

# DIRTY DIRT

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Some story titles come easy and reflect the contents of an article to perfection. The title for this article truly reflects a situation in which the University of Western Ontario was involved during the summer of 1993.

The project started out as a joint venture between the City of London and the University. The city was faced with a shortage of facilities for their sports programs and the University had a field that required some major work as it had recently been deemed unfit for use. After some discussion and many meetings about construction and maintenance, the city agreed to do all cut and fill and rough grading which involved raising the overall level of the field, while the University would do fine grading, seeding and initial establishment of field. Everything seemed organized and ready to roll, what could go wrong?

The contractor who was hired for this project had just completed rebuilding one sports field and had proven competent in his work.

Arrangements had been made for the stripping of existing soil to both sides, the hauling in of clean fill, grading for a 1% crown and the placement of stockpiled soil back on the raised field. Bulldozers moved in to strip the soil in late June and worked through the weekend to have the field ready to receive the fill by Monday morning. This part of the renovation was to be supervised by the city as their contribution to the project.

On Monday I dropped in at the site and noticed that the fill being trucked in was much darker than I had envisioned and it appeared to be more a compost mix than clean fill of mineral soil from a townhouse complex. Further investigation of the fill caused some concern, as there was a slight odour to the soil, and it had an unfamiliar feel to it.

At that time I decided to follow one of the trucks back to the site at which it was being loaded in order to determine where the fill was coming from. I followed the truck for about 15 minutes and arrived at

a local scrap yard at the far side of the city.

I returned and called the city project co-ordinator and inquired about the soil and its contents and I was assured that it was acceptable fill. I still felt uneasy, so a meeting with the contractor, city representative and myself was arranged for the next morning. At the meeting the contractor was asked if the soil was clean. He gave assurances that it was. He was then asked about its origin and he stated exactly where it was coming from. He even stated that it had been tested for contaminants and was perfectly acceptable. At this time I felt reassured, but wanted to be sure. I suggested, or rather demanded, a soil test prior to any further work being carried out, and specified there was to be no soil placed on top of the suspected fill prior to acceptable soil test results.

Events became a bit frantic!

Before the first set of tests came back, we sent out another batch of samples as word of the project problems had spread. The contractor was anxious to complete his job, but we would not allow any work to be carried out.

We had submitted our second set of samples on a Friday prior to the Civic Holiday weekend with a rush order on it and expected results from all tests on Tuesday. We received the results from the original tests first and they increased our concerns, but we would wait for the second set, as we requested a full test for all contaminants.

When the results from the second samples were obtained, and they were terrible. Whatever you could name as a contaminant was in the soil that had been trucked in as "clean" fill. Some of the obvious ones were PCB's, mercury, zinc, lead and cadmium. What a witches brew!

A meeting of all parties involved, including the scrap yard owner, construction firm, UWO senior administration, Ministry of Environment & Energy and other involved parties was called.

The area was barricaded off, a memorandum was distributed to local home owners and the local media was advised. The Senior administration felt that an open approach with the community was the correct way to handle the situation. Discussion, denials, allegations abounded from which orders were issued to remove all contaminated soil. The original contractor was instructed to remove the soil to an authorized site as soon as possible. All costs of the operation were determined at a later date.

Removal of the soil began on Thursday at 7:00 a.m. and continued around the clock until Friday at 4:00 a.m.. All loads that were removed were recorded and records were distributed to appropriate parties. A "clean" fill source was found and the contractor completed the rough construction which allowed our crew to complete the field.

In due course the Ministry of Environment & Energy laid charges and significant fines were imposed on the guilty parties.

In retrospect, make sure your dirt is "clean". For any one else contemplating hauling in fill, it is a very good idea to have tests carried out at the source for all soil contaminants to reduce the possibility of receiving contaminated fill. Also, when issuing the purchase order, specify clean fill as per the Ministry of Environment & Energy guidelines and state that the supplier of material must provide proof that the soil is free of all contaminants or be subject to all costs of removal if soil is found to be contaminated.

All aspects of our work are affected by legislation that demands perfection, leaving little room for mistakes. Organizations should be very aware of all legislation and responsibilities involved. Hopefully from our experience you never have to go through this type of situation. It caused a great deal of stress on all parties involved and made a great project a dirty mess because of the dirt.