

Ministry of the Environment, Conservation and Parks Ministère de l'Environnement, de la Protection de la nature et des Parcs

AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER A021601 Issue Date: June 9, 2023

Ridge (Chatham) Holdings G.P. Inc., as a general partner for and on behalf of Ridge

(Chatham) Holdings, L.P.

20262 Erieau Rd

Chatham-Kent, Ontario

N0P 1A0

Site Location: 20262 Erieau Road

Lot 13-16, Concession 4 Chatham-Kent Municipality,

N0P 1A0

You have applied under section 20.2 of Part II.1 of the <u>Environmental Protection Act</u>, R.S.O. 1990, c. E. 19 (Environmental Protection Act) for approval of:

the use and operation of a 186 hectare landfilling area with the necessary environmental works and wood waste grinding, public waste drop-off, public recycling area, and source-separated construction and demolition waste processing, all within a 340 hectare landfill site property.

For the purpose of this environmental compliance approval, the following definitions apply:

"Approval" or "ECA" means this Environmental Compliance Approval No. A021601, including all items, conditions and Schedules attached to and forming part of this Approval, as amended by the Director;

"D & O Report" means the Design and Operations Report, included as Appendix D6 of the Environmental Compliance Approval Amendment Application identified as Item No. 105 in Schedule A";

"*Director*" means any Ministry employee appointed by the Minister pursuant to Part II.1 of the Environmental Protection Act, as amended;

"*District Manager*" means the District Manager of the Sarnia District Office, Ministry of the Environment, Conservation and Parks;

- "EPA" means the Environmental Protection Act, R.S.O. 1990, as amended;
- "Existing Fill Area" means the 48.2 hectare (119 acre) fill area, with all the necessary associated environmental works, approved for waste disposal under the Environmental Compliance Approval No. A 021601, dated July 25, 1983 and the amending notices and as shown on Drawing No. O.2 entitled "Approved Final Contours and Stockpiles" of the Operation & Development Report (Appendix O of the Environmental Assessment Report, Item No. 2 in Schedule A);
- "Expanded Fill Area" means 86.9 hectare fill area, with all the necessary associated environmental works, shown on the Drawing No. O.3 entitled "Base Contours" of the Operation & Development Report (Appendix O of the Environmental Assessment Report, Item No. 2 in Schedule A);
- "Growing Season" means the months of April to October;
- "IC&I Waste" means the solid non-hazardous waste that is generated by industrial, commercial and institutional activities;
- "*Major Works* " means all aspects of the leachate control and collection system, including the side slope clay liner, the landfill gas control system and the final cover for the Waste Fill Area;
- "Ministry" means the Ministry of the Environment, Conservation and Parks;
- "*Noise Guidelines for Landfill Sites*" means the Ministry document entitled "Noise Guidelines for Landfill Sites", dated June 1998, or as amended from time to time;
- "**ODWO**" means the Ontario Drinking Water Objectives;
- "Operator" has the same meaning as "operator" as defined in s.25 of the EPA;
- "*Owner*" means Ridge (Chatham) Holdings G.P.Inc. as a general partner for and on behalf of Ridge (Chatham) Holdings, L.P.a whole subsidiary of Waste Connections of Canada;
- "OWRA" means the Ontario Water Resources Act, R.S.O. 1990, c.0.40, as amended;
- "PA" means the Pesticides Act, R.S.O. 1990, c. P-11, as amended from time to time;
- "PWQO" means the Provincial Water Quality Objectives;
- "*Reasonable Use Guideline*" or "*RUC*" means the Ministry Guideline B-7 (formerly Policy 15-08) entitled "Incorporation of the Reasonable Use Concept into MOEE Groundwater Management Activities", dated April 1994, as amended;
- "Regional Director" means the Director, Southwestern Region of the Ministry;
- "Site" means the entire 340 hectare landfill site property, including the Existing Fill Area, the

Expanded Fill Area, and the 2020 Expansion Fill Area with all the necessary associated environmental works, and facilities required for the ancillary waste management activities approved by this Approval, located at 20262 Erieau Road, Lot 13-16, Concession 4, Chatham-Kent Municipality;

"Waste" means all solid non-hazardous waste;

"Waste Fill Area" means the 186 hectare waste fill area that comprises both the Existing Fill Area and the Expanded Fill Area as well as the 2020 Expansion Fill Area as shown on Drawing 4 entitled "Proposed Final Contours and Stockpiles (Post-Expansion)" of the D & O Report; and

"2020 Expansion Fill Area" means the area for landfill expansion approved in 2020 to enlarge the total Waste Fill Area to 186 hectares and increase the total landfill volumetric capacity for waste and daily cover by approximately 28,900,000 cubic metres.

You are hereby notified that this environmental compliance approval is issued to you subject to the terms and conditions outlined below:

TERMS AND CONDITIONS

1.0 GENERAL

Compliance

- 1.1 The Owner shall ensure that any person authorized to carry out work on or operate any aspect of the Site is notified of the Approval and the conditions herein and shall take all reasonable measures to ensure the person complies with the same.
- 1.2 Any person authorized to carry out work on or operate any aspect of the Site shall comply with the conditions of this Approval.

In Accordance

1.3 Except as otherwise provided for in this Approval, the Site shall be designed, developed, constructed, operated and maintained in accordance with the supporting documentation listed in Schedule "A".

Other Legal Obligations

- 1.4 The issuance of, and compliance with, this Approval does not:
 - a. relieve any person of any obligation to comply with any provision of the EPA or any other applicable statute, regulation or other legal requirement; or
 - b. limit in any way the authority of the Ministry to require certain steps be taken or to request that any further information related to compliance with this Approval be

provided to the Ministry;

unless a provision of this Approval specifically refers to the other requirement or authority and clearly states that the other requirement or authority is to be replaced or limited by this Approval.

Adverse Effect

1.5 The Owner or Operator remain responsible for any contravention of any other condition of this Approval or any applicable statute, regulation, or other legal requirement resulting from any act or omission that caused the adverse effect or impairment of air and/or water quality.

Furnish Information

- 1.6 Any information requested by the Director or a Provincial Officer concerning the Site and its operation under this Approval, including but not limited to any records required to be kept by this Approval shall be provided in a timely manner.
- 1.7 The receipt of any information by the Ministry or the failure of the Ministry to prosecute any person or to require any person to take any action, under this Approval or under any statute, regulation or subordinate legal instrument, in relation to the information, shall not be construed as:
 - a. an approval, waiver, or justification by the Ministry of any act or omission of any person that contravenes any condition of this Approval or any statute, regulation or other subordinate legal requirement; or
 - b. acceptance by the Ministry of the information's completeness or accuracy.
- 1.8 Any information related to this Approval and contained in Ministry files may be made available to the public in accordance with the provisions of the Freedom of Information and Protection of Privacy Act, RSO 1990, CF-31.

Interpretation

- 1.9 This Approval revokes and replaces the previous Environmental Compliance Approval and all subsequent amendments.
- 1.10 Where there is a conflict between a provision of any document, including the application, referred to in this Approval, and the conditions of this Approval, the conditions in this Approval shall take precedence.
- 1.11 Where there is a conflict between the application and a provision in any documents listed in Schedule "A", the application shall take precedence, unless it is clear that the purpose of the document was to amend the application and that the Ministry approved the amendment in writing

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- 1.12 Where there is a conflict between any two documents listed in Schedule "A", other than the application, the document bearing the most recent date shall take precedence.
- 1.13 The conditions of this Approval are severable. If any condition of this Approval, or the application of any condition of this Approval to any circumstance, is held invalid or unenforceable, the application of such condition to other circumstances and the remainder of this Approval shall not be affected thereby.

Certificate of Requirement

- 1.14 Pursuant to Section 197 of the EPA, no person having an interest in the Site shall deal with the Site in any way without first giving a copy of this Approval to each person acquiring an interest in the Site as a result of the dealing.
- 1.15 (1) Two copies of a completed Certificate of Requirement, containing a registrable description of the Site, shall be submitted to the Director for the Director's signature within 60 calendar days of the date of this Approval.
 - (2) The Certificate of Requirement shall be registered in the appropriate land registry office on title to the Site and a duplicate registered copy shall be submitted to the Director within ten(10) calendar days of receiving the Certificate of Requirement signed by the Director.

No Transfer or Encumbrance

1.16 No portion of this Site shall be transferred or encumbered prior to or after closing of the Site unless the Director is notified in advance and is satisfied with the arrangements made to ensure that all conditions of this Approval will be carried out and that sufficient financial assurance is deposited with the Ministry to ensure that these conditions will be carried out.

Change of Owner

- 1.17 The Owner shall notify the Director, in writing, and forward a copy of the notification to the District Manager, within 30 days of the occurrence of any changes in the following information:
 - i. the ownership of the Site;
 - ii. the Operator of the Site;
 - iii. the address of the Owner or Operator;
 - iv. the partners, where the Owner or Operator is or at any time becomes a partnership and a copy of the most recent declaration filed under the Business Names Act, R. S. O. 1990, c. B.17, shall be included in the notification;
 - v. the name of the corporation where the Owner or Operator is or at any time becomes a corporation, other than a municipal corporation, and a copy of the most current information filed under the Corporations Information Act, R. S. O. 1990, c. C.39, shall be included in the notification.

1.18 In the event of any change in the ownership of the Site, other than a change to a successor municipality, the Owner shall notify in writing the succeeding owner of the existence of this Approval, and a copy of such notice shall be forward to the Director and District Manager.

Inspections

- 1.19 No person shall hinder or obstruct a Provincial Officer from carrying out any and all inspections authorized by the OWRA, the EPA, or the PA, of any place to which this Approval relates, and without limiting the foregoing:
 - i. to enter upon the premises where the approved works are located, or the location where the records required by the conditions of this Approval are kept;
 - ii. to have access to, inspect, and copy any records required to be kept by the conditions of this Approval;
 - iii. to inspect the Site, related equipment and appurtenances;
 - iv. to inspect the practices, procedures, or operations required by the conditions of this Approval; and
 - v. to sample and monitor for the purposes of assessing compliance with the terms and conditions of this Approval or the EPA, the OWRA or the PA.

Correspondence

1.20 The Owner shall ensure that all communications/correspondence made pursuant to this Approval includes reference to the Approval number A021601.

Public Access to Documents

- 1.21 (1) A copy of any reports/documentation required under this Approval to be submitted to the Director, Regional Director or District Manager, or any application submitted under the EPA with respect to the Site, shall also be submitted on the same date or deadline to the Municipal Chief Administrative Officer or designate and to the Liaison Committee and to a location where these documents shall be available for public inspection; and
 - (2) Part (1) above does not apply to information deemed by the Owner to be proprietary or confidential, in which case a notification of the submission of confidential documentation shall be submitted in lieu of the document. Access to the information deemed by the Owner to be proprietary or confidential may be available to the public in accordance with the provisions of the **Freedom of Information and Protection of Privacy Act**, R.S.O. 1990, C. F-31.

2.0 FINANCIAL ASSURANCE

Overview

- 2.1 Financial assurance (FA) shall be provided as required by the Director, in an amount that is sufficient to pay for compliance with and performance of any action specified in this Approval, including closure, monitoring and maintenance of the Site, maintenance of all required contaminant control systems including leachate management systems, contaminant monitoring for the contaminating lifespan of the Site and contingency plans and in accordance with Ontario Regulation 232/98 for the Site in accordance this Approval.
- 2.2 Financial assurance may be provided in one or more of the following forms: cash, irrevocable letter of credit, surety bond, or some other form, all satisfactory to the Director.
- 2.3 No waste shall be received, accepted, disposed or transferred at the site unless appropriate financial assurance is received by the Ministry.
- 2.4 If any financial assurance is scheduled to expire or notice is received, indicating financial assurance will not be renewed, and satisfactory methods have not been made to replace the financial assurance at least 60 days before the financial assurance terminates, the financial assurance shall forthwith be replaced by cash.

Proposed Payment Schedule

- 2.5 The Owner shall ensure that the total amount of financial assurance is provided to the Ministry in a form acceptable to the Director as follows:
 - by December 31, 2023 \$61,710,905.00

Updated Review Report

- 2.6 A written report reviewing the financial assurance required by this Approval shall be submitted to the Director by **April 30, 2024**, and at intervals of not more than five (5) years thereafter. The report shall include:
 - a. updates of the discount, interest and inflation rates associated with the requirements for financial assurance in this Approval including justifications and sources of the proposed rates;
 - b. a report prepared by a qualified professional engineer which updates the cost estimates on which the amounts associated with the requirements for financial assurance in this Approval are based. The report shall take into consideration the:
 - i. actual amounts of waste landfilled;
 - ii. projected rate of fill;
 - iii. progressive capping of completed fill areas;
 - iv. leachate generation rates;
 - v. landfill gas generation rates and gas management system expansions;
 - vi. contaminating life span of the Site with respect to groundwater, surface

- water and landfill gas;
- vii. any measures that have been carried out or need to be carried out to prevent and ameliorate any adverse effect that relates to the site; and
- viii. annual inspection, maintenance, and monitoring costs, including costs for leachate treatment and disposal and landfill gas use or discharge.

3.0 CONSTRUCTION, INSTALLATION and PLANNING

Major Works

- 3.1 For the purposes of this Approval the following are Major Works:
 - a. gas management system;
 - b. leachate collection system;
 - c. liner;
 - d. final cover
- 3.2 (1) A final detailed design shall be prepared for each Major Work to be constructed at the Site consistent with the conceptual design and amendments of the Site as presented in the Supporting Documentation in Schedule "A".
 - (2) The Owner is hereby approved to use the Alternative Leachate Collection System Layer design in the detailed design drawings for landfill cells for which a final detailed design submission has not yet been submitted in accordance with the information provided in Items 77 through 79 in Schedule "A".
 - (3) The excavation base and associated elements of the Site design may be adjusted in order to eliminate any predicted surplus in the cover materials, upon submission of a report documenting the proposed changes and upon receiving the approval of the Director for that report.
- 3.3 The final detailed design of each Major Work shall include the following:
 - a. design drawings and specifications;
 - b. a detailed quality assurance / quality control (QA/QC) program for construction of the major work, including necessary precautions to avoid disturbance to the underlying soils: and
 - c. details on the monitoring, maintenance, repair and replacement of the engineered components of the major work, if any.
- 3.4 Any design optimization or modification that is inconsistent with the conceptual design shall be clearly identified, along with an explanation of the reasons for the change.
- 3.5 (1) At least two (2) months before the anticipated construction of each respective construction

- phase of the leachate collection system, the Owner shall submit to the Director for approval with copies to the District Manager, a final detailed design report and drawings for the Major Work, including quality assurance/quality control procedures for the works.
- (2) At least (3) months prior to the proposed commencement of the construction of other Major Works (excluding the leachate collection system and the final cover), the Owner shall submit to the Director for approval, with copies to the District Manager, final detailed design report and drawings of the Major Work(s), including quality assurance/quality control procedures for the works.
- 3.6 Each major work shall be constructed in accordance with the approved final detailed design and the QA/QC procedures shall be implemented as proposed by the Owner. Any significant variances from the conceptual design for the Site shall be subject to approval by the Director.
- 3.7 As-built drawings for all Major Works shall be retained on Site and made available to Ministry staff for inspection.

4.0 GENERAL OPERATIONS

Proper Operation

- 4.1. (1) Except as otherwise provided by these conditions, this Site shall be designed, developed, used, maintained and operated in accordance with the Environmental Compliance Approval Amendment Application for the Ridge Landfill Expansion Waste dated April 2020 and the supporting documentation, listed in the attached Schedule "A".
 - (2) Any changes to the D & O Report shall be submitted to the Director for approval prior to their implementation.

D & O Report

- 4.2 The D & O Report shall be:
 - a. retained at the Site;
 - b. reviewed on an annual basis and updated by the Owner as required; and
 - c. be available for inspection by Ministry staff.

Service Area and Waste Type

- 4.3 The service area for the Site shall be as follows:
 - (1) Southern and central Ontario for IC&I Waste including asbestos waste; and
 - (2) Municipality of Chatham-Kent for municipal waste.

Site Capacity

- 4.4 The Owner shall only accept and deposit waste at the Site as long as there is available capacity as defined by the final contours for the Site approved by this ECA as shown on Drawing 4 entitled "Proposed Final Contours and Stockpiles (Post-Expansion)" of the D & O Report.
- 4.5 The total volume of Waste and cover material for the Expanded Fill Area, excluding final cover, is approximately equivalent to 21,000,000 cubic metres.
- 4.6 The total additional volume of Waste and cover material for the Waste Fill Area, excluding the completed Existing Fill Area and Expanded Fill Area, is approximately equivalent to 28,900,000 cubic metres, in accordance with the D & O Report.

Annual Volume Capacity

4.7 The maximum disposal rate of waste and waste approved for use as alternative daily cover material in the Waste Fill Area shall not exceed **6,661 tonnes per day** and **1,300,000 tonnes per year**.

Incoming Waste

- 4.8 The Owner shall monitor the weight of Waste received for disposal by the use of weigh scales. Where the weigh scales are temporarily out of operation for maintenance or repair, estimates of Waste volumes and density shall be used to estimate the weight of Waste received for disposal.
- 4.9 The Owner shall ensure that no queuing of Waste vehicles will occur on public roadways.

Hours of Operation

- 4.10 (1) The hours of Waste receipt at the Site shall be from 7:00 a.m. to 5:00 p.m., and the hours for heavy equipment operation shall be from 6:30 a.m. to 6:00 p.m.;
 - (2) No landfilling operations shall be carried out on Sunday; and
 - (3) With the concurrence of the District Manager and the Municipal Chief Administrative Officer, or designate, the Waste may be received between 5:00 p.m. and 7:00 p.m., to accommodate seasonal or unusual demand.

Security and Supervision

4.11 (1) No Waste shall be accepted, landfilled or removed from the Site unless a Site supervisor is present and supervises the operation;

- (2) The Owner shall ensure that all supervisors of the Site have been adequately trained with respect to the following:
 - (a) terms, conditions and operating requirements of this Approval and the D & O Report;
 - (b) the operation and management of the Site, including emergency procedures;
 - (c) relevant waste management regulations and legislation;
 - (d) environmental concerns related to the Waste being handled at the Site;
 - (e) the procedures contained in the D & O Report; and
 - (f) occupational health and safety concerns pertaining to the Waste being handled at the Site;
- (3) The Site is deemed to be closed when a Site supervisor is not present at the Site and the Site entrance and exit gates will be locked or otherwise secured against access by unauthorized persons.
- 4.12 (1) To assist the Site operating personnel, the Owner shall ensure that an Operations Manual describing the day-to-day operation of the Site is kept on Site at all times and updated as necessary;
 - (2) This manual shall include but not be limited to, the day-to-day construction, operations and maintenance and the responsibilities for the following: leachate collection system, landfill gas collection system, surface water management system, daily, interim and final cover, side slope clay liner, all aspects of the leachate, groundwater, surface water and gas monitoring programs, equipment inspection and maintenance, materials management control and placement, odour, dust, noise and litter control and acceptable Waste management program;
 - (3) A copy of the manual shall be provided to the District Manager within three (3) months of the issuance of this Approval; and
 - (4) A copy of any revisions to the manual shall be provided to the District Manager prior to the effective date of revisions.
- 4.13 The Owner shall ensure that a sign which complies with local by-laws is present at the main entrance and the exit from the Site, and which is legible from a distance not less than 25 metres and on which is displayed in prominent letters the following information:
 - a. the name of the Site;
 - b. the Environmental Compliance Approval number under which the Site is operated;

- c. the name of the operator;
- d. the normal hours of operation;
- e. a telephone number to which complaints may be directed; and
- f. a 24-hour emergency telephone number.

Burning of Waste

4.14 No Waste shall be burned or incinerated at the Site.

Buffer

- 4.15 (1) The buffer area around the Site shall be in accordance with the Drawing No. 4 entitled "Proposed Final Contours and Stockpiles (Post Expansion)" of the D & O Report; and
 - (2) To minimize erosion, the buffer shall be maintained with healthy vegetative cover and/or other appropriate surface treatment.

Noise Impacts

- 4.16 The noise levels resulting from the activities related to the construction of the expanded Site, shall not exceed the limits set out in the Noise Guidelines for Landfill Sites.
- 4.17 The Noise Management Plan shall be implemented in accordance with Section 5.0 of the Report entitled "Ridge Landfill Expansion Landfill Site and Haul Route Noise Impact Assessment", Appendix D8, by Dillon Consulting, dated January 2020.
- 4.18 (1) Three (3) months prior to receipt of Waste at the Site scheduled to occur outside of the hours of 7 a.m. to 7 p.m., the Owner shall submit for the Director's approval, a noise impact management report containing the Owner's proposal on how to minimize noise impacts resulting from the proposed activities, as well as those including the truck traffic along the local haul route to the Site, specifically Drury Road;
 - (2) The report should describe in detail:
 - (a) noise impacts from the activities at the Site if Waste is to be received; and
 - (b) mitigative measures and/or the procedures to be followed in order to ensure that the noise levels remain within the Ministry's guidelines;
 - (3) No receipt of Waste at the Site shall occur outside of the hours of 7 a.m. to 7 p.m., prior to the receipt of the Director's approval for the report described in subsection (1), above.
- 4.19 (1) The Owner shall operate the Site within the noise level limits prescribed in the Noise Guidelines for Landfill Sites; and

- (2) The Owner shall take all steps that are reasonably necessary to limit the noise impact from the truck traffic, along the haul route.
- 4.20 (1) The Owner shall ensure that all screening berms proposed for the purpose of noise level attenuation at the Site are completed before the noise impacts from the relevant operations occur;
 - (2) (a) The perimeter screening berms for the Site shall be constructed in accordance with the design details presented in Section 5.11 of the D & O Report; and
 - (b) The perimeter screening berms for the Site shall be constructed and seeded according to the D & O Report;
 - (3) Operational berms for the Site shall be constructed as needed to screen landfilling operations at the working face.

Dust Impacts

- 4.21 (1) The Owner shall, during the normal operations, including truck traffic, limit dust impacts using the control measures as indicated in Item No. 9 and Item 85 (f), 86 and 87 of Schedule "A" and in any event shall take all necessary steps as are reasonably necessary to limit dust impacts from the Site.
 - (2) The Owner shall record in the daily Log (as required by Condition 8.3), any on-Site activities that may generate dust, the reasons for considering the activities may generate dust and the adjustments to the Site operations that results.
- 4.22 The Owner shall, during the construction of works associated with expansion of the Site, limit the dust impacts using the control measures described in the Item No. 10 of the attached Schedule "A" and in any event shall take all necessary steps as are reasonably necessary to limit dust impacts from the Site.

Visual Impact and Landscaping Plan

4.23 Site landscaping shall be completed as outlined in the report entitled "Visual Impact Assessment" (Appendix D12), dated January 2020 prepared by Dillon Consulting.

Bird Control

4.24 The Bird Control Plan shall be implemented in accordance with the report entitled Report entitled Bird Control Plan by LGL Limited, dated April 20, 1999 (item no. 16 of schedule A).

Litter Management

- 4.25 (1) The Owner shall implement the litter control program described in Section 14.3 of the D & O Report; and
 - (2) The Owner shall conduct a daily inspection of the properties in the immediate vicinity of the Site, from the public roads, and shall collect any litter which may have originated from the Site subject to the consent of the owner or tenant. The inspections shall cover Erieau Road from County Road 8 to the Site and other segments of roadway which may be impacted in consideration of the location of the working face and the wind speed and direction.

Abandoned Well Management

4.26 No construction of any expansion works of the Site which would disturb any existing groundwater wells that have not been properly decommissioned, shall begin until the Owner has submitted to, and received the Director's approval for, a plan to locate and properly decommission any abandoned wells at the Site.

5.0 SITE OPERATIONS

Odour Impacts and Daily Cover

- 5.1 (1) At the end of each working day, all Waste received at the Site shall be landfilled in the appropriate fill areas and covered by a minimum of 15 centimetres of daily cover material;
 - (2) Clean soil, non-hazardous contaminated soils, tarpaulins, blown straw, shredded tires, dewatered sewage biosolids and non-hazardous autoshredder waste are the alternative daily cover material approved under this Approval; and
 - (3) The Owner shall ensure that the non-hazardous contaminated soil, blown straw, shredded tires, dewatered sewage biosolids and non-hazardous autoshredder waste used as alternative daily cover, does not cause an adverse environmental effect. If any adverse effect is caused, the Owner shall immediately stop the use of such material and resume the use of other approved daily cover or clean soil.
- 5.2 (1) Where an area of Waste fill, including the initial Waste lift to cover the leachate collection system, has not reached final contours but, will be inactive for a period of six months or longer, the Owner shall ensure that an interim cover material layer of at least 30 centimetres soil depth is applied as soon as reasonably possible; and
 - (2) Areas of interim cover should be seeded as soon as practical.

Dewatered Sewage Biosolids as Alternative Cover Material

5.3 Dewatered sewage biosolids may be used as daily, intermediate and final cover subject to Condition

5.1(2).

- 5.4 (1) Application of the dewatered sewage biosolids shall not exceed 25 tonnes per hectare (dry weight) on a cumulative basis when material is used as intermediate cover.
 - (2) Application of the material shall not exceed 50 tonnes per ha. (dry weight), also on a cumulative basis, when the material is used as final cover.
 - (3) Off site odour impacts shall be monitored and should such impacts occur the Owner shall immediately implement an odour management plan that will minimize odour emissions.
 - (4) The Owner shall retain detailed records of the locations where the material was applied and the quantities of material that were applied at those locations. The records shall be kept for a minimum of five years after the closure of the Site.

Stockpiles

- 5.5 (1) Stockpiles shall be constructed only in the areas shown on the Drawing Drawing No. 4 entitled "Proposed Final Contours and Stockpiles (Post Expansion)" of the D & O Report; and
 - (2) Any exposed portion of the soil stockpiles which becomes inactive, during the Growing Season, for a period greater that one (1) month, shall be seeded to establish vegetative growth within one (1) month of becoming inactive.
- 5.6 Within one (1) year of any portion of the Site being filled to its final contours as shown on Drawing No. 4 entitled "Proposed Final Contours and Stockpiles (Post Expansion)" of the D & O Report, the Owner shall ensure that final cover is placed over that portion of the Site according to the conceptual design specified in Section 7.4 of the D & O Report and the detailed design required to be submitted for the Director's approval under Condition No. 3.1, above.

Leachate Management

- 5.7 Leachate generated from the Site, shall be transported to the Blenheim Wastewater Treatment Lagoons, or an alternative plant able to accept the amount and type of leachate produced at the Site.
- 5.8 (1) The Owner shall notify the District Manager of the decision to build the pre-treatment plant, within thirty (30) days of making such a decision; and
 - (2) The Owner shall submit detailed design plans and specifications of the leachate pre-treatment facility, for Director's approval, at least three (3) months prior to the commencement of the proposed construction.

- 5.9 Leachate shall not be recirculated back into the landfill without the Director's approval.
- 5.10 The Owner shall submit the detailed design for a second on-site leachate storage tank, with a capacity of no less than 605 cubic metres, for the Director's approval by November 30, 2023.

Wood Waste Processing

- 5.11 (1) Processing of wood waste by grinding may be continued at the Site in accordance with the application for approval signed by Mr. Pat Sasso Sr., dated October 24, 1995, and the supporting documentation; and
 - (2) Processing of wood waste shall only occur between the hours of 7:30 a.m. and 5:00 p.m.

6.0 MAJOR WORKS APPROVALS

Cell Construction

- 6.1 (1) Approval is hereby granted for the construction of Cell 3A in accordance with Items 24 to 36 on Schedule "A".
 - (2) Approval is hereby granted for the construction of Cell 3B West in accordance with items 56 to 63 inclusive on Schedule "A".
 - (3) Approval is hereby granted for the construction of Cell 3B East in accordance with Items 80 to 82 in Schedule "A".
 - (4) Approval is hereby granted for the construction of Cell O1 of the Old Landfill in accordance with Appendix I of the ECA application for site expansion (Item 105 of Schedule "A") Cell O1 Detailed Design prepared by Golder Associates Ltd. dated April 28, 2020.
 - (5) Approval is hereby granted for the construction of the leachate collection system at Cell O2 of the Old Landfill, in accordance with Item 107 in Schedule "A".
- 6.2 Should significant deviations from the design as shown on the approved design drawings approved under Condition 6.1 occur during construction, the Owner shall submit as-built drawings to the Director within six (6) months after the completion of construction.

Landfill Gas Collection System

6.3 (1) Approval is hereby granted to construct the first phase of the landfill gas collection system in accordance with items 39 to 53 on Schedule "A".

- (2) Approval is granted for the construction of the Landfill Gas Collection System Expansion in accordance with Items 68 to 72 and Items 83 through 84 in Schedule "A".
- (3) Any waste material generated during the construction that can be landfilled at the Site shall be taken to the active phase of the landfill or to a licensed waste disposal site by a licensed waste hauler. Any waste material that can not be landfilled at the Site shall be transported by a licensed waste hauler to an appropriate licensed waste disposal site.
- (4) Approval is granted for the construction of the Landfill Gas Collection System Expansion, including 34 additional gas extraction wells and the associated piping, in accordance with Items 88 through 92 in Schedule "A".
- (5) Approval is granted for the expansion of the Landfill Gas Collection System, which includes the installation of 84 additional gas extraction wells and the associated piping, in accordance with Items 96, 97 and 98 in Schedule "A".
- (6) During leachate pipe cleaning, the flushing hose shall at least extend to the bottom of the leachate cleanout. By no means shall the leachate pipe cleaning result in backflow in the condensate drain pipe.
- (7) Approval is granted for the detailed design of the Landfill Gas Collection System expansion at the South Mound, all in accordance with Item 100 in Schedule "A".
- (8) Approval is granted for the expansion of landfill gas collection system at Cells O1 to O4 of the Old Landfill vertical expansion area, in accordance with Items 108 and 110 in Schedule "A".
- Prior to commencement of operations of the system, the Owner shall submit for the approval of the Director a document detailing contingency provisions in the event of unexpected component failures.
- 6.5 Any subsequent phases of the landfill gas collection system at the Site shall be subject to approval of the Director.
- 6.6 The Owner shall ensure that the landfill gas collection system in the 2020 Expansion Fill Area including the Old Landfill, South Landfill and West Landfill is designed to maximize landfill gas collection coverage in both vertical and horizontal landfill expansion areas.

Leachate Collection System

- 6.7 The leachate collection system piping for each stage of the landfill shall be visually inspected and cleaned on an annual basis or as circumstances require, in order that the leachate collection system operates properly. This frequency may be reduced to once every two years on the basis of the inspection results with the approval of the Regional Director.
- 6.8 The leachate collection system in the South Landfill Area shall be constructed in accordance with Item 99 in Schedule "A".

- 6.9 The leachate collection system of the Infill Area (Cell 8) shall be constructed in accordance with Items 102, 103 and 104 in Schedule "A".
- 6.10 For any leachate seep at the Old Landfill discovered during daily inspection, the Owner shall ensure the following actions are taken:
 - (1) repair the seeps immediately;
 - (2) notify the Ministry in writing within 24 hours of discovering the seep, with information about the location and likely cause of the seeps, as well as the remediation actions taken;
 - (3) if the leachate seepage is caused by high leachate mounding, the Owner shall develop the mitigation plan in consultation with the Ministry, and submit to the Director for approval prior to implementation.

Renewable Natural Gas (RNG) Facility

- 6.11 (1) Approval is hereby granted for the construction and operation of a Renewable Natural Gas facility at the Site in accordance with Item No. 111 in Schedule A.
 - (2) Prior to the commencement of the RNG facility operation, the Owner shall notify the District Manager in writing about the system commissioning.
 - (3) After commissioning, the Owner shall ensure that a summary of the RNG operation is included in the annual assessment report as required in Condition 13.1 (16) of this ECA.

7.0 FUTURE ANCILLARY WASTE MANAGEMENT ACTIVITIES

- 7.1 (1) This Approval gives a conceptual approval for the following future ancillary waste management activities:
 - (a) chipping of wood waste;
 - (b) processing of source separated construction and demolition waste;
 - (c) transfer of recycling materials; and
 - (2) Prior to the commencement of any construction activities associated with the ancillary waste management activities, the Owner shall submit to the Director for approval under Part V of the EPA, the Design and Operations Report for these facilities.

8.0 RECORDS

Daily Inspections and Log Book

- 8.1 An inspection of the entire Site and all equipment on the Site shall be conducted each day the Site is in operation to ensure that the Site is being operated in compliance with this Approval. Any deficiencies discovered as a result of the inspection shall be remedied immediately, including temporarily ceasing operations at the Site if needed.
- 8.2 A record of the inspections shall kept in a daily log book or a dedicated electronic file that includes:
 - i. the name and signature of person that conducted the inspection;
 - ii. the date and time of the inspection;
 - iii. the list of any deficiencies discovered;
 - iv. the recommendations for remedial action; and
 - v. the date, time and description of actions taken.
- 8.3 A record shall be kept in the daily log book of all the following:
 - i. the type, time of arrival, hauler name, and quantity (tonnes) of all Waste including approved cover material received at the Site.
 - ii. all complaints from the public received by the Owner and an indication of the action taken by the Owner in response;
 - iii. results of any tests done to determine the acceptability of Waste at the Site;
 - iv. a list of the refusal of waste shipments, the reason(s) for refusal, and the origin of the Waste, if known;
 - v. calculation of the total quantity (by weight) of Waste received at the Site for each day;
 - vi. a record of litter collection activities and Site inspections; and
 - vii. presence of leachate seeps and remedial actions taken.

Monthly Records

- 8.4 Monthly site inspection records in the form of a written log or a dedicated electronic file shall include the following:
 - i. a summary of wastes received and refused for disposal at the Site;
 - ii. the area of the Site in which waste disposal operations are taking place;
 - iii. a calculation of the total quantity (tonnes) of waste received at the Site during each operating day and each operating week;
 - iv. the amount of any leachate removed, or treated and discharged from the Site;
 - v. a record of litter collection activities and the application of any dust suppressants;
 - vi. a record of the daily inspections;
 - vii. a description of any out-of-service period of any control, treatment, disposal or monitoring facilities, the reasons for the loss of service, and action taken to restore

- and maintain service;
- viii. type and amount of daily, intermediate and final cover used;
 - ix. maintenance and repairs performed on equipment employed at the Site;
 - x. complaints received and actions taken to resolve them;
- xi. emergency situations and actions taken to resolve them; and
- xii. any other information required by the District Manager.

Site Inspections

- 8.5 During site operations, the Owner shall inspect the Site monthly for the following items but not limited to these items:
 - i. General settlement areas or depressions on the waste mound;
 - ii. Shear and tension cracks on the waste mound;
 - iii. Condition of surface water drainage works;
 - iv. Erosion and sedimentation in surface water drainage system;
 - v. Presence of any ponded water on the waste mound;
 - vi. Adequacy of cover material;
 - vii. Evidence of vegetative stress, distressed poplars or side slope plantings on or adjacent to the waste mound;
 - viii. Condition of groundwater monitoring wells and gas wells;
 - ix. Presence of insects, vermin, rodents and scavenging animals on or adjacent to the waste mound:
 - x. Condition of fence surrounding the Site; and,
 - xi. General site appearance.
- 8.6 The Owner shall inspect the waste mound and surrounding areas weekly for presence of leachate seeps. Any leachate seeps that are discovered shall be repaired within 48 hours of notice by the Owner.

Record Retention

- 8.7 Except as authorized in writing by the Director, all records required by this Approval shall be retained at the Site for a minimum of two (2) years from their date of creation.
- 8.8 The Owner shall retain all documentation listed in Schedule "A" for as long as this Approval is valid.
- 8.9 All monthly summary reports are to be kept at the Site until they are included in the Annual Report.
- 8.10 The Owner shall retain employee training records as long as the employee is working at the Site.
- 8.11 The Owner shall make all of the above documents available for inspection upon request of Ministry staff.

9.0 MONITORING

Well Operation and Maintenance

- 9.1 The Owner shall ensure all groundwater monitoring wells are properly capped, locked and protected from damage.
- 9.2 In areas where landfilling is to proceed around monitoring wells, suitable extensions shall be added to the wells and they shall be properly re-secured.
- 9.3 All groundwater monitoring wells whether included in the monitoring program or not shall be assessed, repaired, replaced or decommissioned as required. Any well being decommissioned shall be decommissioned in accordance with good standard practice that will prevent contamination through the abandoned well and in accordance with Ontario Regulation 903.
- 9.4 The Owner shall repair or replace any monitoring well included in the monitoring program which is destroyed or in any way made inoperable for sampling such that no more than one sampling event is missed.
- 9.5 Any monitoring well included in the monitoring program that is no longer required as part of the groundwater monitoring program may be decommissioned provided its removal from the monitoring program is recommended in a report prepared by a qualified professional and approved by the Director. A report on the decommissioning shall be provided in the annual monitoring report for the period during which the well was decommissioned.

Monitoring Program

- 9.6 (1) Groundwater monitoring shall be carried out in accordance with the monitoring program described in Section 15.2.1 of the Design and Operations Report included as Appendix F of the Environmental Compliance Amendment Application for the Ridge Landfill Expansion Waste (Item No. 105 in Schedule A);
 - (2) Off-site private wells shall be monitored, with the consent of the owner or tenant, in accordance with the monitoring program described in Section 15.2.6 of the D & O Report;
 - (3) Surface water monitoring shall be carried out in accordance with the monitoring program described in Section 15.2.2 of the D & O Report;
 - (4) Performance of the leachate collection system shall be monitored in accordance with the monitoring program described in Section 15.2.3 of the D & O Report;
 - (5) The Owner shall ensure that two leachate monitoring wells are installed within the Old Landfill in accordance with Section 15.2.4 of the D & O Report. Leachate level

- measurement shall be conducted concurrently with groundwater monitoring events; and
- (6) Performance of the gas collection system shall be monitored in accordance with the monitoring program described in Section 15.2.5 of the D & O Report.
- 9.7 Prior to any changes to the monitoring programs being implemented, an approval from the Regional Director is required.
- 9.8 Monitoring for Particulates and Volatile Organic Compounds:
 - (1) The Owner shall undertake the Monitoring for Particulates and Volatile Organic Compounds in accordance with Item 85 (e), 86 and 87 in Schedule "A".
 - (2) The Owner shall ensure there is sufficient clearance between the monitoring samplers and any roadway such that the roads are not a major influence in the sampling.
 - (3) Sampler Placement shall be at a height of at least 2.5 times the height of any downwind obstruction within the landfill.

10.0 CONTINGENCY PLANS

Surface Water

10.1 If the discharge objectives as per the Site's Section 53 OWRA approval are exceeded in any of the storm water management ponds, the impacted water shall not be discharged to the municipal drains, and the contingency measures described Section 17.1 of the D & O Report shall be implemented.

Groundwater

- 10.2 (1) In the event of the groundwater contamination in excess of a maximum of 85% of the acceptable levels as defined by the Reasonable Use Guideline, the Tier 1 of the contingency plan described in Section 17.1 of the D & O Report, shall be implemented;
 - (2) In the event the groundwater concentrations exceeding 85% of applicable Reasonable Use Criteria is confirmed through Tier 1 investigation, Tier 2 of the contingency plan described in Section 17.1 of the D & O Report shall be initiated within one month of the confirmation of the exceedance; and
 - (3) (a) Prior to the implementation of the contingency measures necessary to prevent the unacceptable off-site impacts due to groundwater contamination, the Owner shall submit to the Director for approval, a detailed design of the proposed measures; and
 - (b) The proposed contingency measure for Pathway 1, shall include an assessment on the need for an additional leachate collector outside of the fill area. This assessment

shall be submitted to the District Manager, prior to the submission of the detailed design.

10.3 Any changes to the specific trigger levels for the groundwater and surface water monitoring programs shall be approved by the Regional Director prior to the implementation of these changes.

Old Landfill Leachate Contingency

- 10.4 (1) Leachate seeps at the Old Landfill shall be remediated in accordance with the trigger mechanism and contingency plan described in Section 17.3 of the D & O Report.
 - (2) The Owner shall follow the leachate mound trigger mechanism and contingency plan as described in Section 17.4 of the D & O Report. In the event the leachate level exceeds 28.5 m, a mitigation plan shall be submitted to the Director for approval, with copy to the District Manager within 14 days of discovery of the exceedance.

11.0 PUBLIC COMPLAINTS PROCEDURE

- 11.1 The Owner shall establish a public complaints procedure upon issuance of this Approval, that includes:
 - (1) designating specific staff to receive any complaints and within ten (10) working days of that staff person receiving notice of the complaint to respond in writing indicating the course of action taken by the Owner and the outcome;
 - (2) posting the Site complaints telephone number at the Site entrance and upon issuance of this Approval, providing a written notice explaining the complaints procedure to surrounding residents located along the Drury Line between Highway 40 and Erieau Road and within approximately one (1) kilometre of the Site;
 - (3) keeping an accurate record of the following Site related complaints information:
 - (a) the name and address of the complainant;
 - (b) the date and time;
 - (c) the nature of the complaint;
 - (d) wind speed and wind direction at the time of the complaint; and
 - (e) details of the Owner's response to the complainant, action taken and outcome;
 - (4) reporting to each Liaison Committee meeting a summary of all public complaints received, courses of action taken and outcomes not reported at previous Ridge Liaison Committee meetings.

12.0 LANDFILL SITE LIAISON COMMITTEE

- 12.1 (1) The Owner shall continue to participate in the operation of the Liaison Committee;
 - (2) All meetings of the Liaison Committee shall be open to the public; and
 - (3) Terms of Reference for the Liaison Committee may be altered with the approval of the Regional Director.

13.0 ANNUAL REPORT

- By **April 30**th of each year, an annual report on the use, operation and monitoring of the Site during the previous calendar year shall be submitted to the Regional Director. The report shall include:
 - (1) the results and an interpretive analysis of the results of all groundwater, surface water, landfill gas, on and off Site noise monitoring, leachate collection system monitoring, and leachate monitoring, including the following:
 - (a) the adequacy of the monitoring programs and recommendations for any modifications to programs as appropriate;
 - (b) the extent to which the monitoring results indicate compliance with the conditions of this Approval, PWQO, ODWO, the Reasonable Use Guideline and any other relevant statutes and guidelines;
 - (c) the trend of the monitoring results with respect to future compliance with the conditions of this Approval, PWQO, ODWO, the Reasonable Use Guideline and any other relevant statutes and guidelines; and
 - (d) the current or expected future need to implement contingency plans and/or additional mitigation measures to ensure compliance with the Conditions of this Approval, PWQO, ODWO, the Reasonable Use Guideline and any other relevant statutes and guidelines;
 - (2) summary of Site inspections;
 - (3) Site plans showing:
 - (a) existing contours of the Site;
 - (b) areas of landfilling operation during the reporting period and areas of intended operation during the next reporting period;
 - (c) areas of excavation during the reporting period;
 - (d) the progress of final and interim cover application;
 - (e) previously existing Site works, including stockpiling, works installed during the reporting period, and works planned for installation during

- the next reporting period and the progress of seeding on final and interim cover; and
- (f) Areas and quantities where dewatered sewage biosolids are used as daily, intermediate and final cover.
- (4) a summary of the quantity of any leachate removed, or treated and discharged, from the Site, during each operating week;
- (5) the type and quantity (by weight) of all Waste, alternative daily cover, interim cover and final cover disposed or applied during the reporting period.
- (6) calculation of the total volume of the Site capacity used during the reporting period;
- (7) a calculation of the remaining capacity of the Site and an estimate of the remaining Site life;
- (8) a summary of the weekly, maximum daily and annual tonnage of Waste received at the Site;
- (9) a summary of the public complaints received by the Owner and the responses made by the Owner including the actions taken to resolve these complaints;
- other measures, undertaken by the Owner, to reduce or prevent off-Site impacts and to ensure compliance with the Ministry's requirements;
- extent and timing of the contingency measures described in the Condition No. 10, that may be needed to be implemented;
- report on the decommissioning of wells, that have been decommissioned in the reporting year;
- a brief description of the changes to the operational procedures and the resultant changes to the impact management plans;
- a discussion of the operation and performance of the Major Works at the Site, any operational problems encountered at the Site and the remedial measures taken to alleviate the impacts from those problems, including the control of leachate level, dust, odour and noise;
- (15) leachate quantity and quality sent off-site for treatment, the treatment facility/facilities used, compliance of the treatment facility/facilities with its /their effluent discharge objectives and any expected modifications to be able to continue to accept and treat all of the leachate generated from the Site; and

- an assessment of the operation of the landfill gas collection and utilization system, including but not limited to the following:
 - (a) total volume of landfill gases collected during the reporting year expressed in cubic metres and adjusted to standard 25°C, 101.3 kPa;
 - (b) annual average efficiency of the landfill gas collection system calculated as the percentage of total estimated landfill gas generation that was collected;
 - (c) quantities of landfill gas that was flared, processed at the Renewable Natural Gas (RNG) facility, and product RNG that is injected into Enbridge Gas network;
 - (d) percentage of methane contained in the collected gases expressed as an average value of the total volume of gases collected over the reporting period;
 - (e) a description of any significant maintenance or operational problems encountered and the actions taken for remediation;
 - (f) any changes to the gas collection and utilization system implemented over the reporting period including any extensions of the collection system, installation of new flares, new extraction wells, replacement wells, and any other extraction wells that have been mothballed or decommissioned;
 - (g) adequacy of the gas collection network and the need to expand the collection system in order to maximize the system coverage;
 - (h) adequacy of the flare capacity to ensure the flare station can handle at least 100% of the collected landfill gas;
 - (i) any other changes to the gas collection system implemented over the reporting period;
 - (j) any updates to the inspection and maintenance plan as a result of changes made to the gas collection system during the reporting period; and
 - (k) any updates to the Operation and Maintenance Manual.

14.0 SITE CLOSURE

- 14.1 At least two (2) years prior to the anticipated date of closure of this Site or the date 90 per cent of the total waste disposal volume of the landfill Site is reached, whichever occurs first, the Owner shall submit a detailed plan for the closure, long-term maintenance, monitoring and after-use of the Site to the Director for approval. The plan shall include the following:
 - (1) plans for long-term fencing and access control;
 - (2) details on the final grading, final cover requirements and the source(s) of the cover materials used;
 - (3) details of vegetative cover requirements;
 - (4) end-use plan for the Site;
 - (5) plans for continued monitoring of the groundwater, surface water, leachate and

landfill gas;

- (6) plans for continued maintenance, operation and monitoring of the engineered facilities at the Site including the leachate collection system, gas management system and the surface water drainage facilities;
- (7) plans and schedules for routine inspection and maintenance of the Site upon closure; and
- (8) updated contingency plans for groundwater, leachate, surface water and gas control problems.

15.0 TRAINING

Employees and Training

- 15.1 (1) A training plan for all employees that operate any aspect of the Site shall be developed and implemented by the Operator . Only trained employees shall operate any aspect of the Site or carry out any activity required under this ECA. The Owner must provide proof of staff training to the Ministry upon request. For the purpose of this ECA "trained" means knowledgeable either through instruction or practice in:
 - a. the relevant waste management legislation including EPA, Reg. 347 and O. Reg. 232/98, regulations and guidelines;
 - b. major environmental and occupational health and safety concerns pertaining to the waste to be handled;
 - c. the proper handling of wastes;
 - d. the management procedures including the use and operation of equipment for the processes and wastes to be handled;
 - e. the emergency response procedures;
 - f. the specific written procedures for the control of nuisance conditions;
 - g. identifying on-site activities that have the potential to generate dust;
 - h. identifying how staff will monitor weather conditions and adjust site operations as required
 - g. the terms, conditions and operating requirements of this ECA and
 - h. proper inspection, receiving and recording procedures and the activities to be undertaken during and after a load rejection.
 - (2) The Owner shall keep the training plan and maintain records of staff training at the Site.

Schedule "A"

- 1. Application for Approval of a Waste Disposal Site, submitted by Browning-Ferris Industries Ltd., signed by Mark A. Glass, and dated August 10, 1998.
- 2. "BFI Ridge Landfill Expansion Environmental Assessment", prepared by Browning-Ferris Industries Ltd., dated January 1997; including the following relevant Appendices:
 - -Appendix B -Geology/Hydrogeology Assessment Report
 - -Appendix C -Surface Water Impact Assessment Report
 - -Appendix J -Transportation Impact Assessment Report
 - -Appendix K -Visual Impact Assessment Report
 - -Appendix M -Landfill Atmospheric Studies Impact Assessment Report
 - -Appendix N -Haul Route Air Quality and Noise Impact Assessment Report
 - -Appendix O -Operation and Development
 - -Appendix P -The Diversion Study
- 3. Letter to M. Wojcik, Ministry of the Environment, from Mark Glass, Browning-Ferris Industries Ltd., dated September 28, 1998, clarifying the proposed daily disposal rates.
- 4. Letter to W. Ng, Ontario Ministry of the Environment, from P. Sasso Sr., Browning-Ferris Industries Ltd., dated February 2, 1998, with the attachment, entitled ADraft Responses to Technical Review Comments on *BFI Ridge Landfill Expansion Environmental Assessment*, Ministry of Environment and Energy, October 1997", providing BFI's response to government's comments. dated October 24, 1997.
- 5. Letter to A. Dominski, Ontario Ministry of the Environment, from G.J. Komar, Dillon Consulting Ltd., dated July 21, 1998, with the attachment entitled "Responses to Technical Review Comments on *BFI Ridge Landfill Expansion Environmental Assessment*, Ministry of the Environment, July 1998", providing BFI's response to MOE's comments, dated June 17, 1998.
- 6. Letter to M. Wojcik, Ontario Ministry of the Environment, from G.J. Komar, Dillon Consulting Ltd., dated November 13, 1998, with the attachment entitled "Responses to Technical Review Comments on BFI Ridge Landfill Expansion, November 1998", providing BFI's response to MOE's comments, dated November 3, 1998.
- 7. Letter to T. Storey, Core Technical Advisory Committee, Municipality of Chatham-Kent, from M. Glass, Browning-Ferris Industries Ltd., dated December 14, 1998, committing to completion of the leachate collection works for the existing fill area.
- 8. Facsimile transmission to M. Wojcik, Ontario Ministry of the Environment, from M. Glass, Browning-Ferris Industries Ltd., dated December 18, 1998, confirming the construction completion of the Phase 2 leachate collection works from Manhole 2 to and including Manhole 6,

- for the existing fill area.
- 9. Document entitled "Dust Abatement Program at the BFI Ridge Landfill Site", prepared by Rowan Williams Davies & Irwin Inc., dated November 19, 1998,
- 10. Letter to M. Wojcik, Ontario Ministry of the Environment, from M. Glass, Browning-Ferris Industries Ltd., dated December 18, 1998, confirming the schedule for the construction and seeding of the perimeter screening berms.
- 11. Letter to J. McGuigan, Ridge Landfill Liaison Committee, from M. Glass, Browning-Ferris Industries Ltd., dated February 9, 1998, providing the proposal for monitoring of the off-site wells.
- 12. Facsimile transmission to M. Wojcik, Ontario Ministry of the Environment, from J. MacLachlan, Dillon Consulting Ltd., dated January 8, 1999, providing the size of the fill area considered to be the expansion.
- 13. Letter from J. Zangari, M.M. Dillon Ltd., to D. Staseff, Ministry of Environment and Energy, dated June 24, 1994, including the attachment entitled "Ridge Landfill Leachate Collection System Phase 1, Protocol for Toe Berm Description".
- 14. Report entitled Noise Management Plan for the BFI Ridge Landfill Site, Blenheim Ontario by *Rowan William Davies & Irwin Inc, dated April 21, 1999.*
- 15. Report entitled Results of a Public Open House to Consider Landscaping Plans for the Ridge Landfill Expansion by Bezaire & Associates, dated December 16, 1998.
- 16. Report entitled Bird Control Plan by LGL Limited, dated April 20, 1999.
- 17. Letter and attachments of September 21, 1999 from Mark Glass, P. Eng of Browning-Ferris Industries to M. Turner of MOE regarding financial assurances.
- 18. Report entitled "Ridge Landfill Expansion, Contract 2B, Specifications" dated February 26, 1999, and the Plans C1 through C7, inclusive, entitled "Ridge Landfill Expansion Contract 2B", prepared by Dillon Consulting Limited.
- 19. Report entitled "Ridge Landfill Expansion, Contract 4, Cell 2, Specifications" dated January 2002, and the Plans: GP-1, R1 through R5 and C1 through C5, entitled "Ridge Landfill Expansion Contract 4", prepared by Dillon Consulting Limited.
- 20. Facsimile transmission dated May 14, 2002, to Margaret Wojcik, Ontario Ministry of Environment and Energy, from Jim MacLachlan, Dillon Consulting Limited, containing the revised design of the leachate collection pipe perforations.
- 22. Application for a Provisional Certificate of Approval for a Waste Disposal Site signed by Howard Goldby,

- Vice President, Environmental Health and Safety, dated November 28, 2005, and all the information associated with the application, including letter dated December 19, 2005; and
- 23. Letter from Jim Hawryluk, Chairman, Ridge Landfill Liaison Committee to J. O' Mara, Director, Environmental Assessment and Approvals Branch, Ministry of the Environment, dated October 24, 2005.
- 24. Letter and attached document entitled "Section 4 Special Provisions" dated July 13, 2006 from James R. MacLachlan, Project Manager, Dillon Consulting Limited to Tes Gebrezghi, Supervisor-Waste Unit, MOE.
- 25. Letter dated August 9, 2006 from Greg Washuta, Senior Waste Engineer, Ministry of the Environment to Howard Goldby, Vice-President- Environmental Health and Safety, Ridge (Chatham) Holdings LP.
- 26. Letter dated August 14, 2006 from James R. MacLachlan, Project Manager, Dillon Consulting Limited to Greg Washuta, Senior Waste Engineer, MOE.
- 27. Drawing No. GP-1 entitled "General Plan of Contract 5 Works" prepared by Dillon Consulting Limited, dated August 9, 2006.
- 28. Drawing No. R-1 entitled "Perimeter Road STA. 1+240 to STA. 1+347.65" prepared by Dillon Consulting Limited, dated August 9, 2006.
- 29. Drawing R-2 entitled "Typical Sections" prepared by Dillon Consulting Limited, dated August 9, 2006.
- 30. Drawing C-1 entitled "Cell 3A Base Elevations" prepared by Dillon Consulting Limited, dated August 9, 2006.
- 31. Drawing C-2 entitled "Cell 3A Leachate Collection System and Side Slope Liner" prepared by Dillon Consulting Limited, dated August 9, 2006.
- 32. Drawing C-3 entitled "Cell 3A Top of Leachate Collection System Elevations" prepared by Dillon Consulting Limited, dated August 9, 2006.
- 33. Drawing C-4 entitled "*Leachate Collection Details*" prepared by Dillon Consulting Limited, dated August 9, 2006.
- 34. Drawing C-5 entitled "*Leachate Collection Details*" prepared by Dillon Consulting Limited, dated August 9, 2006.
- 35. Drawing C-6 entitled "*Pump House 3 -Structural*" prepared by Dillon Consulting Limited, dated August 9, 2006.
- 36. Drawing C-7 entitled "*Pump House 3 Mechanical*" prepared by Dillon Consulting Limited, dated August 9, 2006.

- 37. E-mail dated August 24, 2006 from Jim MacLachlan, Dillon Consulting Limited to Greg Washuta, Senior Waste Engineer, Ministry of the Environment.
- 38. Electronic mail sent September 6, 2006 from Tim Kozlof, Landfill Manager, Ridge Landfill to Ranjani Munasinghe, Senior Waste Engineer, Ministry of the Environment.
- 39. Document entitled "Landfill Gas Management System Ridge Landfill Specifications" dated February 2008, prepared by Dillon Consulting Limited and SCS Engineers PC.
- 40. Drawing number 1 entitled "2008 LFG System Plan" dated February 5, 2008, prepared by Dillon Consulting Limited and SCS Engineers PC.
- 41. Drawing number 2 entitled "*LFG Header Plan and Profile Stn. 1+0-50 to 1+400*" dated February 5, 2008, prepared by Dillon Consulting Limited and SCS Engineers PC.
- 42. Drawing number 3 entitled "*LFG Header Plan and Profile Stn. 1+400 to 1+750*" dated February 5, 2008, prepared by Dillon Consulting Limited and SCS Engineers PC.
- 43. Drawing number 4 entitled "*LFG Header Plan and Profile Stn. 3+000 to 3+350*" dated February 5, 2008, prepared by Dillon Consulting Limited and SCS Engineers PC.
- 44. Drawing number 5 entitled "*LFG Header Plan and Profile Stn. 3+350 to 3+700*" dated February 5, 2008, prepared by Dillon Consulting Limited and SCS Engineers PC.
- 45. Drawing number 6 entitled "*LFG Header Plan and Profile Stn. 5+000 to 5+075*" dated February 5, 2008, prepared by Dillon Consulting Limited and SCS Engineers PC.
- 46. Drawing number 7 entitled "*Blower and Flare System Plan*" dated February 5, 2008, prepared by Dillon Consulting Limited and SCS Engineers PC.
- 47. Drawing number 8 entitled "*LFG System Final Build-Out*" dated February 5, 2008, prepared by Dillon Consulting Limited and SCS Engineers PC.
- 48. Drawing number 13 entitled "*Piping Details 1*" dated February 5, 2008, prepared by Dillon Consulting Limited and SCS Engineers PC.
- 49. Drawing number 14 entitled "*Piping Details 2*" dated February 5, 2008, prepared by Dillon Consulting Limited and SCS Engineers PC.
- 50. Drawing number 15 entitled "*Piping Details 3*" dated February 5, 2008, prepared by Dillon Consulting Limited and SCS Engineers PC.
- 51. Drawing number 16 entitled "*Piping Details 4*" dated February 5, 2008, prepared by Dillon Consulting Limited and SCS Engineers PC.

- 52. Letter dated April 16, 2008 from Greg Washuta, Senior Waste Engineer, Waste Unit, EAAB, MOE to Tim Kozlof, Landfill Manger, Ridge (Chatham) Holdings LP.
- 53. Letter dated April 29, 2008 from James R. MacLachlan, Project Manager, Dillon Consulting Limited to Greg Washuta, Senior Waste Engineer, EAAB, MOE.
- 54. Article entitled "*Vertical Landfill Gas Extraction Wells The SCS Model"* by Darrin D. Dillah, PhD, Balwinder S. Panesar, PhD and Gregory P. McCarron, PE, SCS Engineers.
- 55. Letter dated March 22, 2010 and attached specifications from Fabiano Gondim, Project Manager, Dillon Consulting Limited to Mr. Tes Gebrezghi, Supervisor-Waste Unit, Environmental Assessment and Approvals Branch, Ministry of the Environment.
- 56. Letter dated June 18, 2010 from Greg Washuta, Senior Waste Engineer, Waste Unit, Environmental Assessment and Approvals Branch, Ministry of the Environment to Mr. Howard Goldby, Vice President, Ridge (Chatham) Holdings L.P..
- 57. Drawing number GP-1 entitled "General Plan of Contract 6 Works" stamped and signed on June 22, 2010 created by Dillon Consulting.
- 58. Drawing number C-1 entitled "Cell 3B Base Elevations" stamped and signed on June 22, 2010 created by Dillon Consulting.
- 59. Drawing number C-2 entitled "Cell 3B Leachate Collection System" stamped and signed on June 22, 2010 created by Dillon Consulting.
- 60. Drawing number C-3 entitled "Cell 3B Top of Leachate Collection System Elevations" stamped and signed on June 22, 2010 created by Dillon Consulting.
- 61. Drawing number C-4 entitled "Leachate Collection Details" stamped and signed on June 22, 2010 created by Dillon Consulting.
- 62. Letter dated June 23, 2010 from Fabiano Gondim, Project Manager, Dillon Consulting Limited to Greg Washuta, Senior Waste Engineer, Waste Unit, Environmental Assessment and Approvals Branch, Ministry of the Environment.
- 63. E-mail correspondence dated June 30, 2010 from Fabiano Gondim, Project Manager, Dillon Consulting Limited to Greg Washuta, Senior Waste Engineer, Waste Unit, Environmental Assessment and Approvals Branch, Ministry of the Environment.
- 64. Letter dated July 5, 2010 and attached draft Certificate of Approval from Greg Washuta, Senior Waste Engineer, Waste Unit, Environmental Assessment and Approvals Branch, Ministry of the Environment to Mr. Howard Goldby, Vice President, Ridge (Chatham) Holdings L.P..
- 65. E-mail correspondence dated July 6, 2010 from Fabiano Gondim, Project Manager, Dillon Consulting

- Limited to Greg Washuta, Senior Waste Engineer, Waste Unit, Environmental Assessment and Approvals Branch, Ministry of the Environment.
- 66. Letter and attachments 1 to 5 inclusive dated June 14, 2010 from Howard Goldby to Mr. Tesfaye Gebrezghi, Director, Section 39, Environmental Protection Act, Ministry of the Environment.
- 67. Document entitled "Request for Amendment, Certificate of Approval A021601; Ridge (Chatham) Holdings L.P. Municipality of Chatham-Kent, ON Combination of Daily and Annual Quantities of Waste and Waste Used for Alternative Daily Cover" prepared by BFI Canada, dated June 10, 2010.
- 68. Letter and attached specifications dated August 25, 2010 from Fabiano Gondim, Dillon Consulting Limited to Mr. Tes Gebrezghi, Supervisor, Waste Unit, MOE.
- 69. Letter dated October 28, 2010 from Greg Washuta, Senior Waste Engineer, Waste Unit, Ministry of the Environment to Mr. Brian Forrestal, BFI Canada Inc..
- 70. Letter dated November 4, 2010 from Fabiano Gondim, Dillon Consulting Limited to Greg Washuta, Senior Waste Engineer, Waste Unit, Ministry of the Environment.
- 71. Drawing 1 entitled "2010 LFG Collection System Expansion" created by SCS Engineers, signed and stamped on August 23, 2010.
- 72. Drawing 2 entitled "2010 LFG Collection System Expansion Details" created by SCS Engineers, signed and stamped on August 23, 2010.
- 73. Letter report and attachment 1 dated April 29, 2009 prepared by Howard Goldby, BFI Canada Inc., to the Director, Section 39, Environmental Protection Act, Ministry of the Environment.
- 74. Letter dated January 20, 2010 from Greg Washuta, Senior Waste Engineer, Environmental Assessment and Approvals Branch, Ministry of the Environment to Howard Goldby, Vice President, Engineering and Compliance, BFI Canada Inc..
- 75. Letter dated February 22, 2010 from Howard Goldby, Vice President, Engineering and Compliance, BFI Canada Inc. to Greg Washuta, Senior Waste Engineer, Environmental Assessment and Approvals Branch, Ministry of the Environment.
- 76. Letter dated January 31, 2011 from Greg Washuta, Senior Waste Engineer, Environmental Assessment and Approvals Branch, Ministry of the Environment to Howard Goldby, Vice President, Engineering and Compliance, BFI Canada Inc.
- 77. Application for a Provisional Certificate of Approval for a Waste Disposal Site and supporting documentation submitted by BFI Canada Inc. dated December 16, 2011 and signed by Mr. Brian Forrestal requesting an amendment to permit the use of an alternative leachate collection layer design for the remainder of the site. The supporting documentation included the following:

- i. Cover letter dated December 16, 2010 prepared by BFI and signed by Mr. Brian Forrestal; and
- ii. Report entitled "Ridge Landfill Leachate Collection System Amendment" prepared by Dillon Consulting and dated November 2010
- 78. Letter dated March 28, 2011 addressed to Mr. Brian Forrestal, BFI Canada Inc. from Mr. Dale Gable, Ministry of the Environment requesting additional information on the proposed alternative design.
- 79. Letter dated April 11, 2011 addressed to Mr. Dale Gable, Ministry of the Environment from Mr. Fabiano Gondim, Dillon Consulting providing additional information on the alternative leachate collection system layer. Information included the following drawings:
 - i. Drawing No. 0.3 entitled "Ridge Landfill Expansion Base Contours" prepared by Dillon Consulting (Project No. 94-2494-03) and dated April 8, 2011.
 - ii. Figure No. 5 entitled "Ridge Landfill LCS Design Optimization Base Leachate Collection Drainage Layer Cross Section for Approved and Proposed Design" prepared by Dillon Consulting (Project No. 10-3077) dated April 2011.
 - iii. Drawing No. 0.4 entitled "Ridge Landfill Expansion Final Contours Rev. 1" prepared by Dillon Consulting (Project No. 94-2494-03) and dated April 8, 2011
- 80. Letter Report dated March 11, 2011 and supporting documentation addressed to Mr. Tes Gebrezghi, Ministry of the Environment from Mr. Fabiano Gondim, Dillon Consulting requesting approval for the detailed design drawings for Cell 3B East Leachate Collection System. The supporting documentation included the following:
 - i. Drawing No. GP-1 entitled "Ridge Landfill Expansion General Plan of Contract 7 Works" prepared by Dillon Consulting (Project No. 11-4417) dated March 9, 2011;
 - ii. Drawing No. GP-1 entitled "Ridge Landfill Expansion General Plan of Contract 7 Works" prepared by Dillon Consulting (Project No. 11-4417) dated March 9, 2011;
 - iii. Drawing No. R-2 entitled "Ridge Landfill Expansion Typical Section" prepared by Dillon Consulting (Project No. 11-4417) dated March 9, 2011;
 - iv. Drawing No. C-1 entitled "Ridge Landfill Expansion Cell 3B East Base Elevations" prepared by Dillon Consulting (Project No. 11-4417) dated March 9, 2011;
 - v. Drawing No. C-6 entitled "Ridge Landfill Expansion Leachate Collection Details" prepared by Dillon Consulting (Project No. 11-4417) dated March 9, 2011;
 - vi. Drawing No. C-7 entitled "Ridge Landfill Expansion Cell 3B East Pump House 4 Structural" prepared by Dillon Consulting (Project No. 11-4417) dated February 25, 2011;
 - vii. Drawing No. M-1 entitled "Ridge Landfill Expansion Pumphouse 4 Mechanical" prepared by Dillon Consulting (Project No. 11-4417) dated March 9, 2011;
 - viii. Drawing No. E-1 entitled "Ridge Landfill Expansion Pump House 4 Electrical" prepared by Dillon Consulting (Project No. 11-4417) dated March 8, 2011; and
 - ix. Drawing No. SS-1 entitled "Ridge Landfill Expansion Electrical Site Plan" prepared by Dillon Consulting (Project No. 11-4417) dated February 25, 2011.
- 81. Letter dated April 19, 2011 addressed to Mr. Brian Forrestal, BFI Canada Inc. from Mr. Dale Gable,

- Ministry of the Environment requesting additional information pertaining to the detailed design drawings for the Cell 3B Leachate Collection System.
- 82. Letter dated April 26, 2011 addressed to Mr. Dale Gable, Ministry of the Environment from Mr. Fabiano Gondim, Dillon Consulting providing additional information and updated drawings for the detailed design of Cell 3B Leachate Collection System. The drawing include:
 - i. Cover Sheet Ridge Landfill Expansion Contract 7 Cell 3B East prepared by Dillon Consulting (Project No. 11-4417) dated February 2011;
 - ii. Drawing No. R-1 entitled "Ridge Landfill Expansion Main Access Road and Forcemain" prepared by Dillon Consulting (Project No. 11-4417) dated April 25, 2011;
 - iii. Drawing No. R-1 entitled "Ridge Landfill Expansion Main Access Road and Forcemain" prepared by Dillon Consulting (Project No. 11-4417) dated April 25, 2011;
 - iv. Drawing No. C-2 entitled "Ridge Landfill Expansion Leachate Collection System and Side Slope Liner" prepared by Dillon Consulting (Project No. 11-4417) dated April 25, 2011:
 - v. Drawing No. C-3 entitled "Ridge Landfill Expansion Top of Leachate Collection System Elevations" prepared by Dillon Consulting (Project No. 11-4417) dated April 25, 2011;
 - vi. Drawing No. C-4 entitled "Ridge Landfill Expansion Leachate Collection Details" prepared by Dillon Consulting (Project No. 11-4417) dated April 25, 2011;
 - vii. Drawing No. C-5 entitled "Ridge Landfill Expansion Cell 3B East Leacahte Collection Details" prepared by Dillon Consulting (Project No. 11-4417) dated April 25, 2011;
- 83. Letter dated June 2, 2011 and supporting documentation addressed to Mr. Tes Gebrezghi, Supervisor Waste Unit, Ministry of the Environment from Mr. Fabiano Gondim, Dillon Consulting requesting approval for a proposed expansion to the Ridge Landfill Site gas collection system. The supporting documentation included design drawings and quality control and quality assurance documents. The design drawings included the following:
 - Drawing No. 1 entitled "2011 LFG System Expansion Ridge Landfill, Blenheim, Ontario -LFG System Plan" prepared by Dillon Consulting and dated June 2, 2011;
 - ii. Drawing No. 2 entitled "2011 LFG System Expansion Ridge Landfill, Blenheim, Ontario Piping Details" prepared by Dillon Consulting and dated June 2, 2011;
- 84. Email dated July 20, 2011 at 07:56 AM sent to Mr. Brian Forrestal, BFI Canada Inc. from Mr. Dale Gable, Ministry of the Environment that discussed pipe sizing connecting the leachate clean-outs and the lateral pipe.
- 85. Letter dated January 24, 2012 addressed to the Environmental Approvals Access and Service Integration Branch from Mr. Brian Forrestal, BFI Canada Inc. submitting an ECA application and supporting documentation requesting the daily and annual volume capacities be increased. The supporting documentation includes the following:
 - a. Environmental Compliance Application form signed by Mr. Brian Forrestal dated

- January 24, 2012;
- b. Proof of Legal Name;
- c. Statement of Completion Waste Management Projects signed by Mr. Tim Kozlof dated January 11, 2012;
- d. Decision Letter to Elevation Request dated December 13, 2011 addressed to Mr. Tim Kozlof, BFI Canada Inc. from Ms. Agatha Garcia-Wright, Environmental Approvals Branch;
- e. Report entitled "Ridge Landfill Monitoring Plan for Particulates and Volatile Organic Compounds" prepared by Dillon Consulting Ltd and dated March 2012; and
- f. Report entitled "Ridge Landfill -Dust, Odour and Air Emissions Management Plan" prepared by Dillon Consulting and dated February 2012.
- 86. Letter dated February 24, 2012 addressed to Mr. Brian Forrestal, BFI Canada Inc. from Mr. Dale Gable, Ministry of the Environment providing comments on the Monitoring Plan for Particulates and Volatile Organic Compounds and the Dust, Odour and Air Emissions Management Plan.
- 87. Letter dated March 8, 2012 addressed to Mr. Brian Forrestal, BFI Canada Inc. from Mr. Dale Gable, Ministry of the Environment providing comments on the Monitoring Plan for Particulates and Volatile Organic Compounds and the Dust, Odour and Air Emissions Management Plan. The comments pertained to the number of samples, the location of the samplers and the need for a training plan.
- 88. Letter dated May 31, 2012 and supporting documentation addressed to Ontario Ministry of the Environment, Environmental Assessment and Approvals Branch from Fabiano Gondim, Dillon Consulting regarding Ridge Landfill, Certificate of Approval No. A021601 Detailed Design for the Expansion of the Landfill Gas System. The supporting documentation includes Specifications for the proposed works and the following design drawings:
 - (a) Drawing No. GA-1 "LFG System Expansion, LFG System Plan" dated May 30, 2012 prepared by Dillon Consulting;
 - (b) Drawing No. GA-2 "LFG System Expansion, Piping Details" dated May 30, 2012 and revised on October 16, 2012 prepared by Dillon Consulting.
- 89. Letter dated October 2, 2012 addressed to Brian Forrestal, BFI Canada Inc, from Rick Li, Ministry of the Environment providing comments on the submitted detailed design (Item 88).
- 90. Letter dated October 3, 2012 addressed to Rick Li, Ministry of the Environment from Fabiano Gondim, Dillon Consulting providing a response to the ministry's October 2, 2012 letter.
- 91. Letter dated October 12, 2012 addressed to Rick Li, Ministry of the Environment from Fabiano Gondim, Dillon Consulting providing a response to the ministry's additional comments on the depth of gas extraction wells, depth of header pipe, and the wells installation schedule.

- 92. Email dated October 16, 2012 to Rick Li, Ministry of the Environment from Fabiano Gondim, Dillon Consulting regarding the revised Drawing No. GA-2.
- 93. Letter dated January 7, 2013 and supporting documentation addressed to Environmental Assessment and Approvals Branch, Ministry of the Environment from Fabiano Gondim, Dillon Consulting regarding Ridge Landfill, Environmental Compliance Approval No. A021601 Detailed Design of Cells 4A and 4B Leachate Collection System. The supporting documentation includes the following:
 - i. Environmental Compliance Application form signed by Mr. Brian Forrestal dated January 7, 2013;
 - ii. Specifications for Cells 4A and 4B Leachate Collection System;
 - iii. Detailed design drawings for Cells 4A and 4B Leacahte Collection System prepared by Dillon Consulting:
 - a. Drawing No. GP-1 General Plan of Contract 8/9 Works dated November 13, 2012;
 - b. Drawing No. C-1 Cells 4A & 4B Base Excavation Plan dated April 18, 2013;
 - c. Drawing No. C-2 Leachate Collection System and Side Slope Liner dated April 18, 2013;
 - d. Drawing No. C-3 Top of Leachate Collection System Elevations dated November 23, 2012;
 - e. Drawing No. C-4 Leachate Collection Details dated April 11, 2013; and
 - f. Drawing No. C-5 Leachate Collection Details Perimeter Road Interface dated April 18, 2013.
- 94. Letter dated April 8, 2013 addressed to Rick Li, Ministry of the Environment from Fabiano Gondim, Dillon Consulting providing a response to the ministry's review comments on the detailed design for Cells 4A and 4B Leachate Collection System.
- 95. Email and the attachments dated April 17, 2013 to Rick Li, Ministry of the Environment from Fabiano Gondim, Dillon Consulting providing additional information regarding leachate pipe cleanouts and revisions to the detailed design drawings for Cells 4A and 4B Leachate Collection System.
- 96. Environment Compliance Approval Application and the attached supporting documents regarding the Detailed Design for the Expansion of the Landfill Gas Collection System dated signed by Brian Forrestal dated June 23, 2015.
- 97. Letter dated November 10, 2015 addressed to Rick Li, Ministry of the Environment and Climate Change from Fabiano Gondim, Dillon Consulting providing a response to the Ministry's comments on the detailed design for landfill gas expansion.
- 98. Letter dated November 24, 2015 addressed to Rick Li, Ministry of the Environment and Climate Change from Fabiano Gondim, Dillon Consulting regarding response to the Ministry's comments and the updated detailed design drawings for the landfill gas expansion.

- 99. Environmental Compliance Approval Application for Ridge Landfill Detailed Design of the South Landfill Leachate Collection System signed by Brian Forrestal dated April 6, 2016. The supporting documents includes the detailed design drawing set for the South Landfill leachate collection system, and the specifications prepared by Dillon Consulting dated April 2016.
- 100. Application for Amendment to the Environmental Compliance Approval No. A021601, for approval of the detailed design of landfill gas collection system on the South Mound of the Ridge Landfill, signed by Chris Visser dated December 18, 2018. The supporting documents include the detailed design drawing set for the landfill gas collection system expansion in the South Mound, and the specifications prepared by Golder Associates Ltd.
- 101. Environmental Compliance Approval Application signed by Brian Forrestal, Waste Connections of Canada Inc. dated September 6, 2019, seeking emergency approval for temporary increase of the annual disposal rate for 2019.
- Application for Amendment to the Environmental Compliance Approval No. A021601 Detailed Design of the Infill Area submitted by Golder Associates Ltd. dated July 2019.
- Letter of December 4, 2019 to Rick Li, Ministry of the Environment, Conservation and Parks from Fabiano Gondim, Golder Associates Ltd. Regarding Response to Comments on the Application for Approval of the Detailed Design of the Infill Area (Cell 8).
- 104. Email dated December 13, 2019 from Rick Li, Ministry of the Environment, Conservation and Parks to Fabiano Gondim, Golder Associates Ltd./Brian Forrestal, Waste Connections Re: Ridge Landfill Infill Area Detailed Design.
- 105. Environmental Compliance Approval Amendment Application for the Ridge Landfill Expansion Waste dated April 2020 submitted by Golder Associates Ltd., including the appendices.
- 106. Letter dated October 28, 2020 to Rick Li, Ministry of the Environment, Conservation and Parks from Golder Associates Ltd., Re: Application for Approval of Waste Disposal Site Amendment to ECA No. A021601 Ridge Landfill, Municipality of Chatham-Kent, Reference No. 1987-BP6KJC, Response to Letter Dated October 16, 2020.
- 107. Report entitled "Environmental Compliance Approval Amendment Application for the Ridge Landfill Cell O2 Detailed Design" submitted by Golder Associates Ltd. dated September 22, 2021.
- 108. Design drawings and specification for "LFG Collections System Expansion, Old Landfill Cell O1 to Cell O4, Ridge Landfill" dated November 9, 2021 prepared by GHD.
- 109. Letter dated June 1, 2022 to Rick Li, MECP from David Barton, GHD, Re: Response to Ministry of the Environment, Conservation and Parks (MECP) Comments received May 24, 2022, Final Design for the Landfill Gas Collection System Expansion Old Landfill Cells O1 to O4 at the Ridge Landfill.

- 110. Updated design drawings for "Waste Connections Canada Landfill Gas Collection System Expansion Old Landfill Cell O1 to O4, Ridge Landfill, November 2021 Rev. 1 Re-issued for MECP approval dated July 4, 2022.
- 111. Environmental Compliance Approval Application signed by Cathy Smith, Waste Connections dated October 27, 2022 for the construction of a Renewable Natural Gas facility at the Ridge Landfill, and the supporting documents including the Design and Operations Report Addendum 1 Appendix D6 prepared by WSP (Golder Associates) dated October 27, 2022.

The reasons for the imposition of these terms and conditions are as follows:

- 1. The reason for Condition 1.1 and 1.2 is to ensure that the Site is designed, operated, monitored and maintained in accordance with the application and supporting documentation submitted by the Owner, and not in a manner which the Director has not been asked to consider.
- 2. The reason for Conditions 1.3, 1. 4. 1. 5, 1.9, 1.10, 1.11, 1.12, 1.13, 3.1, 3.2, 3.3, 3.4, 3.5, and 3.6 is to clarify the legal rights and responsibilities of the Owner under this Environmental Compliance Approval.
- 3. Conditions 1.6, 1.7 and 1.8 are included to ensure that the appropriate Ministry staff have ready access to information and the operations of the Site, which are approved under this Approval.
- 4. Conditions 1.14 and 1.15 are included, pursuant to subsection 197(1) of the EPA, to provide that any persons having an interest in the Site are aware that the land has been approved and used for the purposes of waste disposal.
- 5. The reasons for Condition 1.16 are to restrict potential transfer or encumbrance of the Site without the approval of the Director and to ensure that any transfer of encumbrance can be made only on the basis that it will not endanger compliance with this Approval.
- 6. The reasons for Condition 1.17 and 1.18 are to ensure that the Site is operated under the corporate name which appears on the application form submitted for this approval and to ensure that the Director is informed of any changes.
- 7. The reason for Condition 1.19 is to ensure that appropriate Ministry staff have ready access to the Site for inspection of facilities, equipment, practices and operations required by the conditions in this Approval. This condition is supplementary to the powers of entry afforded a Provincial Officer pursuant to the EPA and OWRA.
- 8. The reason for Condition 1.20 is to ensure the Approval No. is identified in any

- correspondence.
- 9. The reasons for Conditions 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, and 2.7 are to ensure that sufficient funds are available to the Ministry to close the landfill, and to carry out all expected post-closure care activities and any contingencies. Failure to include requirements for financial assurance would not be in the public interest and may result in a hazard or nuisance to the natural environment or any person.
- 10. The reason for Condition 3.7 is to ensure the availability of as-built drawings for inspection and information purposes.
- 11. The reasons for Condition 4.1, 4.2, 4.3, 4.12, 4.13, 4.15 and 4.26 are to ensure the Owner operates the site in an environmentally safe manner. This to is ensure the environment and public health are protected.
- *12. The reason for Condition 4.3 is to identify the service area for the Site.*
- 13. The reasons for Conditions 4.4, 4.5, 4.6, 4.7, 4.8 and 4.9 is to specify the approved areas from which waste may be accepted at the Site and the types and amounts of waste that may be accepted for disposal at the Site, based on the Owner's application and supporting documentation.
- 14. The reasons for Condition 4.10 are to specify the normal hours of operation for the landfill Site and a mechanism for amendment of the hours of operation.
- 15. The reasons for Condition 4.11 are to specify site access to/from the Site and to ensure the controlled access and integrity of the Site by preventing unauthorized access when the Site is closed and no site attendant is on duty.
- 16. The reason for Condition No. 4.14 is to ensure the Owner is aware that burning of waste is not permitted at the Site.
- 17. The reason for Condition 4.16 is to define the noise limits within which the Site must operate and to require the Owner to minimize the noise impacts during the operating activities at the Site.
- 18. The reason for Condition 4.17, 4.18 and 4.19 is to minimize the noise impacts along the haul route to the Site. This is to ensure the protection of the environment and public health.
- 19. The reason for Condition 4.20 is to ensure that the mitigative measures required to minimize the noise impacts are constructed in a timely manner and in accordance with the proposed design approved by the Director.
- 20. The reason for Condition 4.21 and 4.20 is to minimize the dust impacts during the

- operating activities at the Site. This is to ensure the protection of the environment and public health.
- 21. The reason for Condition 4.23 is to ensure that the proposed landscaping plan is acceptable to the Ministry and to the affected public, to minimize the visual impact from the operations at the Site.
- 22. The reason for Condition 4.24 is to ensure that the proposed bird control program is effective and acceptable to the Ministry.
- 23. The reason for Condition 4.25 is to ensure the proposed litter control plan is incorporated into the Approval.
- 24. The reason for Condition 5.1, 5.2, 5.3, 5.4, 5.5 and 5.6 is to ensure that landfilling operations are conducted in an environmentally acceptable manner. Daily and intermediate cover is used to control potential nuisance effects, to facilitate vehicle access on the site, and to ensure an acceptable site appearance is maintained. The proper closure of a landfill site requires the application of a final cover which is aesthetically pleasing, controls infiltration, and is suitable for the end use planned for the site.
- 25. The reasons for Conditions 5.7, 5.8, and 5.9 are to ensure proper operation of the leachate collection system. This is to ensure the protection of the environment and public health.
- 26. The reason for Condition 5.10 is to ensure that there is adequate on-site storage capacity for leachate management.
- 27. The reason for Condition 5.11 is to ensure the proper operation of the wood waste processing processing facility. This is to ensure the protection of the environment and public health.
- 28. The reason for Conditions 6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.7, 6.8 and 6.9 are to approve the major works based on the submitted information. This is to ensure the protection of the environment and public health.
- 29. The reason for Condition 6.10 is to ensure any leachate spill is promptly mitigated to prevent impact on surface water.
- 30. The reason for COndition 6.11 is to approve the Renewable Natural Gas facility at the landfill site for processing of landfill gas and supplying to the natural gas network.
- 31. The reason for Condition 7.1 is to ensure that the future ancillary waste management activities at the Site are approved in compliance with the requirements specified by the

- EPA and other relevant legislation.
- 32. The reasons for Conditions 8.1, 8.2 8.3, 8.4, 8.5, 8.6, 8.7, 8.8, 8.9, 8.10, 8.11 and 11.1 are to provide for the proper assessment of effectiveness and efficiency of site design and operation, their effect or relationship to any nuisance or environmental impacts, and the occurrence of any public complaints or concerns. Record keeping is necessary to determine compliance with this Environmental Compliance Approval, the EPA and its regulations
- 33. The reasons for Condition 9.1, 9.2, 9.3, 9.4 and 9.5 are to ensure protection of the natural environment and the integrity of the groundwater monitoring network.
- 34. The reason for Condition 9.6 is to demonstrate that the landfill site is performing as designed and the impacts on the natural environment are acceptable. Regular monitoring allows for the analysis of trends over time and ensures that there is an early warning of potential problems so that any necessary remedial/contingency action can be taken.
- 35. The reason for Condition 9.8 is to ensure the Owner conducts monitoring for particulates and volatile organic compounds as per the submitted monitoring plan. This is to ensure the environment and human health are protected.
- 36. The reason for Conditions 10.1, 10.2, 10.3 and 10.4 is to ensure that the Owner follows a plan with an organized set of procedures for identifying and responding to unexpected but possible problems at the Site. A remedial action / contingency plan is necessary to ensure protection of the natural environment.
- 37. The reason for Condition 11.1 is to ensure their is a forum for the exchange of information and public dialogue on activities carried out at the landfill Site. Open communication with the public and local authorities is important in helping to maintain high standards for site operation and environmental protection.
- 38. The reasons for Condition 12.1 is to ensure that the Ministry is informed of any spills or fires at the Site and to provide public health and safety and environmental protection.
- 39. The reasons for Condition 13.1 is to ensure that regular review of site development, operations and monitoring data is documented and any possible improvements to site design, operations or monitoring programs are identified. An annual report is an important tool used in reviewing site activities and for determining the effectiveness of site design.
- 40. The reasons for Condition 14.1 is to ensure that final closure of the Site is completed in accordance with ministry requirements, an aesthetically pleasing manner and to ensure the long-term protection of the natural environment.

41. The reason for Condition 15.1 and 15.2 is to ensure the Owner has a training plan for the Site that is readily accessible to the Owner and the Ministry.

Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). A021601 issued on July 22, 2022

In accordance with Section 139 of the Environmental Protection Act, you may by written notice served upon me, the Ontario Land Tribunal and in accordance with Section 47 of the Environmental Bill of Rights, 1993, the Minister of the Environment, Conservation and Parks, within 15 days after receipt of this notice, require a hearing by the Tribunal. The Minister of the Environment, Conservation and Parks will place notice of your appeal on the Environmental Registry. Section 142 of the Environmental Protection Act provides that the notice requiring the hearing ("the Notice") shall state:

- a. The portions of the environmental compliance approval or each term or condition in the environmental compliance approval in respect of which the hearing is required, and;
- b. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

Pursuant to subsection 139(3) of the Environmental Protection Act, a hearing may not be required with respect to any terms and conditions in this environmental compliance approval, if the terms and conditions are substantially the same as those contained in an approval that is amended or revoked by this environmental compliance approval.

The Notice should also include:

- 1. The name of the appellant;
- 2. The address of the appellant;
- 3. The environmental compliance approval number;
- 4. The date of the environmental compliance approval;
- 5. The name of the Director, and:
- 6. The municipality or municipalities within which the project is to be engaged in.

And the Notice should be signed and dated by the appellant.

This Notice must be served upon:

Registrar* Ontario Land Tribunal 655 Bay Street, Suite 1500 Toronto, Ontario M5G 1E5 OLT.Registrar@ontario.ca

and

The Minister of the Environment, Conservation and Parks 777 Bay Street, 5th Floor and Toronto, Ontario M7A 2J3

The Director appointed for the purposes of Part II.1 of the Environmental Protection Act Ministry of the Environment, Conservation and Parks 135 St. Clair Avenue West, 1st Floor Toronto, Ontario M4V 1P5

* Further information on the Ontario Land Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349 or 1 (866) 448-2248, or www.olt.gov.on.ca

This instrument is subject to Section 38 of the Environmental Bill of Rights, 1993, that allows residents of Ontario to seek leave to appeal the decision on this instrument. Residents of Ontario may seek leave to appeal within 15 days from the date this decision is placed on the Environmental Registry. By accessing the Environmental Registry at https://ero.ontario.ca/, you can determine when the leave to appeal period ends.

The above noted activity is approved under s.20.3 of Part II.1 of the $\it Environmental \, Protection \, Act.$

DATED AT TORONTO this 9th day of June, 2023

Mohsen Keyvani, P.Eng.

Director

appointed for the purposes of Part II.1 of the Environmental Protection Act

RL/

c: Area Manager, MECP Windsor

c: District Manager, MECP Sarnia Fabiano Gondim P. Eng., Golder Associates Ltd.