

Brooks Road Landfill Fill Rate Increase Project Description and Screening Checklist

1. Introduction

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, herein referred to as Brooks Road Environmental (BRE, Owner, Proponent). The location of the Site is shown in **Figure 1.1**.

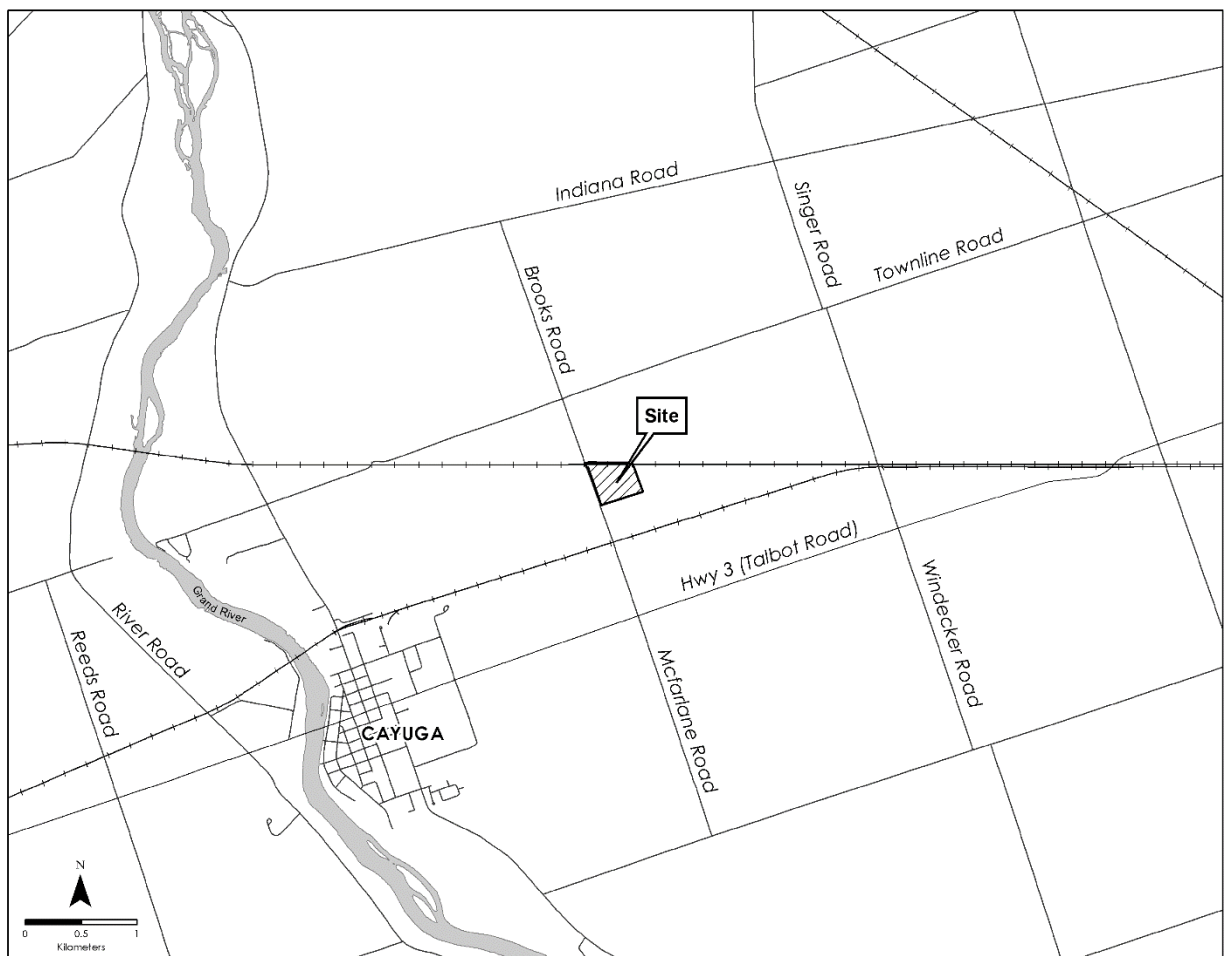


Figure 1.1 Location of the Proposed Undertaking

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 and Climate Change¹ (MOECC) 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 12.4 hectare (ha) Site contains an approved fill area of 6 ha.

Recently, 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 a 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 and the recently approved EA increased the daily tonnage limit to 1,000 tonnes per day, while maintaining the same annual limits (151,000 tonnes per year). The 1,000 tonnes per day was used in the EA as a benchmark during the environmental effects analysis. Any proposed change in the annual fill rate limits requires a modification to Condition 3(7) of the approved ECA, which specifies the maximum amount of waste that may be received at the landfill on an annual basis.

The proposed project would 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 capture additional wastes generated by their customers during busier months of operation and to fill the site faster and reach their ultimate approved capacity sooner.

This ECA amendment is subject to the Environmental Screening Process in accordance with Section 15 of the Waste Management Projects Regulation, (O. Reg. 101/07) of the EA Act. Ontario Regulation 101/07 – Waste Management Projects Act exempts this project from Part II of the Environmental Assessment Act and subjects it to the Environmental Screening Process. The Project falls under Section 15 of the Regulation – Change to Landfilling site, increase in rate of fill.

The Screening will be conducted in accordance with the planning and design process outlined in Ontario Ministry of Environment, Conservation and Parks (MECP) "*Guide to Environmental Assessment Requirements for Waste Management Projects*". The Screening process includes identifying and applying screening criteria to determine and describe potential environmental effects, public/external agency consultation, and the development of measures to mitigate identified environmental effects. The results of the Study will be documented in an Environmental Screening Report, which will be released for review to Stakeholders including Indigenous communities, the public, and government agencies. Upon completion of the Environmental Screening Process an application will be made to amend the existing ECA No. A110302.

2. Purpose and Opportunity

The purpose of the project is to increase the annual waste fill rate currently approved at the site. The proposed project would allow for receipt of a maximum daily quantity (1,000 tonnes per day) throughout the year, which would increase the permitted annual fill rate from 151,000 tonnes per

¹ Now known as the Ministry of Environment, Conservation and Parks



year to 250,000 tonnes per year. This annual maximum assumes the site will operate 5 days a week, (closed on holidays) accepting 1,000 tonnes per day². The proposed change to the annual fill rate requires no additional landfill infrastructure and there is no change to the currently approved landfill volume, footprint, or final contours.

The proposed undertaking provides an opportunity for BRE to capture additional wastes generated by their customers during busier months of operation and to fill the site rapidly and reach their ultimate approved capacity sooner than originally planned, which was estimated to be 5-7 years.

3. Description of Project Components and Activities

The proposed project outlined in this report does not involve a change to the final site capacity, contours or footprint. No construction is required to implement the proposal. There will be no change to the existing infrastructure and no new facilities are proposed on Site. The Brooks Road Landfill will continue to operate within currently approved operating hours and current construction activities and daily operations will continue as usual.

From a traffic perspective there will be no changes to existing haul routes or Site entrance. Increasing the maximum annual fill rate will result in increased truck traffic on the haul route from Highway 3 along Brooks Road on an annual basis. It should be noted that as part of the recently completed Vertical Expansion EA, the assessment of impacts to traffic was based on 1,000 tonnes per day – it is only the cumulative annual total traffic that will change as a result of this proposal. To be conservative, and for the purposes of predicting and modeling potential and net effects to the environment, the Vertical Expansion EA project team used a maximum fill rate that may be experienced at the Site of 1,000 tonnes per day (i.e., double the previously approved daily maximum rate). This was done to demonstrate that the maximum amount of waste (1,000 tonnes per day) could be managed appropriately on Site and that the potential effects of this larger per day amount could be mitigated to acceptable levels.

GHD will build on the analysis completed in the EA from a daily maximum of 1,000 tonnes per day to evaluate the potential effects and mitigation measures required to maintain this daily volume over the course of a year to reach the annual fill rate of 250,000 tonnes per year.

If this project is approved and the maximum tonnage proposed as part of this Screening were received annually at the Brooks Road Landfill starting in 2021, the approved capacity of the site would be reached in approximately 2024 rather than 2027 as previously anticipated.

4. Approval Requirements

A change in the annual fill rate limit requires a modification to Condition 3(7) of the approved ECA, which specifies the maximum amount of waste that may be received at the landfill. This ECA amendment is subject to the Environmental Screening Process in accordance with Section 15 of the Waste Management Projects Regulation, (O. Reg. 101/07) of the EA Act.

² 1,000 tonnes per day over 250 days (5 days per week minus 10 public holidays) equals 250,000



When the Environmental Screening Process has been completed, BRE will initiate the ECA Amendment process by preparing and submitting an application to the MECP to amend ECA No. A110302.

5. Screening Process

As stated above, the study will follow the Environmental Screening Process under the Waste Management Projects Regulation (O.Reg.101/07) of the EA Act. As per Section 15 of Ontario Regulation 101/07 (bold format added by GHD),

“A change to a landfilling site or dump described in paragraph 1 of subsection 2 (1) or paragraph 1 of subsection 11 (1), or to a landfilling site or dump that is a waste disposal site described in paragraph 4 of subsection 2 (1), is defined as a major commercial or business enterprise or activity and is designated as an undertaking to which the Act applies, **if the rate at which the landfilling site or dump is filled after the change would exceed the rate at which the landfilling site or dump was authorized to be filled under the *Environmental Protection Act* before the change.**”

In accordance with Section 15 of Ontario Regulation 101/07, an increase in the fill rate is exempt from Part II of the *EA Act*, subject to fulfilling the Environmental Screening process.

O. Reg. 101/07 came into place in 2007, to ensure that the environmental effects of waste management projects are appropriately reviewed, given their potential significance. In support of O. Reg. 101/07, the MECP published the “Guide to Environmental Assessment Requirements for Waste Management Projects³”(the Guide), which outlines the planning and design process for the Environmental Screening Process. This Study will be conducted in accordance with the planning and design process outlined in the Guide, following the process as illustrated in Figure 5.1.

Next steps in the process include determining the potential adverse environmental effects of the Project on the environment and if adverse environmental effects have been identified, mitigation and monitoring measures will be applied to reduce or eliminate the effects. An Environmental Screening Report will be prepared as part of the Environmental Screening Process, which will document the process followed.

³ MECP, (2007). Guide to Environmental Assessment Requirements for Waste Management Projects.

Step 1	Publish Notice of Commencement & Public Open House
Step 2	Identify Problem or Opportunity & Project Description
Step 3	Apply Screening Criteria
Step 4	Describe Potential Environmental Effects, Concerns, & Issue
Step 5	Consultation and Public Open House #1
Step 6	Conduct Studies & Assessment of Potential Environmental Effects
Step 7	Develop Impact Management/Mitigation Measures
Step 8	Consultation and Public Open House #2
Step 9	Identify Significant Net Effects & Resolve Concerns (if required)
Step 10	Conduct Additional Studies & Assessment (if required)
Step 11	Prepare Environmental Screening Report
Step 12	Publish Notice of Completion
Step 13	Resolve Elevation Requests (if required)
Step 14	Submit Statement of Completion to MOECC

Figure 5.1 Steps in the Environmental Screening Process

6. Screening Criteria Checklist

At the beginning of the Environmental Screening, the Screening Criteria Checklist (provided as Schedule I, pp 62 – 64, to the “Guide to Environmental Assessment Requirements for Waste Management Projects”) is to be completed based on the information provided in the Project Description. The Screening Criteria reflect the broad definition of “environment” contained in the *EA Act*.

As noted in the Guide:

“The Screening Criteria are presented in the form of a checklist with the option of a “Yes” or “No” response. Mitigation measures **are not** to be considered in concluding whether there is “No” potential environmental effect. That is, the proponent is required to answer “Yes” even if the proponent believes that a potential environmental effect could likely be mitigated. The reason for requiring a “Yes” is to ensure that mitigation measures are open to discussion and review. Another reason for this approach is that further discussion and review of a potential effect may reveal that

there is no actual effect, in which case no mitigation is required. Where a “Yes” has been identified, the proponent is to provide additional information in the Environmental Screening Report, explaining the potential effect(s), methods to mitigate or address the effect(s), any net effects that are anticipated and if so, their significance. Even where the proponent indicates that “No” environmental effects are anticipated, it is recommended that additional information be provided in the Environmental Screening Report in order to support the “no effects” conclusion”. Each criterion is based on a question which is prefaced with the phrase, “Might the Project...”. The table below has been completed as the first step of the Environmental Screening Process based on the project description provided:

Table 6.1 Screening Criteria Checklist

	Criterion	YES	NO	Additional Information
	Might the project...			
1. Surface and Ground Water				
1.1	Cause negative effects on surface water quality, quantities or flow?		X	The proposed Environmental Compliance Approval amendment will not change the existing landfill footprint or on-site operations and will not cause negative effects on surface water quality, quantities or flows.
1.2	Cause negative effects on ground water quality, quantity or movement?		X	The proposed Environmental Compliance Approval amendment will not change the existing landfill footprint or on-site operations and will not cause negative effects on ground water quality, quantity or movement.
1.3	Cause significant sedimentation or soil erosion or shoreline or riverbank erosion on or off site?		X	The proposed Environmental Compliance Approval amendment will not change the existing landfill footprint or on-site operations and will not cause significant sedimentation or soil erosion or shoreline or riverbank erosion on or off site.
1.4	Cause negative effects on surface or ground water from accidental spills or releases (e.g., leachate) to the environment?		X	The proposed Environmental Compliance Approval amendment will not change the existing landfill footprint or on-site operations and will not cause negative effects on surface or ground water from accidental spills or releases (e.g., leachate) to the environment.
2. Land				
2.1	Cause negative effects on residential, commercial, institutional or other sensitive land uses within 500 metres from the site boundary?		X	The proposed Environmental Compliance Approval amendment will not change the existing landfill footprint or on-site operations and will not cause negative effects on nearby residential, commercial, institutional or other sensitive land uses.
2.2	Not be consistent with the Provincial Policy		X	The proposed Environmental Compliance Approval amendment will continue to be

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	Criterion	YES	NO	Additional Information
	Might the project...			
	Statement, provincial land use or resource management plans?			consistent with the Provincial Policy Statement, provincial land use and/or resource management plans.
2.3	Be inconsistent with municipal land use policies, plans and zoning bylaws (including municipal setbacks)?		X	The proposed Environmental Compliance Approval amendment will not change the existing landfill footprint or on-site operations and will continue to be consistent with municipal land use policies, plans and zoning bylaws (including municipal setbacks). No new lands are required and no changes to existing zoning are required.
2.4	Use lands not zoned as industrial, heavy industrial or waste disposal?		X	The proposed Environmental Compliance Approval amendment will not change the existing landfill footprint or on-site operations and do not require new lands or changes to existing zoning.
2.5	Use hazard lands or unstable lands subject to erosion?		X	The proposed Environmental Compliance Approval amendment will not change the existing landfill footprint or on-site operations and do not require the use of hazard lands or unstable lands subject to erosion.
2.6	Cause negative effects related to the remediation of contaminated land?		X	The proposed Environmental Compliance Approval amendment will not cause negative effects related to the remediation of contaminated land.
3. Air and Noise				
3.1	Cause negative effects on air quality due to emissions (for parameters such as temperature, thermal treatment exhaust flue gas volume, nitrogen dioxide, sulphur dioxide, residual oxygen, opacity, hydrogen chloride, suspended particulates, or other contaminants)?		X	The proposed Environmental Compliance Approval amendment will not change the existing landfill footprint or on-site operations and will not cause negative effects on air quality due to emissions.
3.2	Cause negative effects from the emission of greenhouse gases (e.g., carbon dioxide, carbon monoxide, methane)?	X		The proposed Environmental Compliance Approval amendment will result in a potential increase in emissions associated with additional truck movements to/from the site and increased on-site landfill equipment requirements.

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	Criterion	YES	NO	Additional Information
	Might the project...			
3.3	Cause negative effects from the emission of dust or odour?	X		The proposed Environmental Compliance Approval amendment will result in a potential increase in dust and odour emissions associated with additional truck movements to/from the site and increased on-site landfill equipment requirements.
3.4	Cause negative effects from the emission of noise?	X		The proposed Environmental Compliance Approval amendment will result in a potential increase in noise emissions associated with additional truck movements to/from the site and increased on-site landfill equipment requirements.
3.5	Cause light pollution from trucks or other operational activities at the site?		X	The proposed Environmental Compliance Approval amendment will not change the existing landfill footprint or on-site operations and will not cause negative effects from light pollution.
4. Natural Environment				
4.1	Cause negative effects on rare (vulnerable), threatened or endangered species of flora or fauna or their habitat?		X	The proposed Environmental Compliance Approval amendment will not change the existing landfill footprint or on-site operations and will not cause negative effects on rare (vulnerable), threatened or endangered species of flora or fauna or their habitat. It should be noted that none are present on-site.
4.2	Cause negative effects on protected natural areas such as, ANSIs, ESAs or other significant natural areas?		X	The proposed Environmental Compliance Approval amendment will not change the existing landfill footprint or on-site operations and will not cause negative effects on protected natural areas such as, ANSIs, ESAs or other significant natural areas.
4.3	Cause negative effects on designated wetlands?		X	The proposed Environmental Compliance Approval amendment will not change the existing landfill footprint or on-site operations and will not cause negative effects on designated wetlands.
4.4	Cause negative effects on wildlife habitat, populations, corridors or movement?		X	The proposed Environmental Compliance Approval amendment will not change the existing landfill footprint or on-site operations and will not cause negative effects on wildlife habitats, populations, corridors or movements.

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	Criterion	YES	NO	Additional Information
	Might the project...			
4.5	Cause negative effects on fish or their habitat, spawning, movement or environmental conditions (e.g., water temperature, turbidity, etc.)?		X	The proposed Environmental Compliance Approval amendment will not change the existing landfill footprint or on-site operations and will not cause negative effects on fish or their habitat, spawning, movement or environmental conditions (e.g., water temperature, turbidity, etc.). It should be noted that none are present on-site.
4.6	Cause negative effects on locally important or valued ecosystems or vegetation?		X	The proposed Environmental Compliance Approval amendment will not change the existing landfill footprint or on-site operations and will not cause negative effects on locally important or valued ecosystems or vegetation.
4.7	Increase bird hazards within the area that could impact surrounding land uses (e.g., airports)?		X	The proposed Environmental Compliance Approval amendment will not change the existing landfill footprint or on-site operations and will not cause increase to bird hazards.
5. Resources				
5.1	Result in practices inconsistent with waste studies and/or waste diversion targets (e.g., result in final disposal of materials subject to diversion programs)?		X	The proposed Environmental Compliance Approval amendment will not change the existing landfill footprint or on-site operations and will be consistent with diversion targets.
5.2	Result in generation of energy that cannot be captured and utilized?		X	The proposed Environmental Compliance Approval amendment will not change the existing landfill footprint or on-site operations. No energy recovery/ utilization is proposed.
5.3	Be located a distance from required infrastructure (such as availability to customers, markets and other factors)?		X	The proposed Environmental Compliance Approval amendment will not change the existing landfill location, footprint or on-site operations.
5.4	Cause negative effects on the use of Canada Land Inventory Class 1-3, specialty crop or locally significant agricultural lands?		X	The proposed Environmental Compliance Approval amendment will not change the existing landfill footprint or on-site operations and will not cause negative effects on Canada Land Inventory Class 1-3, specialty crop or locally significant agricultural lands.

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	Criterion	YES	NO	Additional Information
	Might the project...			
5.5	Cause negative effects on existing agricultural production?		X	The proposed Environmental Compliance Approval amendment will not change the existing landfill footprint or on-site operations and will not cause negative effects on agricultural production.
6. Socio-Economic				
6.1	Cause negative effects on neighbourhood or community character?		X	The proposed Environmental Compliance Approval amendment will not change the existing landfill footprint or on-site operations and will not cause negative effects to neighbourhood or community character.
6.2	Result in aesthetics impacts (e.g., visual and litter impacts)?		X	The proposed Environmental Compliance Approval amendment will not change the existing landfill footprint or on-site operations and will not cause aesthetic impacts (e.g., visual and litter impacts).
6.3	Cause negative effects on local businesses, institutions or public facilities?		X	The proposed Environmental Compliance Approval amendment will not change the existing landfill footprint or on-site operations and will not cause negative effects on local businesses, institutions or public facilities.
6.4	Cause negative effects on recreation, cottaging or tourism?		X	The proposed Environmental Compliance Approval amendment will not change the existing landfill footprint or on-site operations and will not cause negative effects on recreation, cottaging or tourism.
6.5	Cause negative effects related to increases in the demands on community services and infrastructure?		X	The proposed Environmental Compliance Approval amendment will not change the existing landfill footprint or on-site operations and will not cause negative effects related to increases in the demands on community services and infrastructure.
6.6	Cause negative effects on the economic base of a municipality or community?		X	The proposed Environmental Compliance Approval amendment will not change the existing landfill footprint or on-site operations and will not cause negative effects on the economic base of a municipality or community.
6.7	Cause negative effects on local employment and labour supply?		X	The proposed Environmental Compliance Approval amendment will not change the existing landfill footprint or on-site operations and will not cause negative effects on local employment and labour supply.

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	Criterion	YES	NO	Additional Information
	Might the project...			
6.8	Cause negative effects related to traffic?	X		The proposed Environmental Compliance Approval amendment will result in an increase in the daily frequency/ volume of vehicle traffic on the local road to the site.
6.9	Be located within 8 km of an aerodrome/airport reference point?		X	The landfill is not located within 8 km of an aerodrome/airport reference point.
6.10	Interfere with flight paths due to the construction of facilities with height (i.e. stacks)?		X	The proposed Environmental Compliance Approval amendment will not interfere with flight paths.
6.11	Cause negative effects on public health and safety?		X	The proposed Environmental Compliance Approval amendment will not change the existing landfill footprint or on-site operations and will not cause negative effects on public health and safety.
7. Heritage and Culture				
7.1	Cause negative effects on heritage buildings, structures or sites, archaeological sites or areas of archaeological importance, or cultural heritage landscapes?		X	The proposed Environmental Compliance Approval amendment will not change the existing landfill footprint or on-site operations and will not cause negative effects on heritage buildings, structures or sites, archaeological sites or areas of archaeological importance, or cultural heritage landscapes.
7.2	Cause negative effects on scenic or aesthetically pleasing landscapes or views?		X	The proposed Environmental Compliance Approval amendment will not change the existing landfill footprint or on-site operations and will not cause negative effects on scenic or aesthetically pleasing landscapes or views.
8. Aboriginal				
8.1	Cause negative effects on land, resources, traditional activities or other interests of Aboriginal communities?		X	Consultation with Indigenous communities will take place throughout the Environmental Screening Process.

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	Criterion	YES	NO	Additional Information
	Might the project...			
9. Other				
9.1	Result in the creation of non-hazardous waste materials requiring disposal?		X	The proposed Environmental Compliance Approval amendment will not change the types of wastes the facility is permitted to receive and will not result in the creation of non-hazardous waste materials requiring disposal (the landfill currently <u>receives</u> non-hazardous wastes as permitted by the existing Environmental Compliance Approval).
9.2	Result in the creation of hazardous waste materials requiring disposal?		X	The proposed Environmental Compliance Approval amendment will not change the types of wastes the facility is permitted to receive and will not result in the creation of non-hazardous waste materials requiring disposal (the landfill currently <u>receives</u> non-hazardous wastes as permitted by the existing Environmental Compliance Approval).
9.3	Cause any other negative environmental effects not covered by the criteria outlined above?		X	The proposed Environmental Compliance Approval amendment will not cause any other negative environmental effects not covered by the criteria outlined above.