



Memorandum

March 3, 2021

To: Blair Shoniker Ref. No.: 018235

From: William Maria/mg/MEM-116 Tel: 905 814 4397

**Subject: Brooks Road Environmental Landfill Fill Rate Amendment
Environmental Screening Study**

The Brooks Road Landfill Site (Site), is located at 160 Brooks Road, near Cayuga, Haldimand County, Ontario and is owned and operated by 2270386 Ontario Limited.

The Site, which operates under Environmental Compliance Approval (ECA) No. A110302, has an approved annual fill rate of 151,000 tonnes per year and a total capacity of 1,045,065 cubic metres (m³) (including waste and daily/final cover). The Site has accepted waste (in one form or another) since 1959 and received a Certificate of Approval (CofA) in 1980, with amendments approved by the Ministry of the Environment in 1980, 2002, 2004, 2005, 2007, 2011, 2012, 2013, 2014, 2017 and 2018. Under the current ECA, the Site is licenced to receive post-diversion solid non-hazardous Industrial, Commercial & Institutional (IC&I) waste from across Ontario. The 14.3 hectare (ha) Site contains an approved fill area of 6 ha.

In 2018, BRE completed an Individual Environmental Assessment (EA) to increase the total approved capacity at the site to allow for the continued receipt of post-diversion IC&I waste over a five to seven year planning period and an amendment to the Site's rate of fill to provide for maximum of 151,000 tonnes per year (known as the Brooks Road Landfill Vertical Capacity Expansion EA). Previously, the Site was approved to accept up to 500 tonnes per day. The approved Brooks Road Landfill Vertical Capacity Expansion EA assessed the effects to the environment based on a maximum daily fill rate of 1,000 tonnes per day to demonstrate that the Site could manage this daily quantity, while maintaining the same annual limits (151,000 tonnes per year). Therefore, the 1,000 tonnes per day was used in the EA as a benchmark for the environmental effects analysis.

BRE is proposing to amend the approved ECA to allow for receipt of this maximum daily quantity (1,000 tonnes per day) throughout the year, increasing the annual fill rate from 151,000 tonnes per year to 250,000 tonnes per year. There is no change to the currently approved total landfill volume, size of landfill footprint, or final site contours. This change to the annual fill rate will allow for BRE to respond to the growing demands from waste generators/ customers who need a safe and reliable waste management facility for their residual material. This includes the ability to accommodate BRE's customers facing seasonal volume increases at certain times of the year (i.e. increased construction generated wastes) which the Site might not be able to be accommodate with the current annual fill rate. If this project is approved and the maximum tonnage proposed as part of this Screening were received annually at the Site starting in 2021, the approved capacity of the site may be reached earlier.



GHD completed an assessment of the Transportation Future Conditions within the Study Area as part of the Vertical Capacity Expansion EA¹. The traffic analysis utilized the existing conditions as a baseline and incorporated future projected network volumes as well as additional site truck volumes generated by the proposed increase in the maximum daily quantity to 1,000 tonnes per day. Forecasted 2021 and 2026 turning movement counts were projected at both the intersection of Highway 3 and Brooks Road and at the existing Site driveway during the weekday a.m., mid-day and p.m. peak periods and Saturday mid-day peak periods. This included an estimated 16 additional trucks per day as a result of the proposed vertical expansion. To provide a conservative and worst-case scenario analysis, all 16 of the daily new truck trips were applied to each of the peak hours (assuming all 16 new daily truck trips would enter/exit the site within each peak hour).

The analysis of future traffic conditions concluded that the study intersections overall would operate with minimal delay and substantial excess capacity under the 2021 and 2026 traffic conditions. Individual movements at both study intersections were expected to operate with levels of service 'B' or better representing minimal delay with v/c ratios not exceeding 0.08 representing substantial excess capacity, during the weekday a.m., mid-day, p.m. and Saturday mid-day peak hours.

Since the proposed project would continue to allow for receipt of the same maximum daily quantity (1,000 tonnes per day), increasing the annual fill rate from 151,000 tonnes per year to 250,000 tonnes per year does not increase the expected traffic volumes at the study intersections. Concerning the truck transportation effects along adjacent roads, with no increase in the daily or the hourly peak hour volumes, the site will continue to be acceptable from a traffic operations and safety perspective. There is an expected minimal impact on traffic safety, an expected negligible impact on traffic operations, and no potential road improvements required or recommended with the change.

¹ GHD, 2016. Transportation Assessment Report for the Brooks Road Landfill Site Vertical Capacity Expansion Environmental Assessment. URL: https://a468c89b-bff0-499c-9ce3-bbac186d5eb4.filesusr.com/ugd/8a04be_1c6dd2bbc5fc45cea655c5319c1acc57.pdf