

Hello,

My name is Christine Black. I am a speech language pathologist residing in Burlington. I wanted to come today to tell the chair and members of the committee why I think this quarry would be detrimental to our city. I was recently hiking the Bruce trail that goes into Mount Nemo with some colleagues of mine. We enjoy being able to hike locally. This year I made a goal to hit 1000 hours outside as a fun way to explore my city and connect with nature. Unfortunately, this summer, this goal was much harder than I thought it would be. With all the wildfires affecting the air quality, health authorities were warning people to stay inside. Suddenly climate change felt much closer to home. We are so lucky to live here where we are often protected from extreme weather events such as wildfires, floods, hurricanes. But climate change is well...changing that. When I looked at Nelson Aggregates' plan to rehabilitate the quarry when they're done with it, I can't help but think: what will happen in the meantime? As they blast into rocks and idle in diesel trucks, I can't help but wonder: what is the impact on our local air quality? How will the fine dust particulate be captured and how will they ensure that it is not affecting local wildlife and local citizens? I worry too that the process of quarrying and extracting resources may have detrimental effects on the waterways nearby. As someone who values evidence, I have sought out information on this matter.

In a paper titled: "Effects of Mining on Surface Water" from 2022, the article discusses that in limestone quarries, there can be a change in the pH of the water, making the water more alkaline. When the groundwater is too alkaline, it can affect plant growth, not just in the immediate environment, but also in nearby farms. This article also points out that the modifications to the watershed can change where water flows and affect the groundwater in the surrounding area. I also looked at other quarry expansions. There was a quarry expansion called Miller Braeside, and the article "Air quality assessment for the proposed Miller Braeside quarry expansion in Canada: TSP" from 2015 details how in each sample of the air quality representing each season they found that the total suspended particulates or "TSP" all significantly exceeded Ontario's limit of total suspended particulates allowed per hour and per 24 hours. We all learned this summer that breathing in fine particulate matter is not good for our health. I know I had a sore throat from going outside, and I know others who had headaches or coughs when the air quality was poor. I wonder if there is a way or any new technology that could be used to reduce the impact of the dust on air quality? What is Nelson Aggregates' plan to ensure that the negative impacts of quarrying are mitigated? And are there any alternatives that we could turn to instead of expanding this quarry?

As well, I noticed that Nelson Aggregates' environmental plan is from 2013 and I have to wonder: don't we have newer technology and ways of controlling emissions compared to 2013? It seems as though their environmental policy hasn't been properly updated to account for the rapidly changing climate. That makes me wonder about some of the details in their rehabilitation plan. They say "Trees and shrubs are planted and waterways created to create natural self-sustaining ecosystems for plants and animals" which makes me wonder about some of the details. Will they research appropriately and ensure that they are not planting invasive species? How do they plan on creating waterways without damaging existing waterways? This plan reminds me of corporations that clear cut old growth forests and promise to plant new trees to take their place. It lacks insight into what makes the previous ecosystem precious and valuable.

I value caring for the environment, and I've seen that city council does too. I remember hearing the city's climate resilient slogan: a plan for adapting to our warmer, wetter, and wilder weather and thinking of that phrase as we all sat inside this summer, looking at the smoke from the wildfires. I don't want our future to consist of terrifying storms and wildfire smoke. We have to acknowledge that blasting rocks and expanding quarries is terrible for the environment. Between the fine dust thrown up into the air, to the loud noise and blasts literally destroying the ecosystem, it is simply detrimental to the environment.

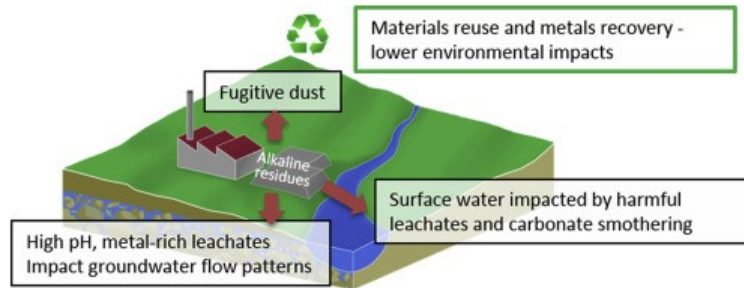
I would ask that you, city council, represent your constituents at the Ontario Land Tribunal hearing and use the city's resources to oppose this application that lacks tangible action items that Nelson Aggregates plans to use to decrease their negative impact on the environment.

References:

Abdul-Wahab, S.A., Fgaier, H., Elkamel, A. *et al.* Air quality assessment for the proposed Miller Braeside quarry expansion in Canada: TSP. *Air Qual Atmos Health* **8**, 573–589 (2015). <https://doi.org/10.1007/s11869-014-0304-5>

Figure explaining alkaline residues and the environment:

Gomes, Helena I., et al. "Alkaline residues and the environment: a review of impacts, management practices and opportunities." *Journal of Cleaner Production* 112 (2016): 3571-3582.



Wolkersdorfer, Christian, and Elke Mugova. "Effects of mining on surface water." *Encyclopedia of Inland Waters*, 2nd ed.; Elsevier: Amsterdam, The Netherlands (2021).