest laws. A 2013 industry-sponsored survey of 143 municipalities surrounding the GTA found less than half had a fill bylaw and only eight referenced the environment ministry’s soil quality criteria tables. (The soil quality tables were developed to apply to brownfield sites and not intended as a standard for clean fill, but they are the closest thing we have to a soil quality standard.)

**The federal government (aerodromes)**

Aerodromes are federally regulated under the Aeronautics Act, potentially limiting municipal authority. Some sleepy rural airfields have become suspiciously busy accepting streams of trucks in the name of airport upgrades, and municipalities have been unclear about their rights to oversee these operations.

**Ministry of Natural Resources and Forestry (quarries)**

Municipal jurisdiction is also limited on quarry lands, where soil is often brought in for rehabilitation – to fill in old pits, such as the one near Hwy 89 and First Line East in south Mulmur. These sites are regulated by MNRF under the Aggregate Resources Act, and monitored by the site’s owners.

**Ministry of the Environment and Climate Change**

The Ontario Soil Regulation Task Force (OSRTF) has been urging the provincial government to provide more direction over the patchwork of fill regulations. Today the MOECC treats all soil as clean unless proven dirty.

That means its involvement is strictly reactionary – coming in to enforce the Environmental Protection Act when there is evidence of off-site impacts, usually identified through citizen complaints. (The MOECC spill hotline is 1-800-268-6060.)
Last year the ministry released a guidebook of voluntary “best management practices” for excess soil. The OSRTF and many municipalities have urged the ministry to take the next step and pass a clean soil act that would see best practices become law.

Last year the ministry launched a review – expected to be completed “very shortly” – to determine if such a province-wide soils policy is needed.

**Conservation authorities**

Conservation authorities are responsible for issuing fill permits on lands they regulate. OSRTF director Carmela Marshall says CAs typically have different, often less comprehensive requirements than municipalities, so sometimes landowners are able to proceed with fill projects on their CA lands after being rejected on municipally-regulated portions of the same property.

**Niagara Escarpment Commission**

Land filling and contour changes on the Niagara Escarpment require a development permit from the NEC. However, a 2013 NEC discussion paper suggests this permitting process is broken. Specifically, a significant number of permit applications were submitted after the fact, indicating “a lack of awareness” that a permit was needed “or possibly that landowners are willing to risk non-compliance and potentially a fine in order to accept the fill.” The paper also stated, “It is very difficult for the NEC staff to monitor fill quality and the potential contamination of fill being accepted on-site.”