

*Community Planning, Regulation and Mobility Committee – Sept 18, 2023,*

*Chairman Paul Sharman:*

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Good evening, Mister Chairman and Members of the Committee:

My name is Doug Christilaw. Donna Millar and I live on the south side of No. 2 Side Road opposite the Nelson quarry in Mount Nemo. The land we live on was originally part of the 100 Acre farm purchased by Donna's parents a decade before Nelson began operations. Her parents ran a thriving dairy farm and sold fruits and vegetables at both the Hamilton and Burlington Farmer's Market for over 60 years.

We are here tonight to discuss the proposed expansion of the Nelson quarry. You will hear about many serious concerns, but what I am most disturbed about is already imported soil from the past, and what will come in the future.

For 25 years I worked for the Ham-Went Region & the City of Hamilton as a Civil Engineering Technologist in the land development industry. Between 2012 and 2018, I worked to enforce M.O.E guidelines and municipal by-law(s) related to the dumping of excess soil. It became extremely obvious to me that dangerous and unacceptable practices were happening and there were innumerable ways to circumvent weak and obscure guidelines for handling excess soil.

Land development is occurring at an incredible rate in Ontario. Over 25 million cubic metres of excess soil is generated annually – that's enough to fill the Rogers Centre 15 times. No one really knows where most of it is going.

Prior to 2021, minimal Provincial guidelines were in place to monitor or regulate the handling of excess soil. Good and bad soil ended up on farm land and in pits and quarries. Provincial ministries and local municipalities have been and continue to be short of staff with little power to regulate or enforce illegal dumping.

Quoting from a recent article published in the Globe and Mail:

*Peter Sutton, vice-president of environmental services at Terrapex Environmental, a Toronto-based consulting and geotechnical services firm,*

*said “There were virtually no rules governing where soil went. People moved soil around based on what they could get away with.”*

Soil testing determines what chemicals and their concentrations exist in soil. When high concentrations are found, the ultimate use and its destinations are diminished and proper disposal is very expensive. It is poor quality material that is uncontrollably dumped in rural areas.

So, let's ask the question, how much material would Nelson need to rehabilitate the quarry? Without going into detailed calculations (which I can verify), an estimated amount could exceed 10 million cubic metres. This equals nearly 1,000,000 truckloads. Over the past 70 years, a large amount of soil has already been imported to the Nelson quarry, most of which has not been regulated or tested. For the 2 proposed expansions, imported fill could exceed an additional 5 million cubic metres.

In 2019, Nelson Aggregates produced a document called: “Procedures for Accepting Soil for Rehabilitation”. I will para-phrase 2 parts of this document:

- 1) Soil sample tests for imported soil is based on physical inspection, and the frequency of testing is based on that physical inspection. In other words, physical inspection is simply by eye sight. You can't see chemically contaminated soil because chemicals are invisible. Rarely, can you see or smell petroleum products or detect heavy metals. Chemical analysis is the only way to properly test for contamination.
- 2) Nelsons procedures recommend sampling be completed at a rate of not less than every 10,000 cubic metres of imported soil from each originating site. This could be up to 1,000 truckloads. We have to understand that many originating sites generate less than 10,000 cubic metres and therefore testing may not be considered at all. I understand that Nelson has confirmed some testing and has rejected some loads of unacceptable material, but the question is, how many of the untested loads were unacceptable and not rejected?

Provincial regulations established since 2021 require originating sites to test soil before it is removed, and register where excess material is to go. For sites generating less than 2,000 cubic metres, these requirements don't apply. Very minimal, if any, testing is done to ensure contaminated material

is rejected. This is typical province wide and not just at the Nelson operation.

Through my direct field experience, I witnessed numerous cases where questionable soil was being dumped on farm lands without the owner's understanding of what they were getting. Soil disposal is a multi million-dollar business. Illegal dumping is orchestrated by unscrupulous Soil Brokers hungry for fast and easy money.

Many ways exist to get around guidelines and procedures which are rarely detected. For example:

- 1) Tracking a specific load is virtually non-existent,
- 2) Testing reports are substituted for one another providing false information relating to soil quality when dumped at receiving sites,
- 3) Persons of authority at receiving sites can easily look the other way.

I have attended numerous sites where more than 50 trucks lined up waiting to dump their loads. They come fast and furious and by the time I was called to investigate, damage was done. In one particular case, 6 adjoining properties in a light industrial area had more than 2,500 loads dumped over the Christmas holidays when no one was around to stop the truckers. The culprits were blatantly trespassing on most of the 6 properties while dumping. Generally speaking, it has been extremely difficult to stop this kind of activity because no one really knows when or where loads are going.

However, I must clearly state I have no reason to believe that Nelson is doing anything illegal at this time, but their testing protocol is not adequate to prevent illegal activities. We have no way of knowing what has happened over the past 70 years. Contaminated soil can easily pass by even trained and experienced people. Once it is here, contaminants take decades to leach out and it's too late to protect the ground water that we all drink.

Another issue of importing soil is this. Plant growth is affected primarily by the quality of top soil. This includes the top 1.5 metres. Subsurface soil is below the top soil. Top soil and sub-surface soil are often mixed when excavated. Without testing or strict control, it is difficult to determine if finished grades contain true top soil. Currently, there is a massive pile of

soil sitting on the floor of the Nelson quarry. I think we can be fairly certain that top soil and sub-surface materials are inter-mixed and not all material is reusable for agricultural purposes or is without contaminants.

Chemicals and heavy metals are not the only contaminants. Ontario recognizes a number of plant species that are highly invasive and there is a certainty of transporting them into rehabilitation sites. This could include plants like Hog Weed or purple loosestrife which is known for its invasion of wetlands and ditches. Many invasive plants can present new disruptions to the environment that did not exist before a quarry operation began. We rarely consider these to be present in fill material.

Mr. Chairman and members of the committee, to summarize:

Massive amounts of imported materials are needed for rehabilitation. There are no significant enforceable Provincial regulations in place to track, test and monitor soil quality or its transportation. Few new rules have been introduced, but clearly these are not adequate without additional strict and enforceable regulations in place to ensure top quality soil will be placed in our living environment, now and in the future.

Quarries are required to rehabilitate. This means put clean soil in place that will accommodate the growth of plants and trees, not harm people or animals and not pollute the environment. We must be assured imported soil is clean and adequate for agricultural reuse and will not harm the surrounding area.

I plead with City Council to use all city resources to represent the residents of Mount Nemo, Burlington, and Halton at the Ontario Land Tribunal hearing to oppose the Nelson Aggregates' Application which will permit the continued blasting of their mega-quarry in the World Unesco site known as The Niagara Escarpment.

Thank you for your time and considerations.

Doug Christilaw