



GOLDER

REPORT

CRRRC EA Compliance Monitoring Report

May 2019 - May 2020 File No. EA-03-08-02, EIAMS No. 10261

Submitted to:

Ministry of the Environment, Conservation and Parks

Director, Environmental Assessment Branch

1st Floor, 135 St. Clair Avenue West

Toronto, ON

M4V 1P5

Submitted by:

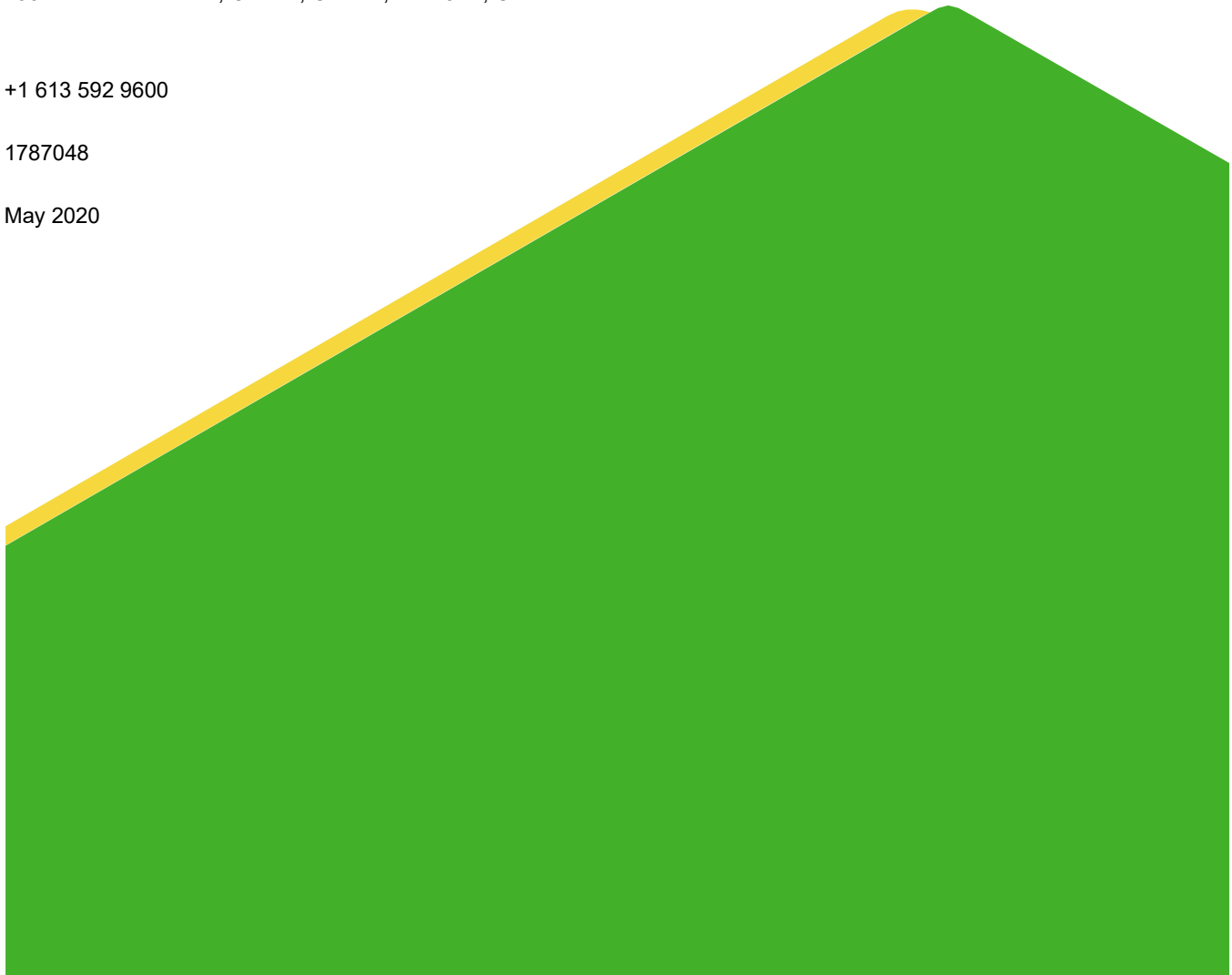
Golder Associates Ltd. on behalf of Taggart Miller Environmental Services

1931 Robertson Road, Ottawa, Ontario, K2H 5B7, Canada

+1 613 592 9600

1787048

May 2020



Distribution List

- 1 e-copy MECP
- 1 e-copy CRRRC; posted on website
- 1 copy CRRRC
- 1 e-copy Golder Associates Ltd.

Table of Contents

1.0 INTRODUCTION	1
1.1 Purpose.....	1
1.2 Structure.....	1
1.3 Proponent’s Contact Information	1
1.4 Overview of Activities Since Approval.....	2
2.0 EA CONDITIONS OF APPROVAL	3
2.1 Conditions Not Yet Started.....	3
2.2 Conditions in Progress	3
2.3 Completed Conditions.....	4
3.0 COMMITMENTS	4
3.1 Commitments Not Yet Started	4
3.2 Commitments in Progress.....	4
3.3 Completed Commitments.....	4
4.0 WASTE DIVERSION TARGETS	4
5.0 GREENHOUSE GAS EMISSIONS	4
6.0 COMPLIANCE STATUS	5
7.0 LIMITATIONS	5
8.0 CLOSURE	6

TABLES

Table 1: Completion Status of EA Conditions

Table 2: Completion Status of Mitigation Measures Outlined in the EA

APPENDIX A

Complaint Protocol

1.0 INTRODUCTION

1.1 Purpose

In May 2017, Taggart Miller Environmental Services (Taggart Miller) received approval from the Minister of the Environment, Conservation and Parks (MECP) under the *Environmental Assessment Act* for the development of the Capital Region Resource Recovery Centre (CRRRC) in Ottawa, Ontario. Condition 5 of that approval requires that Taggart Miller submit an annual Environmental Assessment (EA) Compliance Monitoring Report.

This document, referred to as the *Environmental Assessment Compliance Monitoring Report (EACMR)*, is intended to fulfill Condition 5 of the EA approval conditions. The EACMR reports on the status of all conditions included in the EA approval or agreed to during the EA process.

The MECP's Environmental Assessment and Permissions Branch file number is EA-03-08-02 and the Environmental Assessment Information Management System (EAIMS) number is 10261.

1.2 Structure

The EACMR is comprised of the following sections:

- **Introduction** – provides an overview of the purpose, context of submission and structure of the report as well as the proponent's contact information and an overview of significant activities related to the CRRRC during the reporting period.
- **EA Conditions of Approval** – the conditions of EA approval contained in the Minister's letter are listed in Table 1 and Taggart Miller's progress in meeting these conditions is described.
- **Commitments** – during the EA, Taggart Miller made commitments that were listed in Tables 15-1 and 15-2 of the EA. These commitments are listed in Table 2 of this report and Taggart Miller's progress in meeting these requirements is assessed.
- **Compliance Status** – the final section of the report summarizes Tables 1 and 2 and provides concluding remarks on the overall status of compliance with the EA.

1.3 Proponent's Contact Information

The contact information for Taggart Miller and the CRRRC is as follows:

Taggart Miller Environmental Services
Capital Region Resource Recovery Centre
c/o Miller Waste Systems Inc.
8050 Woodbine Avenue
Markham, Ontario
L3R 2N8

Attention: Jamie Betts, Director Project Management

1.4 Overview of Activities Since Approval

The CRRRC will be an integrated solid waste management facility to provide facilities and capacity for recovery of resources and diversion of materials from disposal for solid non-hazardous wastes that are generated by the Industrial, Commercial and Institutional (IC&I) and Construction and Demolition (C&D) sectors in the Ottawa area. The CRRRC is comprised of a material recycling facility (MRF), C&D processing, organics processing, petroleum hydrocarbon (PHC) contaminated soil treatment, surplus soil management, drop-off for separated materials or for separation of materials, leaf and yard materials composting and a landfill (including leachate pre-treatment and landfill gas collection) for disposal of residuals and material not diverted. Since EA approval, Taggart Miller has worked on the remaining municipal and provincial approvals required to proceed to construction of the CRRRC and has advanced the detailed design of the site and site components and the facility has not yet been constructed. As such, there is no information to report on the waste diversion targets set out during the EA, nor year over year greenhouse gas emissions (EA Conditions 4.4 f, g and h).

In July 2017 Taggart Miller ran advertisements in several local English and French newspapers soliciting participants for the Community Liaison Committee (CLC). The first meetings were held in December 2017 and to date there have been five CLC meetings.

On November 26, 2017, Taggart Miller submitted applications for Official Plan and Zoning Bylaw amendments (OPA/ZBA) for the CRRRC. As part of the City of Ottawa OPA/ZBA process Taggart Miller held a community information and comment session on December 7, 2017. On April 11, 2018 the OPA/ZBA was approved by the City of Ottawa Council. On May 16, 2018 an appeal was filed regarding the ZBA (the OPA permitting the CRRRC is now in force). The Local Planning Appeal Tribunal dismissed the appeal and a further appeal from that decision was taken. An appeal hearing occurred in September of 2018 and the Local Planning Appeal Tribunal (LPAT) denied the appeal. As such, the required zoning for the CRRRC is in place.

In June 2018 Taggart Miller submitted the Site Plan application to the City of Ottawa for the CRRRC project including all necessary supporting reports. Taggart Miller has responded to questions arising from the City review of the submission; the Site Plan approval is in progress as of May 2020.

As a component of the Site Plan application Taggart Miller advanced the detailed designs of all of the buildings, processes and facilities that make up the CRRRC.

A proposal was made to the Department of Fisheries and Oceans (DFO) on December 14, 2017 regarding infilling of several ditches at the CRRRC site and installation of two culverts in the Simpson Drain. On April 11, 2018 DFO provided mitigation measures and notification that if the mitigation measures were incorporated in the site development plans, the proposal will not result in serious harm to fish or prohibited effects on listed aquatic species at risk. As such, an authorization under the *Fisheries Act* or a permit under the *Species at Risk Act* is not required.

A Notice of Activity (NOA) was filed with the Ministry of Natural Resources and Forestry (MNR) in November 2017 (Confirmation ID: M-102-929031100) for the removal of actively used barn swallow (*Hirundo rustica*) habitat at the proposed CRRRC.

Golder prepared and submitted a Headwater Drainage Features Assessment (HDFA) for the CRRRC lands to South Nation Conservation (SNC) in April 2018. A review of the HDFA was received from SNC on June 27, 2018, to which Golder provided responses. A subsequent letter was received from SNC on July 25, 2018 and similar comments from SNC were received in relation to the Site Plan application; SNC comments are being addressed via the Site Plan application process.

Approval under the *Drainage Act* is required for the three municipal drains that are to provide the outlet for stormwater management from the CRRRC site. The *Drainage Act* is administered by the City of Ottawa; Taggart Miller started the process of obtaining these approvals in January 2018. This process is in progress as of May 2020.

Taggart Miller submitted two Environmental Compliance Approval (ECA) applications to the MECP in February 2018 for approvals under the *Environmental Protection Act* (EPA), Sections 9 and 27 for air (stationary) / noise and waste, respectively. As of October 2019 and December 2019, respectively, the ECAs for air (stationary) / noise and waste (2172-BAGR2C and 4538-B8EMLT) have been issued by the MECP.

Taggart Miller also submitted an application to the MECP in February 2018 for approval under the *Ontario Water Resources Act* (OWRA), Section 53 for the stormwater management system. Environmental Compliance Approval (ECA) No. 4742-B3ULLF was issued to the CRRRC dated March 7, 2019.

In September 2017 Taggart Miller initiated discussion with the City of Ottawa regarding a Leachate Agreement for receipt of pre-treated leachate from the CRRRC site at the City's wastewater treatment plant. A Draft Leachate Agreement was provided by the City on April 18, 2019 and discussions to finalize this agreement are in progress.

2.0 EA CONDITIONS OF APPROVAL

All conditions and their status as of the reporting period are summarized in Table 1.

2.1 Conditions Not Yet Started

Progress to complete the following conditions has not yet begun:

- Condition 10.1, which requires no waste to be placed in the residual landfill until the waste diversion facilities are constructed and in operation, is not engaged at this time as site construction has not commenced.
- Condition 13.1, which requires the installation of a dust collection system at the MRF and C&D facility, is not engaged at this time as construction of these facilities has not commenced.
- Condition 14 (including 14.1 and 14.2) requires an annual inspection of the landfill component of the site as part of the Compliance Monitoring Program. Condition 14.2 requires an inspection of the landfill by a qualified person within 24 hours of a seismic event, which will commence in the event there is a seismic activity. These will commence when the landfill is constructed.
- Condition 15 relates to the commencement of construction and will only be considered in the event construction has not started within 5 or 10 years of the date of EA approval, as appropriate.

2.2 Conditions in Progress

Many conditions detail operational parameters that will be ongoing throughout the operational life of the site. These conditions (2.1 through 2.5, 3.1 through 3.4, 4.3 through 4.7, 5.1 through 5.6, 6.1 through 6.4, 7.1 through 7.4) are all in progress. Details regarding the requirements of each condition are provided in Table 1.

2.3 Completed Conditions

The following conditions have been completed between approval of the EA and May 2020; Table 1 contains details regarding the date of completion and condition stipulations:

- Conditions 4.1 and 4.2
- Conditions 8.1 – 8.2
- Condition 9
- Condition 11.1
- Condition 12.1
- Condition 13.2

3.0 COMMITMENTS

All commitments discussed in the EA and their status as of the reporting period are summarized in Table 2.

3.1 Commitments Not Yet Started

There were many commitments made during the EA related to operations or construction of the CRRRC and as the project is still in the approvals phase these commitments have not been started. The commitments not yet started are as follows: 2 through 31, 33 through 36, 38, 45 through 51, 54 through 63, 66, 68, 69, 71, 73 through 75, 78 through 80, AA and BB.

3.2 Commitments in Progress

Many commitments detail operational parameters that will be ongoing throughout the operational life of the CRRRC. These commitments can all be considered to be in progress and consist of: 40 through 44, 53, 70, 72, 77, 81, 82, C and F.

3.3 Completed Commitments

Commitments D, E and G through O were made by Taggart Miller during the Terms of Reference, all of which were completed during the Environmental Assessment. In addition, the following other commitments relate to requirements prior to operation and have also been completed: 1, 32, 37, 39, 52, 64, 65, 67, 70, 72, 76 and CC.

4.0 WASTE DIVERSION TARGETS

To be completed in subsequent reports after site operations commence.

5.0 GREENHOUSE GAS EMISSIONS

To be completed in subsequent reports after site operations commence.

6.0 COMPLIANCE STATUS

The Minister listed 43 conditions in the Notice of Approval to Proceed with the undertaking, which are listed in Table 1. These conditions are almost equally divided amongst not yet started, in progress and complete, which is appropriate given that construction of the CRRRC has not yet commenced. Many of the conditions are operational stipulations that will continue throughout the operational life of the CRRRC.

Taggart Miller made a total of 100 commitments during the EA (15 during the ToR and 85 during the EA) as listed in Table 2. Many of these commitments have not yet been started as all the approvals to proceed to construction and operation of the CRRRC have not yet been obtained. All but one of the ToR commitments are complete. It is noted that the EA commitments involving environmental controls and procedures, i.e., atmosphere, groundwater, surface water and traffic, have been included in the detailed design and in the submissions made under the ECA and City application processes

No non-compliance issues were identified during the reporting period for commitments or conditions.

7.0 LIMITATIONS

This report was prepared for the exclusive use of Taggart Miller Environmental Services. The report, which specifically includes all tables, figures and appendices, is based on data and information collected by Golder Associates Ltd. and is based solely on the conditions of the properties at the time of the work.

Golder Associates Ltd. has relied in good faith on all information provided and does not accept responsibility for any deficiency, misstatements, or inaccuracies contained in the reports as a result of omissions, misinterpretation, or fraudulent acts of the persons contacted or errors or omissions in the reviewed documentation.

The services performed, as described in this report, were conducted in a manner consistent with that level of care and skill normally exercised by other members of the engineering and science professions currently practicing under similar conditions, subject to the time limits and financial and physical constraints applicable to the services.

Any use which a third party makes of this report, or any reliance on, or decisions to be made based on it, are the responsibilities of such third parties. Golder Associates Ltd. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

The findings and conclusions of this report are valid only as of the date of this report. If new information is discovered in future work, including excavations, borings, or other studies, Golder Associates Ltd. should be requested to re-evaluate the conclusions of this report, and to provide amendments as required.

Electronic media is susceptible to modification, deterioration and incompatibility. In the event that data or reports provided by Golder are distributed and/or electronically posted, Golder does not warrant, guarantee, or make any representations regarding the use of, or results in terms of correctness, accuracy, reliability or current conditions. No express or implied warranty or fitness for a particular use is made. Any use of the electronic information will be at the sole risk of the party making use of this information.

8.0 CLOSURE

We trust this report satisfies your current needs. If you have any questions regarding this report, please contact the undersigned.

Golder Associates Ltd.



Trish Edmond, M.E.Sc., P.Eng.
Principal

PLE/RM/PAS/sg

[https://golderassociates.sharepoint.com/sites/18733g/technical work/phase 600 monthly contingency allowance/ea compliance report/2020/crrrc ea compliance report may2020.docx](https://golderassociates.sharepoint.com/sites/18733g/technical%20work/phase%20600%20monthly%20contingency%20allowance/ea%20compliance%20report/2020/crrrc%20ea%20compliance%20report%20may2020.docx)

Golder and the G logo are trademarks of Golder Associates Corporation

Table 1: Completion Status of EA Conditions

EA Approval Condition Number	Condition	Implementation Schedule	Status
2	GENERAL REQUIREMENTS		
2.1	The proponent shall implement the undertaking in accordance with the CRRRC Environmental Assessment which is hereby incorporated in this approval by reference except as provided in these conditions and as provided in any other approval or permit that may be issued for the site.	Throughout the operation of the CRRRC in accordance with the EA approval.	In Progress
2.2	The proponent shall fulfill all commitments made during the environmental assessment process.		
2.3	Any proposed changes to the CRRRC Environmental Assessment and/or the undertaking shall be made in accordance with the <i>Environmental Assessment Act</i> and the amending procedure outlined in the CRRRC Environmental Assessment.		
2.4	These conditions do not prevent more restrictive conditions being imposed under other statutes.		
2.5	Where a document is required to be posted on a website, the Director may determine the length of time for which the document must be posted.		
3	PUBLIC RECORD		
3.1	Where a document is required for the public record, the proponent shall provide a copy of the document to the Director.	Throughout the operation of the CRRRC in accordance with the EA approval.	In Progress
3.2	The EAB file number EA-03-08-02 and the EAIMS number 10261 shall be quoted on all documents submitted to the ministry pursuant to this Notice of Approval.		

EA Approval Condition Number	Condition	Implementation Schedule	Status
3.3	For every document submitted to the ministry, the proponent shall clearly identify under which condition the document is.	Throughout the operation of the CRRRC in accordance with the EA approval.	In Progress
3.4	Documents may be provided electronically where appropriate. If the ministry requests that the document be provided in hardcopy, the proponent shall provide the document in hardcopy within 15 business days to the Director.		
4	COMPLIANCE MONITORING PROGRAM		
4.1	The proponent shall prepare and implement a Compliance Monitoring Program.	60 days prior to the start of construction or such other date the Director agrees to in writing.	Completed with the issuance of the first EA Compliance Monitoring Report
4.2	The Compliance Monitoring Program shall be submitted to the Director a minimum of 60 days prior to the start of construction or such other date the Director agrees to in writing.	60 days prior to the start of construction or such other date the Director agrees to in writing.	Completed with the issuance of the first EA Compliance Monitoring Report
4.3	The Compliance Monitoring Program shall be included in the public record and shall be posted on the proponent's website at the time of submission.	With each annual EA Compliance Monitoring Report	In progress

EA Approval Condition Number	Condition	Implementation Schedule	Status
4.4	<p>The Compliance Monitoring Program shall include updated reports on the:</p> <ul style="list-style-type: none"> a) implementation of the undertaking, including mitigation measures b) post-approval consultation with the public and Indigenous communities c) completion of any outstanding studies or work to be undertaken d) compliance with the conditions in this Notice of Approval e) status of commitments made during the <i>Environmental Assessment Act</i> application process f) actualization of the targets for waste diversion set out in the Waste Diversion Protocol <ul style="list-style-type: none"> i) by waste type by year ii) by waste type showing year over year changes g) steps taken to reach the targets for waste diversion set out in the Waste Diversion Protocol and any additional proposed measures if targets are not being met h) year over year changes in greenhouse gas emissions 	With each annual EA Compliance Monitoring Report.	In progress
4.5	The Compliance Monitoring Program must contain an implementation schedule.		
4.6	The Director may amend the Compliance Monitoring Program at any time by providing notice to the proponent in writing. The proponent shall amend the Compliance Monitoring Program document in accordance with the Director's notice and shall carry out the amended Compliance Monitoring Program.	With each annual EA Compliance Monitoring Report.	In Progress

EA Approval Condition Number	Condition	Implementation Schedule	Status
4.7	The proponent shall make the Compliance Monitoring Program documentation available to the ministry or its designate upon request in a timely manner when so requested by the ministry.	With each annual EA Compliance Monitoring Report.	In Progress
5	COMPLIANCE REPORTING		
5.1	The proponent shall prepare an annual compliance report documenting the results of the Compliance Monitoring Program (Condition 4 above).	Ongoing	In Progress
5.2	The first compliance report shall be submitted to the Director for the public record no later than one year following the date of approval. Each subsequent compliance report shall be submitted within 12 months of the submission of the previous report. Each report shall cover the previous 12 month period.		
5.3	The proponent shall submit an annual compliance report until the Director provides notice otherwise.		
5.4	The proponent shall retain, either onsite or in another location approved by the Director, copies of each of the annual compliance reports and any associated documentation regarding compliance monitoring activities.	Ongoing	In Progress
5.5	The compliance reports and supporting documentation shall be posted on the proponent's website.		
5.6	The proponent shall make the compliance reports and supporting documentation available to the ministry or its designate upon request in a timely manner when requested to do so by the ministry.		

EA Approval Condition Number	Condition	Implementation Schedule	Status
6	COMMUNITY LIAISON COMMITTEE		
6.1	The proponent shall maintain a CLC to provide a forum for public concerns to be raised and for mitigation measures to be discussed.	Ongoing	CLC has been formed and has met five times to date
6.2	Interested members from the Township of Russell shall be invited to participate in the CLC.		
6.3	If there is no interest from the public in the CLC, the proponent may discontinue the CLC. The proponent shall re-establish the CLC at the request of the public.		
6.4	The CLC, as required, shall serve for the dissemination, review and exchange of information and monitoring results relevant to the undertaking.		
7	COMPLAINT PROTOCOL		
7.1	The proponent shall prepare and implement a protocol establishing a procedure for addressing inquiries and complaints with respect to the undertaking.	The earlier of one year from the date of approval, or 60 days before the start of construction.	In progress, submitted as part of the ECA application; as requested following submission of the 2019 EACMR, a copy of the complaint protocol is included with this report in Appendix A.
7.2	The proponent shall submit the Complaint Protocol to the Director at a minimum the earlier of one year from the date of approval, or 60 days before the start of construction.		
7.3	The Director may amend the Complaint Protocol at any time by providing notice to the proponent in writing. The proponent shall amend the Complaint Protocol document in accordance with the Director's notice and shall carry out the amended Complaint Protocol.	Throughout the operation of the CRRRC	In Progress

EA Approval Condition Number	Condition	Implementation Schedule	Status
7.4	The proponent shall submit the amended Complaint Protocol to the Director within the time period specified by the Director.	Throughout the operation of the CRRRC	In Progress
8	CLIMATE CHANGE CONSIDERATIONS		
8.1	The proponent shall include with its application for an Environmental Compliance Approval: <ul style="list-style-type: none"> a) an assessment of the largest ten (10) storm events in the past five (5) years b) an assessment of whether the proposed stormwater management system has the capacity to contain the events c) a discussion of potential contingency plans to address extreme weather events in the future should the frequency of such storms increase and capacity become an issue 	With submission of the ECA Part V application.	Completed, submitted as part of the ECA application
8.2	The proponent shall study the feasibility of utilizing the landfill gas collected at the site for beneficial uses (i.e. electricity or heat generation) rather than just flaring the gas. The results of the study shall be provided to the Director 60 days prior to the proponent accepting waste in the residual waste disposal facility.	Results to be provided to the Director 60 days prior to accepting waste in the residual waste disposal facility.	Completed, submitted as part of the ECA application
9	TRAFFIC STUDY COMMITMENTS		
9.1	Prior to the start of construction, the proponent shall consult with the Ministry of Transportation on the commitments outlined in the CRRRC EA, including: <ul style="list-style-type: none"> a) intersection improvements at the Site access location off Boundary Road (left turn lane into the Site) b) on-Site queuing area of sufficient capacity to avoid truck queuing on Boundary Road 	Prior to construction, consult with the Ministry of Transportation.	Completed as part of the City of Ottawa Site Plan Application process

EA Approval Condition Number	Condition	Implementation Schedule	Status
10	WASTE DIVERSION		
10.1	The proponent shall not accept waste in the residual waste landfill until the waste diversion facilities and/or operations that form part of this undertaking as contemplated in the CRRRC EA have also been constructed and are operational, including the construction and demolition processing facility, materials recovery facility, organics processing facility, compost processing and storage pad, and contaminated soil treatment and soil surplus stock piles.	At commencement of operation.	Not Yet Started
11	LEACHATE TREATMENT PLAN		
11.1	The proponent shall include in its application for an Environmental Compliance Approval a proposed Leachate Treatment Plan that outlines the long-term plan for pre-treatment at the site, transport, and delivery to the receiving facility. The Leachate Treatment Plan shall include, but is not limited to, contingency measures for: <ul style="list-style-type: none"> a) accommodating short-term disruptions at the receiving leachate treatment facility b) spills c) potential effects due to seismic events 	To be submitted with ECA Part V application.	Completed
12	ODOUR ABATEMENT PLAN		
12.1	The proponent shall develop an Odour Abatement Plan detailing the measures for addressing the potential odours that may emanate from the site. The proponent shall submit the plan to the ministry as part of the application for approval under Part V of the <i>Environmental Protection Act</i> .	To be submitted with ECA application.	Completed

EA Approval Condition Number	Condition	Implementation Schedule	Status
13	DUST CONTROLS		
13.1	The proponent shall install a dust collection system at the Materials Recovery and Recycling Facility and the Construction and Demolition Processing Facility.	At commencement of operation.	Not Yet Started
13.2	The proponent shall prepare a Dust Management Plan for the site and shall submit the plan to the ministry as part of the application for approval under Part II.1 of the <i>Environmental Protection Act</i> . The plan shall include fugitive dust from all sources on the site.	To be submitted with ECA application.	Completed
14	SEISMIC INSPECTIONS		
14.1	The proponent shall include as part of its Compliance Monitoring Program an annual inspection of the site the purpose of which is to determine that all landfill components are in good working order. The inspection shall be carried out by a person(s) qualified to assess the proper functioning of the landfill components. The results of the inspection shall be included in the Compliance Reports required by Condition 5 of this approval. The frequency of the inspections may be changed by the Director by giving notice in writing to the proponent.	Throughout the operation of the CRRRC.	Not Yet Started
14.2	Within 24 hours of a seismic occurrence, the proponent shall have a person(s) qualified to do so evaluate and ensure that the landfill components are in good working order. The proponent shall submit to the District Manager a written report from the person(s) conducting the evaluation of the landfill components within five business days of the seismic occurrence. The requirement for these inspections may be changed by the Director by giving notice in writing to the proponent.	To be implemented only if required throughout the operation of the CRRRC.	Not Yet Started

EA Approval Condition Number	Condition	Implementation Schedule	Status
15	REVIEW AND DURATION OF APPROVAL		
15.1	If, within 5 years of the date of approval, the proponent has not commenced construction of the undertaking, the proponent shall undertake a review of the CRRRC Environmental Assessment. The proponent shall review whether the effects analysis, anticipated net effects, and associated mitigation measures set out in the CRRRC Environmental Assessment remain accurate for the undertaking, and identify any changes to these.	To be implemented only if required.	Not currently required
15.2	The proponent shall provide to the ministry a report that sets out the findings of its review. The report shall be submitted to the Director at least 90 days prior to the commencement of construction. The proponent shall also, at the same time, provide the report to the Indigenous communities consulted on the CRRRC Environmental Assessment, the CLC and the City of Ottawa. The proponent shall also post the review of the CRRRC Environmental Assessment on the proponent's website at the time of submission.	To be implemented only if required, 90 days prior to the commencement of construction.	Not currently required
15.3	Construction of the undertaking must commence within 10 years of the date of approval or this approval expires.	Ten years from the date of this approval.	Ongoing

Table 2: Completion Status of Mitigation Measures Outlined in the EA

Reference Number	Commitment (Location of Where the Commitment was Made in the EA Document Package)	Project Phase	Status
1	The Environmental Monitoring Plan will be a standalone document in the EPA Application. (EASR – Section 14.1)	Pre-construction	Completed
2	Implementation of all required Site effects monitoring and reporting programs. (EASR – Section 14.0 and Volume IV – Section 7.0)	Construction, operations and post-closure	Not Yet Started
ATMOSPHERE			
3	Maximize drive-through road patterns on-Site to minimize need for use of back-up alarms. (EASR – Section 11.1 and TSD #2)	Construction and operations	Not Yet Started
4	Paved roads in the northern part of the Site. (EASR – Section 11.1 and TSD #3)	Construction and operations	Not Yet Started
5	Berms to attenuate noise as required, i.e., from the active face of the landfill, entrance and on-Site haul roads, as required. (EASR – Section 11.1 and TSD #2)	Construction and operations	Not Yet Started
6	Truck waiting area inside the Site. (EASR – Section 11.1, TSD #2 and TSD #3)	Construction and operations	Not Yet Started
7	Maintain existing vegetation in buffer around Site perimeter or, where required construct perimeter screening berms with plantings on top. (EASR – Section 11.1 and TSD #3)	Construction and operations	Not Yet Started
8	Receiving of organics, and materials at the MRF and C&D processing facility, inside buildings. (EASR – Section 11.1, TSD #2 and TSD #3)	Operations	Not Yet Started
9	Biofilters on the exhaust of air from within the organics processing and PHC contaminated soil treatment facilities. (EASR – Section 11.1 and TSD #3)	Construction and operations	Not Yet Started
10	Dust collection system consisting of a bag house and cyclone on exhaust air from the MRF and C&D processing buildings. (EASR – Section 11.1 and TSD #3)	Construction and operations	Not Yet Started

Reference Number	Commitment (Location of Where the Commitment was Made in the EA Document Package)	Project Phase	Status
11	Low permeability cover of organics primary reactor cells and PHC contaminated soil treatment cells. (EASR – Section 11.1 and TSD #3)	Operations	Not Yet Started
12	Flare for combustion of biogas captured from the organics processing and from the landfill. (EASR – Section 11.1 and TSD #3)	Operations	Not Yet Started
13	LFG collection system approach using horizontal collection from within the waste, installed during the filling period. (EASR – Section 11.1 and TSD #3)	Construction and operations	Not Yet Started
14	Truck tire wash for vehicles leaving the landfill area. (EASR – Section 11.1 and TSD #3)	Operations	Not Yet Started
15	Place compacted granular materials and, if required, surface sealing on regularly used Site construction roads. (EASR – Section 11.1 and TSD #3)	Construction and operations	Not Yet Started
16	Use of typical best management practices for dust suppression. (e.g., covering vehicle loads, use of water or other suppressants, etc.) (EASR – Section 11.1 and TSD #3)	Construction and operations	Not Yet Started
17	Use equipment that complies with appropriate emission standards. (EASR – Section 11.1 and TSD #3)	Construction and operations	Not Yet Started
18	Minimize idling of vehicles on-Site. (EASR – Section 11.1 and TSD #3)	Construction and operations	Not Yet Started
19	Restrict the use of heavy equipment to daytime hours as best possible. (EASR – Section 11.1 and TSD #2)	Construction and operations	Not Yet Started
20	Maintain vehicles and equipment, and ensure they have noise suppression equipment. (EASR – Section 11.1 and TSD #2)	Construction and operations	Not Yet Started
21	Control speed limit for traffic on-Site. (EASR – Section 11.1 and TSD #2)	Operations	Not Yet Started
22	Time the frequency of turning of compost piles to avoid development of anaerobic conditions. (EASR – Section 11.1 and Volume IV)	Operations	Not Yet Started

Reference Number	Commitment (Location of Where the Commitment was Made in the EA Document Package)	Project Phase	Status
23	Introduction of oxygen into the anaerobically digested organics reactors to establish aerobic conditions prior to uncovering them. (EASR – Section 11.1 and Volume IV)	Operations	Not Yet Started
24	Manage the working face of the landfill effectively to minimize potential for odorous emissions. (EASR – Section 11.1 and TSD #3)	Operations	Not Yet Started
25	Apply appropriate daily cover on landfill. (EASR – Section 11.1 and TSD #3)	Operations	Not Yet Started
26	Minimize the area of uncovered waste. (EASR – Section 11.1 and TSD #3)	Operations	Not Yet Started
27	Placement of final cover progressively on completed portions of the landfill component. (EASR – Section 11.1 and Volume IV)	Operations	Not Yet Started
28	Provide for odour control measures for leachate holding and treated effluent ponds. (EASR – Section 11.1 and TSD #3)	Operations and post-closure	Not Yet Started
29	Annually determine status of development applications on vacant land where sensitive land use could occur to assess requirement for noise mitigation. (EASR – Section 11.10 and TSD #2)	Operations	Not Yet Started
GEOLOGY AND HYDROGEOLOGY (GROUNDWATER)			
30	Engineered leachate/liquid containment for the landfill, leachate ponds, and organics processing and PHC treatment cells. (EASR – Section 11.1 and Volume III)	Construction, operations and post-closure	Not Yet Started
31	Perimeter liner system cut-off for the landfill, together with leachate collection system and LDSCS. (EASR – Section 11.1 and Volume III)	Construction, operations and post-closure	Not Yet Started
32	Adequate buffer width between landfill component and property boundary. (EASR – Section 11.1 and Volume III)	Construction and operations	Complete; buffer width in ECA application as proposed in EA

Reference Number	Commitment (Location of Where the Commitment was Made in the EA Document Package)	Project Phase	Status
33	Provide construction quality control on all liner and collection system installations. (EASR – Section 11.1 and Volume IV)	Construction and operations	Not Yet Started
34	Provide monitoring and maintenance of leachate collection system and LDSCS components. (EASR – Section 11.1 and Volume IV)	Operations and post-closure	Not Yet Started
35	Inspect construction and operating equipment regularly and repair promptly if found to be leaking. (EASR – Section 11.1 and Volume IV)	Operations and post-closure	Not Yet Started
36	Geotechnical monitoring of landfill settlement. (EASR – Section 11.1 and Volume III)	Operations and post-closure	Not Yet Started
SURFACE WATER			
37	Design surface water management systems to separate leachate and liquids from processing from clean surface water runoff. (EASR – Section 11.1 and Volume IV)	Prior to operations	Completed
38	Divert clean runoff to swales, ditches and ponds. (EASR – Section 11.1 and Volume IV)	Construction and operations	Not Yet Started
39	Design ditch systems to convey design storm flows. (EASR – Section 11.1 and Volume IV)	Prior to operations	Completed
40	Control post-development discharge flows to match pre-development conditions as close as possible. (EASR – Section 11.1 and Volume IV)	Prior to and during operations	In Progress
41	Enhanced sediment removal in SWM system design. (EASR – Section 11.1 and Volume IV)	Prior to and during operations	In Progress
42	Sedimentation and erosion control measures. (EASR – Section 11.1 and Volume IV)	Construction, prior to and during operations	In Progress
43	Design and construct the component liners and leachate / liquid collection systems to safeguard surface water resources. (EASR – Section 11.1 and Volume III)	Prior to operations and construction	In Progress

Reference Number	Commitment (Location of Where the Commitment was Made in the EA Document Package)	Project Phase	Status
44	Implementation of a sediment and erosion control plan during construction and operations. (EASR – Section 11.1 and Volume IV)	Prior to operations, construction and operations	In Progress
45	Re-vegetate final landfill cover. (EASR – Section 11.1 and Volume IV)	Operations and post-closure	Not Yet Started
46	Provide monitoring and maintenance of stormwater ponds; provide valve(s) on ponds, where necessary depending on ongoing water quality monitoring, to be able to batch-discharge water from the ponds. (EASR – Section 11.1 and Volume IV)	Operations and post-closure	Not Yet Started
47	Provide monitoring and maintenance of leachate/liquid collection systems. (EASR – Section 11.1 and Volume IV)	Operations and post-closure	Not Yet Started
48	Use best management practices for erosion control until vegetation cover is established. (EASR – Section 11.1 and Volume IV)	Construction, operations and post-closure	Not Yet Started
49	Manage surface water on-Site; control off-Site stormwater discharge. (EASR – Section 11.1 and Volume IV)	Operations and post-closure	Not Yet Started
50	Operate, store and maintain (e.g., re-fuel, lubricate) all equipment and associated materials in an area away from surface water features in a manner that minimizes the potential for the entry of any deleterious substance into water bodies. (EASR – Section 11.1 and Volume IV)	Operations	Not Yet Started
51	Inspect construction and operating equipment regularly and repair promptly if found to be leaking. (EASR – Section 11.1 and Volume IV)	Construction and operations	Not Yet Started
52	Develop a spill response plan. (EASR – Section 11.1 and Volume IV)	Prior to construction and operations	Completed, Submitted with ECA application
53	Develop a Sediment and Erosion Control Plan as part of the City of Ottawa Site Plan Approval Process, for the EPA application and in support of permit applications to the SNC. (Volume II, Appendix K)	Prior to construction	In Progress. Completed for ECA application; permit application to SNC not yet started

Reference Number	Commitment (Location of Where the Commitment was Made in the EA Document Package)	Project Phase	Status
BIOLOGY			
54	Maintain existing perimeter vegetative buffers where possible. (EASR – Section 11.1 and TSD #4)	Prior to construction and operations	Not Yet Started
55	Remove vegetative cover progressively in sequence with Site development. (EASR – Section 11.1 and TSD #4)	Construction and operations	Not Yet Started
56	Stabilize and re-vegetate (or use other materials appropriate to Site conditions) areas of soil disturbed/exposed during construction. (EASR – Section 11.1 and TSD #4)	Construction, operations and post-closure	Not Yet Started
57	To the extent practical, limit the extent of disturbed areas and soil stockpiles, control their orientation (with respect to prevailing wind directions) and for piles to be left in place for a prolonged period of time seed to establish vegetation. (EASR – Section 11.1 and TSD #4)	Construction and operations	Not Yet Started
58	Schedule construction activities to minimize area and duration of soil exposure, to the extent practical. (EASR – Section 11.1 and TSD #4)	Construction and operations	Not Yet Started
59	Ongoing review of condition of revegetation and maintenance. (EASR – Section 11.1 and TSD #4)	Operations and post-closure	Not Yet Started
60	Apply best management practices in applying chemical dust suppressants, fertilizers, pesticides and herbicides, and minimize their use to the extent possible. (EASR – Section 11.1 and TSD #4)	Construction, operations and post-closure	Not Yet Started
61	Conduct all vegetation clearing activities outside the breeding bird season. (EASR – Section 11.1 and TSD #4)	Construction and operations	Not Yet Started
62	Prepare a worker awareness program to avoid harm to milksnake (a species of concern), if they are in the Site-vicinity. (EASR – Section 11.1 and TSD #4)	Construction and operations	Not Yet Started

Reference Number	Commitment (Location of Where the Commitment was Made in the EA Document Package)	Project Phase	Status
63	Manage waste effectively to avoid attracting nuisance wildlife and pests, control the nuisance wildlife populations as permitted and required, and conduct periodic inspections to monitor effectiveness of the pest control. (EASR – Section 11.1 and TSD #4)	Construction and operations	Not Yet Started
64	Review significant wildlife habitat (SWH) with the City of Ottawa during its planning and permitting process. (Volume II, Appendix K)	Prior to construction	Completed
65	Obtain authorization from the MNRF under the Endangered Species Act prior to submitting the planning application to the City of Ottawa as a result of barn swallow nests in the northeastern corner of the Site. (Volume II, Appendix K)	Prior to construction	Completed
66	No vegetation clearing between April 15 and August 15 unless a qualified biologist has checked for nests first. (Volume II, Appendix K)	Construction	Not Yet Started
AA	If Snapping Turtles are encountered they will only be trapped pursuant to a license, as required under the provincial Fish and Wildlife Conservation Act. (response to MNRF comment, 10Dec2015)	Construction and operations	Not Yet Started
BB	Any applicable requirements of the Ontario Invasive Species Act (2015) will be addressed in the development of the Site. (response to MNRF comment, 10Dec2015)	Construction and operations	Not Yet Started
CC	Prior to any fish salvage and relocation, a scientific collection permit will be obtained from the MNRF. (response to MNRF comment, 10Dec2015)	Prior to construction and operation	Completed

Reference Number	Commitment (Location of Where the Commitment was Made in the EA Document Package)	Project Phase	Status
LAND USE & SOCIO-ECONOMIC AND AGRICULTURE			
67	Maintain appropriate buffer between proposed on-Site activities and off-Site land uses. (EASR – Section 11.1 and TSD #5)	Construction and operations	Complete; buffer widths in detailed site design as proposed in EA
68	Control off-Site nuisance emissions, i.e., air, odour, dust in accordance with MECP standards. (EASR – Section 11.1 and TSD #3)	Construction and operations	Not Yet Started
69	Maintain perimeter vegetative buffers where possible; construct screening features where there is not already a significant stand of trees. (EASR – Section 11.1 and TSD #5)	Construction and operations	Not Yet Started
70	Provide Property Value Protection Plan. (EASR – Section 11.1 and EASR Section 15.0)	Construction and operations	In Progress
71	Provide Community Benefits - an annual per tonne royalty of \$0.47 has been offered to a local community association, to be administered by a new community based group. There has however been no response to this offer.	Operations	Not Yet Started
72	Purchase goods and services locally where reasonably possible. (EASR – Section 11.1 and TSD #5)	Construction and operations	In Progress
73	Minimize on-Site generation and accumulation of litter. (EASR – Section 11.1, TSD #5 and Volume IV)	Construction and operations	Not Yet Started
74	Use litter fencing to control windborne trash from leaving Site. (EASR – Section 11.1, TSD#5 and Volume IV)	Operations	Not Yet Started
75	Regularly clean up litter both on-Site and in the Site-vicinity. (EASR – Section 11.1, TSD #5 and Volume IV)	Operations	Not Yet Started
76	Establish procedure to register and address complaints. (EASR – Section 11.1 and TSD #5)	Prior to construction and operations	Completed, Submitted as part of the ECA application
77	Use best efforts to establish a community liaison committee. (EASR – Section 11.1 and EASR Section 15.0)	Prior to operations	CLC established

Reference Number	Commitment (Location of Where the Commitment was Made in the EA Document Package)	Project Phase	Status
CULTURE AND HERITAGE RESOURCES			
78	Should any archaeological resources be discovered, cease all alteration of the Site immediately and engage a licensed consultant archaeologist to carry out archaeological fieldwork. (EASR – Section 11.1 and TSD #6)	Construction and operations	Not Yet Started
79	Should any human remains be discovered, the police or coroner and the Registrar of Cemeteries at the Ministry of Consumer Services must be notified. (EASR – Section 11.1 and TSD #6)	Construction and operations	Not Yet Started
80	If during the process of development any archaeological resources or human remains of potential Aboriginal interest are encountered, the Algonquins of Ontario Consultation Office will be contacted. (EASR – Section 11.1)	Construction and operations	Not Yet Started
TRAFFIC			
81	Provide required intersection improvements at the Site access location off Boundary Road (left turn lane into the Site). (EASR – Section 11.1 and TSD #9)	Prior to operations	In Progress; Design complete and approved by City
82	Provide on-Site queuing area of sufficient capacity to avoid truck queuing on Boundary Road. (EASR – Section 11.1, TSD #9 and Volume IV)	Prior to operations	In Progress; Design complete and approved by City

Reference Number	Commitment (Location of Where the Commitment was Made in the EA Document Package)	Project Phase	Status
COMMITMENTS MADE DURING DEVELOPMENT OF THE TERMS OF REFERENCE			
C ¹	Taggart Miller commit to provide facilities and capacity for recovery of resources and diversion of materials from disposal for wastes that are generated by the IC&I and C&D sectors upon opening of the operation of the CRRRC. Both the diversion and disposal components will be implemented at a scale appropriate for the level of business that might reasonably be expected during the initial period of Site operation. The facilities will be scalable, and their capacity will be increased over time in order to respond efficiently to changing market conditions and to any new government regulations mandating increased IC&I diversion. (Section 12.1 in the TOR)	Prior to and during operations	In Progress
D	Taggart Miller will carry out a cumulative effects assessment as a component of the EA. (Section 12.1 in the TOR)	During EA	Completed
E	The draft EA will be made available for public review and comment before the final EA is submitted. A 7 week comment period is contemplated. (Section 12.1 in the TOR and letter from Taggart Miller to MOECC dated November 16, 2012)	During EA	Completed
F	If the Boundary Road Site is identified as preferred, Taggart Miller will continue to interact with local community associations. (Section 9.3 in the TOR)	During EA	Completed
G	All public consultation sessions will be hosted in both English and French. (Section 9.3 in the TOR and Notice of Approval)	During EA	Completed
H	Special workshops will be held based on interest indicated from stakeholders. (Section 9.3 in the TOR, Notice of Approval and letter from Taggart Miller to MOECC dated November 16, 2012)	During EA	Completed

Reference Number	Commitment (Location of Where the Commitment was Made in the EA Document Package)	Project Phase	Status
I	Open House #3 will be presented to both communities where the two sites being considered are located. (Section 9.3 in the TOR, Notice of Approval and letter from Taggart Miller to MOECC dated November 16, 2012)	During EA	Completed
J	Taggart Miller will provide draft materials at key EA milestones on the CRRRC website. (Section 9.3 in the TOR)	During EA	Completed
K	Following approval of TOR Taggart Miller will contact the identified Aboriginal communities and invite discussions on the work plans and EA process to ensure that Aboriginal community concerns and input are received and incorporated. (Section 9.3.1 in the TOR)	During EA	Completed
L	Taggart Miller commit to develop a conceptual monitoring framework during preparation of the EA including compliance monitoring and effects monitoring. (Section 12.2 in the TOR)	During EA	Completed
M	Taggart Miller will refine the purpose statement, if required, during the EA. (Section 3.0 of the TOR and letter from Taggart Miller to MOECC dated November 16, 2012)	During EA	Completed
N	Taggart Miller will provide the draft and final main environmental assessment report in both French and English. (Section 9.3 of the TOR and Letter from Taggart Miller to MOECC dated November 16, 2012)	During EA	Completed
O	Taggart Miller commit to assess potential effects on the Mer Bleue and include the findings in the EA report, if the Boundary Road Site is selected as preferred. (Section 8.3.3 of the TOR and Letter from Taggart Miller to MOECC dated November 16, 2012)	During EA	Completed

Notes: ¹ Commitments A and B that were made during the development of Terms of Reference are synonymous with commitments 70 and 71 that were made during the EA.

APPENDIX A

Complaint Protocol



COMPLAINTS PROTOCOL

The following formal complaint reporting procedure will be employed at the CRRRC. When a complaint is received, a complaint report will be completed, which includes the following information:

- Date and time of complaint
- Nature of complaint
- Name and telephone number of complainant
- Employee receiving complaint
- Details and circumstances of complaint
- Corrective action taken or planned (as applicable)
- Follow-up with complainant

Where the complaint relates to an incident or circumstance that is reportable to the Ministry of Environment and Climate Change, it will be reported to the Spills Action Centre and/or the Ottawa District Office as applicable. The Site Community Liaison Committee (CLC) will be advised of all complaints and resolution of same. Ottawa Public Health will be informed when complaints regarding significant noise, odour and air quality are received. The City of Ottawa General Manager of Environmental Services and the east end Councillors or their offices will be informed of all complaints received regarding odour, litter, noise and traffic within 24 hours



golder.com