

**Township of Macdonald, Meredith
and Aberdeen Additional
Landfill Environmental Screening Report - 2021**



Consultant



**Notice of Completion: February 10, 2021
End of Question Period: April 11, 2021**

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1. INTRODUCTION

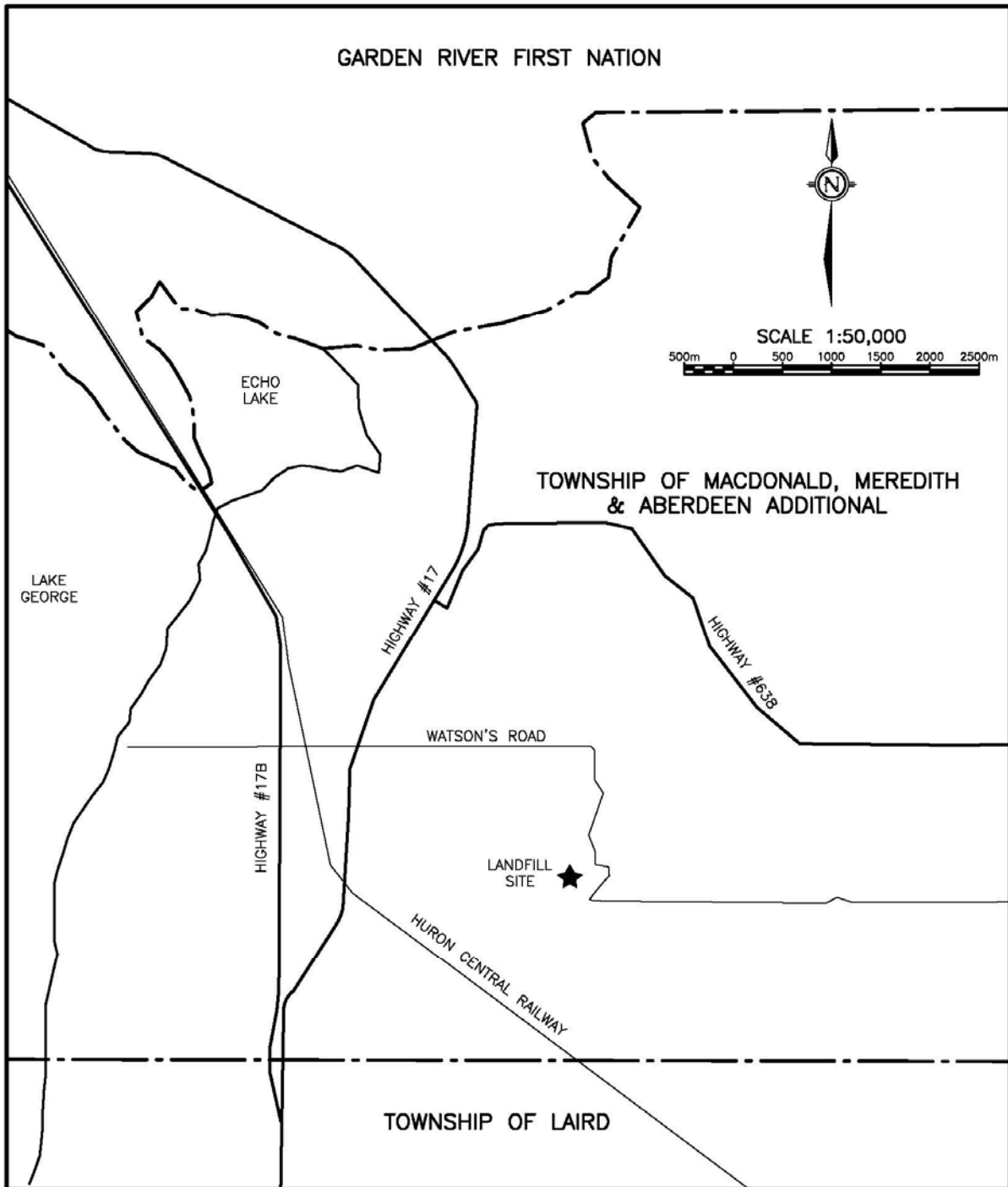
Tulloch Engineering Inc. has been retained by the Township of Macdonald, Meredith & Aberdeen Additional to proceed with an Environmental Screening Process. This Environmental Screening Process is to expand the service area to allow the landfill to accept non-hazardous contaminated soil to be used for daily and interim cover in accordance with Ontario Regulation (O.Reg). 101/07 s.18. Completion of an Environmental Screening Process is required to obtain approval for this change in accordance with O.Reg. 101/07 s.10, Waste Management Projects, under the Environmental Assessment Act (EAA). The Environmental Screening Process identifies advantages, disadvantages, and potential impacts that the undertaking might have on the surrounding environment. Figure 1: Details of the Environmental Screening Process from the *Guide to Environmental Assessment Requirements for Waste Management Projects* has been attached for reference as Appendix A. This guide outlines the steps required to complete the Environmental Screening Process.

An important part of the Environmental Screening Process involves consultation with the general public, First Nation communities, and government agencies that could be affected by the change to the landfill service area. Comments are encouraged to identify any issues or concerns. The non-hazardous contaminated soil received at the site will only be used to provide daily and interim cover for the landfill.

1.1 Background

The landfill is located at 503 Watson Road in the municipal township of Macdonald, Meredith, & Aberdeen Additional in the Algoma District, approximately 25km east of Sault Ste Marie, Ontario, as shown on Figure 1. The current Environmental Compliance Approval No A561302 allows receiving waste from the municipal Township of Macdonald, Meredith and Aberdeen Additional and the unincorporated Township of Kehoe.

The purpose of expanding the geographic service area to the entire district of Algoma, is to receive non-hazardous contaminated soil that will be used for interim and daily cover. Tipping fees will be collected by the Municipality for receiving this non-hazardous contaminated soil, typically soils with hydrocarbons from the cleanup of gas stations. This will provide a twofold benefit in that tipping fees will be collected by the Municipality and the cost to import soil for cover purposes will be reduced. The intent is to only receive soil when it is needed for cover so that the approved landfill capacity of 264,000 cu. m. will not be impacted. The approved landfill capacity includes waste and cover. Cover materials typically represent 20% of the overall volume of waste and cover placed. There will be no change in the service area that domestic waste will be received from as it will continue to only be received from the municipal Township of Macdonald, Meredith and Aberdeen Additional and the unincorporated Township of Kehoe. Therefore, the change in geographic area will not affect the year at which the landfill will reach its approved capacity.



LOCATION SKETCH OF LANDFILL
MACDONALD, MEREDITH & ABERDEEN ADDITIONAL

Figure 1 - Location Sketch

The Municipality currently imports soil to be used for interim and daily cover. Soil is imported from various sources including ditching within the Municipality, local gravel pits, and construction projects in the surrounding area. The Municipality typically stockpiles the imported soil that has been brought to the landfill for future use. The Municipality currently accepts and will continue to accept non-hazardous contaminated soils consisting of sands and gravels. Materials consisting of sands and gravels are better suited for cover material as they are easier than silts and clays to spread and they are also less susceptible to freeze if stored in a stockpile.

The landfill is currently approved to receive the following waste types as outlined in Condition 7 Landfill Design - Clause (1) of the ECA A561302.

- (a) Only municipal waste as defined under Reg. 347 being solid non-hazardous shall be accepted at the site for disposal.
- (b) Notwithstanding Condition 7(1)(a), non-hazardous contaminated soil may be accepted at the Site for disposal.

The landfill is owned and operated by the Corporation of the Township of Macdonald, Meredith and Aberdeen Additional. It operated under the Provisional Certificate of Approval (C of A) No. A561302 issued by the Ministry of the Environment (MOE) on March 17, 1980. The original C of A was revoked on February 23, 2015 and replaced with amended Environmental Compliance Approval A561302. The ECA amendment was initiated by the MOE to bring the landfill to current operation and monitoring standards. A copy of the amended Environmental Compliance Approval A561302 is included in Appendix B.

1.2 Land Use

The property has an Official Plan designation as Rural in the Township of Macdonald Meredith and Aberdeen Additional Official Plan. All adjacent lands are designated as Rural. The Zoning Bylaw has a designation of M2 - Industrial 2 Zone for the location of the landfill on the subject property. The remainder of the subject property and all adjoining properties have a Rural zoning designation. The Industrial 2 Zone designation allows for a non-residential use as follows:

- a) Waste Disposal Site
- b) Waste Recycling Depot

There are no changes required for the Official Plan or Zoning Bylaw designation for the landfill site property. The landfill operations will take place within the designated 27 ha (66.7 acres) of the approved landfill footprint.

1.3 Physical Site Setting

The landfill is located west of Watson Road in a cleared area surrounded by trees and vegetation within the southeast quadrant of the property. The northeast quadrant of the landfill site in the area designated for the Contaminant Attenuation Zone (CAZ) is an open field which continues to be used for agricultural purposes. The remainder of the property which includes the southwest and northwest quadrants is covered with trees and is hilly with bedrock outcrops.

A small watercourse originates within the property at the midpoint of the property and flows northerly crossing Watson Road, Highway 17 and ultimately empties into Lake George. Surface water flow is varied due to the hilly terrain but the majority of the runoff from the landfill site would be collected into the watercourse although other runoff flows by surface flow off the property.

Access to the landfill is from Watson Road located on the east side of the property. Watson Road can be accessed from Highway 17 Four Lane to the west and from municipal roads to the east including Fords Road, Cemetery Road and McCarrel Lake Road.

1.4 Project Team

The following Project Team are involved in carrying out this Environmental Screening Process:

Proponent: The Township of Macdonald, Meredith and Aberdeen Additional

208 Church Street, P.O. Box 10
Echo Bay, ON P0S 1C0
Phone: +1-705-248-2441
Fax: +1-705-248-3091
E-mail: lduguay@onlink.net

Consulting Engineer: Tulloch Engineering Inc.

200 Main Street, P.O. Box 579
Thessalon, ON P0R 1L0
Phone: +1-705-842-3372
Toll-Free: +1-800-797-2997
E-mail: thessalon@tulloch.ca

2. ENVIRONMENTAL SCREENING PROCESS

This project is exempt from the Environmental Assessment (EA) process but is required to undergo the self assessment of the Environmental Screening Process. The MECP has provided a *Guide to Environmental Assessment Requirements for Waste Management Projects*. Part B of this guide outlines the process required to complete the Environmental Screening Process. The 14-step process is presented as the flow chart included as Appendix A.

The requirement to follow the Environmental Screening Process is outlined in a letter from the MECP included as Appendix C.

2.1 Notice of Commencement

A Notice of Commencement of Environmental Screening letter was distributed to all residents within the municipal township of Macdonald Meredith and Aberdeen Additional on September 17, 2020. The notice is included as Appendix D.

3. PROBLEM/OPPORTUNITY STATEMENT

The Township of Macdonald, Meredith, and Aberdeen Additional would like to extend the geographic limits for which their landfill receives non-hazardous contaminated soil. These are typically soils with hydrocarbons from the cleanup of gas stations, to be used as interim and daily cover material on site. This will benefit the Township as they will be able to collect tipping fees for this service while also reducing the need to import soil for cover material.

Currently, the landfill receives domestic waste from the municipal Township of Macdonald, Meredith and Aberdeen Additional and the unincorporated Township of Kehoe. The intent is to only add receiving non-hazardous contaminated soil from outside the existing service area, that can be used for daily and interim cover. There will be no change in the approved capacity of the landfill as domestic waste will continue to only be received from the municipal Township of Macdonald, Meredith and Aberdeen Additional and the unincorporated Township of Kehoe.

4. ENVIRONMENTAL SCREENING CHECKLIST

Projects subject to the Environmental Screening Process must apply the screening criteria checklist provided in the *Guide* to identify any environmental effects. The purpose of this checklist is to identify potential environmental effects and provide any necessary mitigation measures. Where “Yes” is answered, further studies and assessments may be needed as indicated in Table 1 on pages 5-7.

Table 1- Environmental Screening Checklist

Criterion Might the project...		Yes		Comments/Mitigation Measures
		Yes	No	
1. Surface & Ground Water				
1	cause negative effects on surface water quality, quantities, or flow?		✓	
2	cause negative effects on ground water quality, quantity, or movement?		✓	
3	cause significant sedimentation or soil erosion or shoreline or riverbank erosion on or off site?		✓	
4	cause negative effects on surface or ground water from accidental spills or releases (e.g., leachate) to the environment?		✓	
2. Land				
1	cause negative effects on residential, commercial, institutional, or other sensitive land uses within 500 metres from the site boundary?		✓	
2	not be consistent with the Provincial Policy Statement, provincial land use or resource management plans?		✓	

3	be inconsistent with municipal land use policies, plans, zoning by-laws (including municipal setbacks)?		✓	
4	use lands not zoned as industrial, heavy industrial or waste disposal?		✓	
5	use hazard lands or unstable lands subject to erosion?		✓	
6	cause negative effects related to the remediation of contaminated land?		✓	
3. Air & Noise				
1	cause negative effects on air quality due to emissions?		✓	
2	cause negative effects from the emission of greenhouse gases?		✓	
3	cause negative effects from the emission of dust or odour?		✓	
4	cause negative effects from the emission of noise?		✓	
5	cause light pollution from trucks or other operational activities at the site?		✓	
4. Natural Environment				
1	cause negative effects on rare (vulnerable), threatened or endangered species of flora or fauna or their habitat?		✓	
2	cause negative effects on protected natural areas such as, ANSIs, ESAs or other significant natural areas?		✓	
3	cause negative effects on designated wetlands?		✓	
4	cause negative effects on wildlife habitat, populations, corridors, or movement?		✓	
5	cause negative effects on fish or their habitat, spawning, movement or environmental conditions (e.g., water, temperature, turbidity, etc.)?		✓	
6	causes negative effects on locally important or valued ecosystems or vegetation?		✓	
7	increase bird hazards within the area that could impact surrounding land uses (e.g., airports)?		✓	
5. Resources				
1	result in practices inconsistent with waste studies and/or waste diversion targets (e.g., result in final disposal of materials subject to diversion programs)?		✓	
2	result in generation of energy that cannot be captured and utilized?		✓	
3	be located a distance from required infrastructure (such as availability to customers, markets and other factors)?		✓	

4	cause negative effects on the use of Canada Land Inventory Class 1-3, specialty crop or locally significant agricultural lands?		✓	
5	cause negative effects on existing agricultural production?		✓	
6. Socio-economic				
1	cause negative effects on neighbourhood or community character?		✓	
2	result in aesthetics impacts (e.g., visual and litter impacts)?		✓	
3	cause negative effects on local businesses, institutions, or public facilities?		✓	
4	cause negative effects on recreation, cottaging, or tourism?		✓	
5	cause negative effects related to increases in the demands on community services and infrastructure?		✓	
6	cause negative effects on the economic base of a municipality or community?		✓	
7	cause negative effects on local employment and labour supply?		✓	
8	cause negative effects related to traffic?		✓	
9	be located within 8 km of an aerodrome/airport reference point?	✓		No change
10	interfere with flight paths due to the construction of facilities with height (i.e., stacks)?		✓	
11	cause negative effects on public health and safety?		✓	
7. Heritage and Culture				
1	cause negative effects on heritage buildings, structures or sites, archeological sites or areas of archeological importance, or cultural heritage landscapes?		✓	
2	cause negative effects on scenic or aesthetically pleasing landscapes or views?		✓	
8. Aboriginal				
1	cause negative effects on land, resources, traditional activities, or other interests of Aboriginal communities?		✓	
9. Other				
1	result in the creation of non-hazardous waste materials requiring disposal?		✓	
2	result in the creation of hazardous waste materials requiring disposal?		✓	
3	cause any other negative environmental effects not covered by the criteria outlined above?		✓	

5. POTENTIAL ENVIRONMENTAL EFFECTS, CONCERNS AND/OR ISSUES

The screening checklist showed that the proposed geographic expansion will not impose any changes to the final site capacity or footprint, so no construction or physical changes will be required on site. As such, there are no new environmental concerns and no mitigation measures required.

The current operations and procedures at the landfill do not have a negative effect on the Bar River airport. The proposed change in service area to receive cover material from the entire district of Algoma, does not alter the final approved footprint of the landfill, does not alter the daily operations, and does not include the addition of any structures. There will continue to be no negative effects from the landfill on the Bar River airport.

6. STUDIES/ASSESSMENTS

No studies or assessments are needed.

7. PRE-CONSULTATION

Tulloch Engineering engaged in consultation with interested and affected parties early in the preliminary screening process to provide opportunities to receive valuable community feedback on the proposal. The following consultation activities were undertaken up to this point, in accordance with the *Guide*:

- Letter to adjacent landowners – August 12, 2020
- Notice of Commencement – September 17, 2020
- Letter to affected parties, including Indigenous Communities and Government Agencies– November 16, 2020

The letters and notice can be found in Appendix D.

For the consultation purposes with the First Nation Communities, the MECP provided a list of First Nation communities in the area who were identified as being potentially affected by the proposal. This letter had to be received before the letter to affected parties could be distributed. The letter correspondence can be found in Appendix E.

A copy of the letter was distributed to the following parties:

- Batchewana First Nation
- Garden River First Nation
- Thessalon First Nation
- MNO Historic Sault Ste. Marie
- Métis Nation of Ontario
- Ministry of Natural Resources and Forestry

- Ministry of Environment, Conservation and Parks, Sudbury District Office
- Ministry of Environment, Conservation and Parks, Sault Ste Marie Area Office
- Ministry of Transportation, Maintenance - Sault Ste. Marie Area Office
- Heritage, Sport, Tourism and Culture Industries, Sault Ste Marie Office
- Township of Laird
- EA Coordinator – Northern Region
- Agriculture, Food and Rural Affairs, Northern Ontario Regional Office
- Municipal Affairs and Housing, Community Planning & Development

7.1 Comments Received

The letter to affected parties was distributed on November 16, 2020 and was followed by a thirty (30) day comment/question period ending on December 18, 2020. Two separate replies were submitted in response to the letter sent to affected parties. No concerns were raised. Comments have been included in Appendix F.

8. IMPACT MANAGEMENT

No mitigation measures are necessary as a result of the proposed change beyond the existing operation management procedures set in place for the landfill. The Design and Operations Report completed in February 2016 has been attached in Appendix G for reference to existing operating procedures.

Any contaminated soil received at the site will be via Trans Canada Highway 17 and Watson Road. Trans Canada Highway 17 is a provincial King's Highway used as the primary transportation route within the Province of Ontario. All vehicles transporting the waste will be approved haulers in accordance with the *Non-Hazardous Waste Transportation Systems User Guide for Environmental Activity and Sector Registry*.

The *Management of Excess Soil – a Guide for Best Management Practices* provides the recommended protocol for receiving excavated soil. All non-hazardous contaminated soil will need to be inspected and analyzed prior to being received at the landfill to make sure it meets the requirements for a non-hazardous contaminated soil.

It is recommended that waste management facilities retain the services of a Qualified Person (QP) to perform various tasks and duties. The Guide provides the following definition for a QP:

“A QP who is retained should be someone who can exercise professional judgment based on his or her experience in order to advise on appropriate reuse options for the excavated soil or excess soil, and make these decisions based on appropriate analysis and characterization of the soil. The QP should use a risk-based approach and take into consideration the effects of loading associated with the concentrations of individual contaminants in soil and the impacts on the pre-existing, ambient conditions at the site.”

The following protocol will be followed when non-hazardous contaminated soil is received on site:

- Loads received at the landfill will be subject to spot inspections upon arrival, by the site QP.
- Documentation will be required for each incoming load confirming that the soil is non-hazardous contaminated soil.
- Visual and olfactory inspections will be conducted of all incoming loads to screen for odour, visible staining, or debris.
- Contingency measures will be put in place for load rejections.
- Documentation will be written and stored to track each incoming load of non-hazardous contaminated soil including records of:
 - date and time of arrival of the load to the landfill,
 - name and location of the Source Site,
 - volume of soil received,
 - spot checks performed by site QP,
 - documentation from the Source Site, including soil analytical results,
 - rejections of any loads of soil due to visual inspection or review of analytical results, and
 - documentation to the Source Site owner/operator and QP, once excess soil is received, confirming the soil was received and the type, quality and quantity was appropriate.
- audit sampling protocols consisting of:
 - sampling protocols (designed by a QP) sufficient to produce results that would be representative of the volume of excess soil that is being received from each Source Site; and a
 - contingency plan to identify actions that are to be taken in the event that audit sampling or other information identifies concerns with soil quality from a Source Site.
- Documentation that identifies the location of soil from each source site, such that it can be assessed if required.

Currently, when the Municipality receives a request to receive non-hazardous contaminated soil the current protocol is to send a letter of request to Municipal Council to receive the soil. This letter must provide details on the quantity and quality of the soil, the source site location, timeframe for haulage and documentation from the analysis of the soil. Council, with input from the Road Superintendent, then decides whether they will receive the soil. If Council passes a resolution to receive the soil, an agreement document is written and signed. Payment must be received before any soil can be received at the landfill.

The Guide recommends that the soil must be tested by a laboratory with an internationally recognized accreditation body and in accordance with the international standard ISO/IEC 17025

One technique used to minimize the negative impacts from non-hazardous contaminated soil, is to use a process referred to as Landfarming. Landfarming is a bioremediation technique used to help volatile hydrocarbons in the soil dissipate over time. This is accomplished by spreading out the soil in thin uniform layers. In this particular situation, the non-hazardous contaminated soil will be spread out over waste as daily and interim cover material. Therefore, landfarming the material prior to using it as cover material would be unnecessary.

Using non-hazardous contaminated soil at the landfill is beneficial in many ways. It gives value to the waste soil, avoids the consumption and transport of imported fill for cover material, reduces the destruction of land, and may reduce the cost and impact on the environment from remediation and waste disposal.

9. CONSULTATION

No studies or assessments were required for this proposal so there was no updated information to be sent to affected parties and government agencies at this stage of the environmental screening process.

9.1 Notice of Completion

A Notice of Completion was posted on February 10, 2021. This Notice has been attached as Appendix H.

The Environmental Screening Report will be posted and available for a period of sixty (60) days from the date indicated on the Notice of Completion. Interested persons will be able to provide written comment on the proposal within 60 days from the date of the Notice. Comment should be directed to the Township at the following address:

The Township of Macdonald, Meredith, and Aberdeen Additional
208 Church Street, P.O. Box 10
Echo Bay, ON P0S 1C0
Phone: +1-705-248-2441
Fax: +1-705-248-3091
E-mail: lduguay@onlink.net
Attention: Lynne Duguay, Clerk Treasurer

9.2 Opportunity for Elevation Requests

If concerns arise regarding this project, which cannot be resolved in discussion with the Municipality, a person or party may bring their concerns to the Director of the MECP Environmental Assessment and Permissions Branch to request that the project be elevated. Request must be received by the Director at the address below within 60 calendar days of the Notice of Completion. If there is no request received by April 11, 2021, the Municipality will complete and submit the Statement of Completion.

Director, Environmental Assessment and Permissions Branch

Ministry of the Environment, Conservation, and Parks
2 St. Clair Ave West, Floor 12A
Toronto, ON
M4V 1L5
enviopermissions@ontario.ca

A copy of the written elevation request should also be sent to the Municipality and the Consulting Engineer.

The Township of Macdonald, Meredith, and Aberdeen Additional

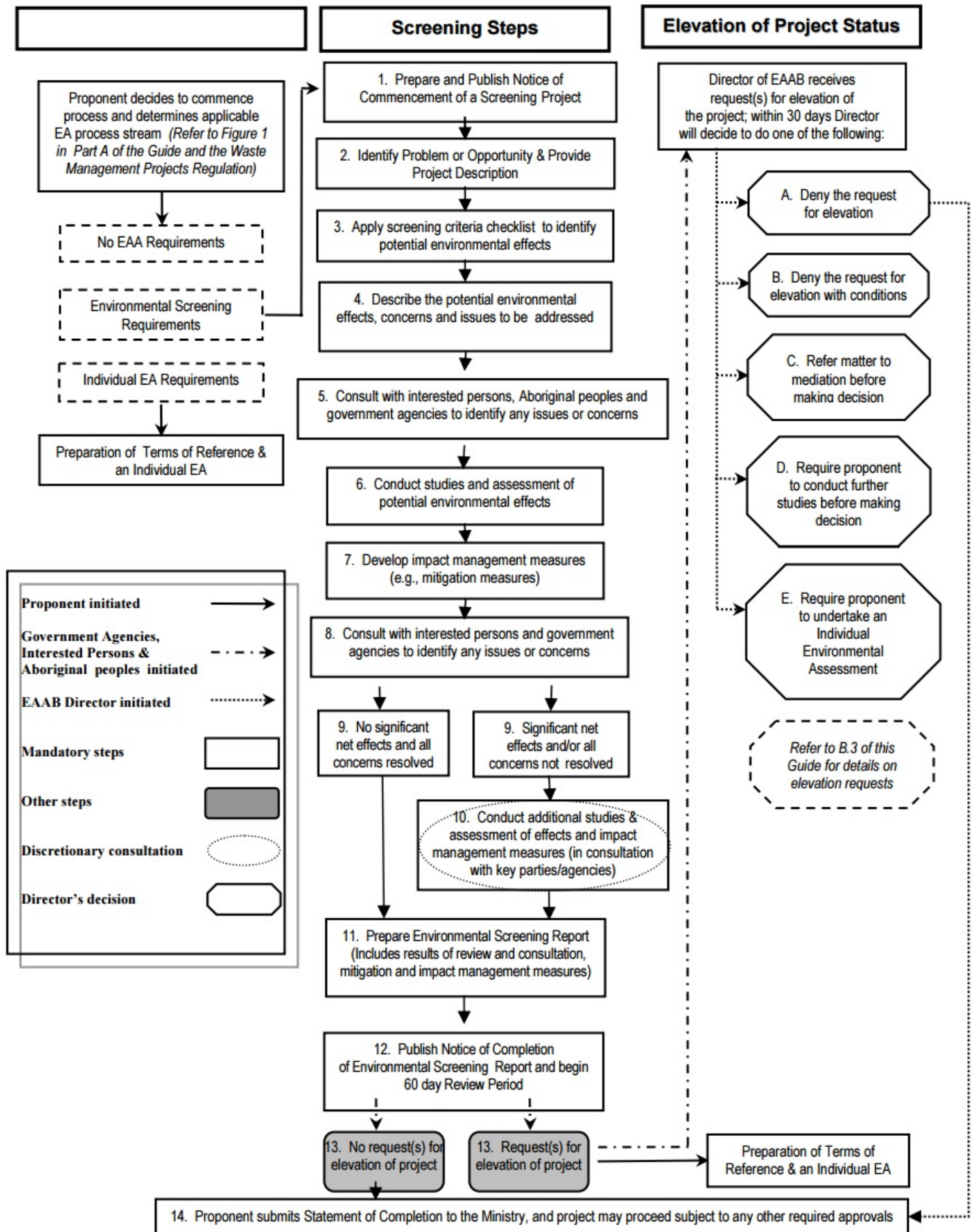
208 Church Street, P.O. Box 10
Echo Bay, ON P0S 1C0
Phone: +1-705-248-2441
Fax: +1-705-248-3091
E-mail: lduguay@onlink.net
Attention: Lynne Duguay, Clerk Treasurer

Tulloch Engineering Inc.

200 Main Street, P.O. Box 579
Thessalon, ON
P0R 1L0
Phone: +1-705-842-3372
E-mail: thessalon@tulloch.ca

Appendix A

Figure 1: Details of Environmental Screening Process - Flowchart



Proponent decides to commence process and determines applicable EA process stream (Refer to Figure 1 in Part A of the Guide and the *Waste Management Projects Regulation*)

Appendix B

**Amended Environmental Compliance Approval
No. A561302**

AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER A561302

Issue Date: February 23, 2015

The Corporation of the Township of Macdonald, Meredith and Aberdeen Additional
208 Church St
Echo Bay, Ontario
P0S 1C0

Site Location: MacDonalD, Meredith & Aberdeen Additional Landfill
Lot 10, 11, Concession Section 28
Macdonald, Meredith and Aberdeen Additional Township, District of Algoma
P0S 1C0

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

the use and operation of 27 hectare waste disposal/transfer site within a total site area of 63.3 hectares.

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

"Approval " means this Environmental Compliance Approval and any Schedules to it, including the application and supporting documentation listed in Schedule "A";

"Contaminating Life Span" means contaminating life span as defined in Ontario Regulation 232/98;

"Director" means any *Ministry* employee appointed in writing by the Minister pursuant to section 5 of the EPA as a Director for the purposes of Part II.1 of the *EPA*;

"District Manager" means the District Manager of the local district office of the *Ministry* in which the *Site* is geographically located;

"EPA " means *Environmental Protection Act* , R.S.O. 1990, c. E. 19, as amended;

"Ministry" means the Ontario Ministry of the Environment and Climate Change;

"NMA " means *Nutrient Management Act* , 2002, S.O. 2002, c. 4, as amended;

"Operator" means any person, other than the *Owner's* employees, authorized by the *Owner* as having

the charge, management or control of any aspect of the *Site* and includes its successors or assigns;

"*Owner*" means any person that is responsible for the establishment or operation of the *Site* being approved by this *Approval*, and includes the Corporation of the Township of Macdonald, Meredith and Aberdeen Additional and its successors and assigns;

"*OWRA* " means the *Ontario Water Resources Act* , R.S.O. 1990, c. O.40, as amended;

"*PA* " means the *Pesticides Act* , R.S.O. 1990, c. P-11, as amended;

"*Provincial Officer*" means any person designated in writing by the Minister as a provincial officer pursuant to Section 5 of the *OWRA*, Section 5 of the *EPA*, Section 17 of the *PA*, Section 4 of the *NMA*, or Section 8 of the *SDWA*;

"*Regional Director* " means the Regional Director of the local Regional Office of the *Ministry* in which the *Site* is located;

"*Regulation 347* " or "*Reg. 347* " means Regulation 347, R.R.O. 1990, made under the *EPA*, as amended;

"*SDWA*" means *Safe Drinking Water Act*, 2002, S.O. 2002, c. 32, as amended;

"*Site* " means the entire waste disposal site, including the buffer lands, and contaminant attenuation zone at Lot 10, 11, Concession Section 28, Macdonald, Meredith and Aberdeen Additional Township, District of Algoma; and

"*Trained Personnel*" means personnel knowledgeable in the following through instruction and/or practice:

- a. relevant waste management legislation, regulations and guidelines;
- b. major environmental concerns pertaining to the waste to be handled;
- c. occupational health and safety concerns pertaining to the processes and wastes to be handled;
- d. management procedures including the use and operation of equipment for the processes and wastes to be handled;
- e. emergency response procedures;
- f. specific written procedures for the control of nuisance conditions;
- g. specific written procedures for refusal of unacceptable waste loads; and
- h. the requirements of this *Approval*.

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. GENERAL

Compliance

- (1) The *Owner* and *Operator* shall ensure compliance with all the conditions of this *Approval* and shall ensure that any person authorized to carry out work on or operate any aspect of the *Site* is notified of this *Approval* and the conditions herein and shall take all reasonable measures to ensure any such person complies with the same.
- (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

- (3) Except as otherwise provided by this *Approval*, the *Site* shall be designed, developed, built, operated and maintained in accordance with the documentation listed in the attached Schedule "A".

Interpretation

- (4) Where there is a conflict between a provision of any document listed in Schedule "A" in this *Approval*, and the conditions of this *Approval*, the conditions in this *Approval* shall take precedence.
- (5) Where there is a conflict between the application and a provision in any document 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.
- (6) Where there is a conflict between any two documents listed in Schedule "A", the document bearing the most recent date shall take precedence.
- (7) 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.

Other Legal Obligations

- (8) The issuance of, and compliance with, this *Approval* does not:
- (a) relieve any person of any obligation to comply with any provision of any 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 require the *Owner* and *Operator* to furnish any further information related to compliance with this *Approval* .

Adverse Effect

- (9) The *Owner* and *Operator* shall take steps to minimize and ameliorate any adverse effect on the natural environment or impairment of water quality resulting from the *Site*, including such accelerated or additional monitoring as may be necessary to determine the nature and extent of the effect or impairment.
- (10) Despite an *Owner*, *Operator* or any other person fulfilling any obligations imposed by this *Approval* the person remains 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 to the natural environment or impairment of water quality.

Change of Ownership

- (11) 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:
- (a) the ownership of the *Site*;
 - (b) the *Operator* of the *Site*;
 - (c) the address of the *Owner* or *Operator*; and
 - (d) 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.
- (12) 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 sufficient financial assurance is deposited with the *Ministry* to ensure that these conditions will be carried out.
- (13) In the event of any change in ownership of the *Site*, other than change to a successor municipality, the *Owner* shall notify the successor of and provide the successor with a copy of this *Approval*, and the *Owner* shall provide a copy of the notification to the *District Manager* and the *Director*.

Registration on Title Requirement

- (14) Prior to dealing with the property in any way, the *Owner* shall provide a copy of this *Approval*

and any amendments, to any person who will acquire an interest in the property as a result of the dealing.

- (15) (a) Within one (1) year from the date of issuance of this *Approval*, the *Owner* shall submit to the *Director* a completed Certificate of Requirement which shall include:
- (i) a plan of survey prepared, signed and sealed by an Ontario Land Surveyor, which shows the area of the *Site* where waste has been or is to be deposited at the *Site*;
 - (ii) proof of ownership of the *Site*;
 - (iii) a letter signed by a member of the Law Society of Upper Canada or other qualified legal practitioner acceptable to the *Director*, verifying the legal description provided in the Certificate of Requirement;
 - (iv) the legal abstract of the property; and
 - (v) any supporting documents including a registerable description of the *Site*.
- (b) Within fifteen (15) calendar days of receiving a Certificate of Requirement authorized by the *Director*, the *Owner* shall:
- (i) register the Certificate of Requirement in the appropriate Land Registry Office on the title to the property; and
 - (ii) submit to the *Director* written verification that the Certificate of Requirement has been registered on title.

Inspections by the Ministry

- (16) No person shall hinder or obstruct a *Provincial Officer* from carrying out any and all inspections authorized by the *OWRA*, the *EPA*, the *PA*, the *SDWA* or the *NMA*, of any place to which this *Approval* relates, and without limiting the foregoing:
- (a) 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;
 - (b) to have access to, inspect, and copy any records required to be kept by the conditions of this *Approval*;
 - (c) to inspect the *Site*, related equipment and appurtenances;
 - (d) to inspect the practices, procedures, or operations required by the conditions of this *Approval*; and
 - (e) to sample and monitor for the purposes of assessing compliance with the terms and conditions of this *Approval* or the *EPA*, the *OWRA*, the *PA*, the *SDWA* or the *NMA*.

Information and Record Retention

- (17) (a) Except as authorized in writing by the *Director*, all records required by this *ECA* shall be retained at the *Site* for a minimum of two (2) years from their date of creation.
- (b) The *Owner* shall retain all documentation listed in Schedule "A" for as long as this *ECA* is valid.
- (c) All monthly summary reports are to be kept at the *Site* until they are included in the

Annual Report.

- (d) The *Owner* shall retain employee training records as long as the employee is working at the *Site*.
 - (e) The *Owner* shall make all of the above documents available for inspection upon request of *Ministry* staff.
- (18) 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 other legal requirement, 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 term or condition of this *Approval* or any statute, regulation or other legal requirement; or
 - (b) acceptance by the *Ministry* of the information's completeness or accuracy.
- (19) The *Owner* shall ensure that a copy of this *Approval*, in its entirety and including all its Notices of Amendment, and documentation listed in Schedule "A", are retained at the *Site* at all times.
- (20) 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.

2. SITE OPERATION

Operation

- (1) The *Site* shall be operated and maintained at all times including management and disposal of all waste, in accordance with the *EPA, Regulation 347*, and the conditions of this *Approval*. At no time shall the discharge of a contaminant that causes or is likely to cause an adverse effect be permitted.

Signs

- (2) A sign shall be installed and maintained at the main entrance/exit to the *Site* on which is legibly displayed the following information:
- (a) the name of the *Site* and *Owner*;
 - (b) the number of the *Approval*;
 - (c) the name of the *Operator*;
 - (d) the normal hours of operation;
 - (e) the allowable and prohibited waste types;
 - (f) the telephone number to which complaints may be directed;
 - (g) a warning against unauthorized access;
 - (h) a twenty-four (24) hour emergency telephone number (if different from above); and
 - (i) a warning against dumping outside the *Site*.

- (3) The *Owner* shall install and maintain signs to direct vehicles to working face and recycling areas.
- (4) The *Owner* shall provide signs at recycling area informing users what materials are acceptable and directing users to appropriate storage areas.

Vermin, Vectors, Dust, Litter, Odour, Noise and Traffic

- (5) The *Site* shall be operated and maintained such that the vermin, vectors, dust, litter, odour, noise and traffic do not create a nuisance.

Burning Waste Prohibited

- (6) (a) Burning of waste at the *Site* is prohibited.
- (b) Notwithstanding Condition 2. (6) (a) above, burning of segregated, clean wood and brush at the landfill may be carried out in strict compliance with the Ministry of the Environment Document titled "Guideline C-7, Burning at Landfill Sites" dated April 1994.

Site Access

- (7) Waste shall only be accepted during the following time periods:

Summer (April 1 - September 30)

Tuesday: 12 noon - 8 p.m.
Thursday: 12 noon - 5 p.m.
Saturday: 8 am - 5 p.m.

Winter (October 1 - March 31)

Tuesday: 12 noon - 5 p.m.
Thursday: 12 noon - 5 p.m.
Saturday: 9 am - 5 p.m.

- (8) On-site equipment used for daily site preparation and closing activities may be operated one (1) hour before and one (1) hour after the hours of operation approved by this *Approval*.
- (9) With the prior written approval from the *District Manager*, the time periods may be extended to accommodate seasonal or unusual quantities of waste.

Site Security

- (10) No waste shall be received, landfilled or removed from the *Site* unless a site supervisor or an attendant is present and supervises the operations during operating hours. The *Site* shall be closed when a site attendant is not present to supervise landfilling operations.

- (11) The *Site* shall be operated and maintained in a safe and secure manner. During non-operating hours, the *Site* entrance and exit gates shall be locked and the *Site* shall be secured against access by unauthorized persons.

3. EMPLOYEE TRAINING

- (1) A training plan for all employees that operate any aspect of the *Site* shall be developed and implemented by the Owner or the *Operator*. Only *Trained Personnel* shall operate any aspect of the *Site* or carry out any activity required under this *Approval* .

4. COMPLAINTS RESPONSE PROCEDURE

- (1) If at any time the *Owner* receives complaints regarding the operation of the *Site*, the *Owner* shall respond to these complaints according to the following procedure:
 - (a) The *Owner* shall record and number each complaint, either electronically or in a log book, and shall include the following information: the nature of the complaint, the name, address and the telephone number of the complainant if the complainant will provide this information and the time and date of the complaint;
 - (b) The *Owner*, upon notification of the complaint, shall initiate appropriate steps to determine possible causes of the complaint, proceed to take the necessary actions to eliminate the cause of the complaint and forward a formal reply to the complainant; and
 - (c) The *Owner* shall complete and retain on-site a report written within one (1) week of the complaint date, listing the actions taken to resolve the complaint and any recommendations for remedial measures, and managerial or operational changes to reasonably avoid the recurrence of similar incidents.

5. EMERGENCY RESPONSE

- (1) Any spills, fires or other emergency situations shall be forthwith reported directly to the *Ministry's* Spills Action Centre (1-800-268-6060) and shall be cleaned up immediately.
- (2) In addition, the *Owner* shall submit, to the *District Manager* a written report within three (3) business days of the emergency situation, outlining the nature of the incident, remedial measures taken, handling of waste generated as a result of the emergency situation and the measures taken to prevent future occurrences at the *Site*.
- (3) All wastes resulting from an emergency situation shall be managed and disposed of in accordance with *O.Reg. 347*.
- (4) All equipment and materials required to handle the emergency situations shall be:
 - (a) kept on hand at all times that waste landfilling and/or handling is undertaken at the *Site*; and
 - (b) adequately maintained and kept in good repair.

- (5) The *Owner* shall ensure that the emergency response personnel are familiar with the use of such equipment and its location(s).

6. INSPECTIONS, RECORD KEEPING AND REPORTING

Log Book

- (1) A log shall be maintained in written or electronic format and shall include the following information:
- (a) the type, date and quantity (volume or tonnes) of all waste and cover material received at the *Site*;
 - (b) the area of the *Site* in which waste disposal operations are taking place;
 - (c) a record of litter collection activities and the application of any dust suppressants;
 - (d) a record of inspections; and
 - (e) 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.
- (2) 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 to the *Ministry*, upon request.

Inspections and Log Book

- (3) 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 secure; that the operation of the *Site* is not causing any nuisances; that the operation of the *Site* is not causing any adverse effects on the environment and 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.
- (4) A record of the inspections shall be kept in a log book that includes:
- (a) the name and signature of person that conducted the inspection;
 - (b) the date and time of the inspection;
 - (c) the list of any deficiencies discovered;
 - (d) the recommendations for remedial action; and
 - (e) the date, time and description of actions taken.
- (5) A record shall be kept in the log book of all refusals of waste shipments, the reason(s) for refusal, and the origin of the waste, if known.

Annual Report

- (6) A written report on the development, operation and monitoring of the *Site*, shall be completed

annually (the "Annual Report"). The Annual Report shall be submitted to the *District Manager*, by March 31st of the year following the period being reported upon.

(7) The Annual Report shall include but not be limited to the following information:

Operations:

- (a) an assessment of the operation and performance of all engineered facilities, the need to amend the design or operation of the *Site*, and the adequacy of and need to implement the contingency plans;
- (b) site plans showing the existing contours of the *Site*; areas of landfilling operation during the reporting period; areas of intended operation during the next reporting period; areas of excavation during the reporting period; the progress of final cover, vegetative cover, and any intermediate cover application; facilities existing, added or removed during the reporting period; and site preparations and facilities planned for installation during the next reporting period;
- (c) calculations of the volume of waste, daily and intermediate cover, and final cover deposited or placed at the *Site* during the reporting period and a calculation of the total volume of *Site* capacity used during the reporting period;
- (d) a calculation of the remaining capacity of the *Site* and an estimate of the remaining *Site* life;
- (e) a summary of the weekly, maximum daily and total annual quantity (tonnes) of waste received at the *Site*;
- (f) a summary of any complaints received and the responses made;
- (g) a discussion of any operational problems encountered at the *Site* and corrective action taken;
- (h) any changes to the Design and Operations Report and the Closure Plan that have been approved by the *Director* since the last *Annual Report*;

Monitoring:

- (i) an accurately scaled site plan illustrating the location of all buried wastes, the site boundaries, monitoring well locations, surface water sampling locations, and the location of the contaminant attenuation zone;
- (j) an accurately scaled location map illustrating topography and the site relative to nearby potentially sensitive groundwater/surface water features (i.e., lakes, streams, wells);
- (k) a water table contour map based on current data;
- (l) stratigraphic cross-sections which clearly illustrate the subsurface distribution of geological materials;
- (m) borehole logs for all monitoring wells;
- (n) tables illustrating historical water chemistry and water level data;
- (o) graphs illustrating historical water quality trends with time for key leachate indicator parameters (as a minimum these should include alkalinity, chloride, sulphate, boron, sodium, iron, manganese, zinc and DOC);
- (p) an assessment of monitoring data to evaluate compliance with the requirements of *Ministry's* Guideline B-7 and the PWQO's;
- (q) recommendations for future monitoring and/or remedial actions; and
- (r) a section detailing the field sampling protocols and QA/QC measures.

7. LANDFILL DESIGN AND DEVELOPMENT

Approved Waste Types

- (1) (a) Only municipal waste as defined under *Reg. 347* being solid non-hazardous shall be accepted at the *Site* for disposal.
- (b) Notwithstanding condition 7 (1) (a), non-hazardous contaminated soil may be accepted at the *Site* for disposal.
- (2) The *Owner* shall develop and implement a program to inspect waste to ensure that the waste received at the *Site* is of a type approved for acceptance under this *Approval*.
- (3) The *Owner* shall ensure that all loads of waste are properly inspected by *Trained personnel* prior to acceptance at the *Site* and that the waste vehicles are directed to the appropriate areas for disposal or transfer of the waste. The *Owner* shall notify the *District Manager*, in writing, of load rejections at the *Site* within one (1) business day from their occurrence.

Capacity

- (4) Maximum volumetric capacity approved for the *Site*, consisting of the waste, daily cover and intermediate cover, but excluding the final cover approved by this *ECA* based on the supporting documentation is 264,000 cubic metres.

Service Area

- (5) Only waste that is generated within the boundaries of the Township of Macdonald, Meredith and Aberdeen Additional and the unincorporated Township of Kehoe may be accepted at the *Site*.

Cover

- (6) Alternative materials to soil may be used as weekly and interim cover material, based on an application with supporting information and applicable fee for a trial use or permanent use, submitted by the *Owner* to the *Director*, copied to the *District Manager* and as approved by the *Director* via an amendment to this *Approval*. The alternative material shall be non-hazardous according to *Reg. 347* and will be expected to perform at least as well as soil in relation to the following functions:
 - (a) Control of blowing litter, odours, dust, landfill gas, gulls, vectors, vermin and fires;
 - (b) Provision for an aesthetic condition of the landfill during the active life of the *Site*;
 - (c) Provision for vehicle access to the active tipping face; and
 - (d) Compatibility with the design of the *Site* for groundwater protection, leachate management and landfill gas management.

- (7) Cover material shall be applied as follows:
- (a) **Bi-weekly Cover** - Weather permitting, deposited waste shall be covered **bi-weekly** in a manner acceptable to the *District Manager* so that no waste is exposed to the atmosphere;
 - (b) **Intermediate Cover** - In areas where landfilling has been temporarily discontinued for six (6) months or more, a minimum thickness of 300 millimetre of soil cover or an approved thickness of alternative cover material shall be placed; and
 - (c) **Final Cover** - In areas where landfilling has been completed to final contours, a minimum 600 millimetre thick layer of soil of medium permeability and 150 millimetres of top soil (vegetative cover) shall be placed. Fill areas shall be progressively completed and rehabilitated as landfill development reaches final contours.

Design and Operations Report

- (8) Within one (1) year from the date of this *Approval*, the *Owner* shall submit for the *Director's* approval, a Design and Operations Report that includes as a minimum the following information:
- (a) proposed landfill design including the footprint, final contours, capacity and an estimate of the amount of existing waste. A survey plan showing the new CAZ area and features (buildings, storage areas etc.) from the site plan;
 - (b) an estimate of waste types and quantities to be landfilled at the site and recycling and resource recovering activities at the *Site*;
 - (c) location and description of the access road and the on-site roads at the *Site*;
 - (d) description and location of the fencing and the gate(s);
 - (e) screening of the *Site* from the public, both visual and the protection from the noise impact;
 - (f) details of the clean surface water drainage from the *Site* and any works required to prevent extraneous surface water from contacting the active working face;
 - (g) description of the fill method, the equipment used at the *Site*, the areas used for various fill methods of landfilling, and timelines for various phases of the *Site* development;
 - (h) the operating hours of the *Site* and the hours for the various activities to be undertaken at the *Site*, including waste compaction, waste coverage and other activities within the *Site*;
 - (i) details on winter operations;
 - (j) the equipment used and the procedures used for waste deposition, spreading and covering (if sludge is disposed);
 - (k) details on supervision and monitoring of the activities at the *Site*;
 - (l) details on handling of other wastes, including the types and amounts of wastes handled, storage locations, storage facility design/description and the frequency of removal from the *Site*;
 - (m) details on housekeeping practices undertaken to control noise, dust, litter, odour, rodents, insects and other disease vectors, scavenging birds or animals;
 - (n) details on the closure of the *Site*, including the description of the final cover and its estimated permeability, its thickness, the source of the final cover material, the thickness of the top soil and the vegetation proposed for the closed waste mound, as well as the timeframe for the progressive waste coverage;
 - (o) monitoring program for the surface and ground water;

- =
- (p) site-specific trigger mechanism program for the implementation of the groundwater and surface water, contingency measures and a description of such measures;
 - (q) landfill gas control or management required at the *Site*;
 - (r) maintenance activities proposed for the *Site* and for the monitoring well network, including the type of the activities, the frequency of the activities and the personnel responsible for them;
 - (s) inspection activities proposed for the *Site*, including the frequency of the activities and the personnel responsible for them;
 - (t) details of training provided for the personnel responsible for the activities at the *Site*;
 - (u) contingency plans for the emergency situations that may occur at the *Site*;
 - (v) storm water management, including the location and the design of any works required; and
 - (w) any other information relevant to the design and operation of the *Site* or the information required by the *District Manager*.

8. LANDFILL MONITORING

Landfill Gas

- (1) The *Owner* shall ensure that any buildings or structures at the *Site* contain adequate ventilation systems to relieve any possible landfill gas accumulation to prevent methane concentration reaching the levels within its explosive range. Routine monitoring for explosive methane gas levels shall be conducted in all buildings or structures at the *Site*, especially enclosed structures which at times are occupied by people.

Compliance

- (2) The *Site* shall be operated in such a way as to ensure compliance with the following:
 - (a) Reasonable Use Guideline B-7 for the protection of the groundwater at the *Site*; and
 - (b) Provincial Water Quality Objectives included in the July 1994 publication entitled *Water Management Policies, Guidelines, Provincial Water Quality Objectives*, as amended from time to time or limits set by the *Regional Director*, for the protection of the surface water at and off the *Site*.

Surface Water and Groundwater

- (3) (a) The Owner shall construct and maintain to the satisfaction of the *Ministry*, a groundwater and surface water monitoring network which fully delineates the horizontal and vertical extent of leachate migration resulting from the landfilling activities at the *Site*. In addition to the existing groundwater wells (as of 2013), two (2) new wells shall be installed at the property as follows:
 - (i) one (1) located east of MW-3 to monitor groundwater quality as it enters the

- Contaminant Attenuation Zone; and
- (i) one (1) located southeast of the fill area for the background groundwater quality.
 - (b) Groundwater samples from all wells in the above-described monitoring network will be obtained and analyzed at least three (3) times per year (Spring, Summer and Fall) which is at east 60 days apart. All samples shall be analysed for parameters listed in Schedule 5 of the Ministry's "Landfill Standards: A Guideline on the Regulatory and Approval Requirements for New or Expanding Landfilling Sites", January 2012. Spring and fall samples shall be analysed for the parameters listed in Column 2 of Schedule 5 and the summer samples shall be analysed for the parameters listed in Column 2 of Schedule 5. Groundwater elevations in all monitoring wells shall be measured during each monitoring event prior to obtaining water quality samples.
 - (c) The proposed design and locations of the groundwater monitoring network shall be submitted to the *Director* for approval, within twelve (12) months from the date of this *Approval*.
- (4) A certified Professional Geoscientist or Engineer possessing appropriate hydrogeologic training and experience shall execute or directly supervise the execution of the groundwater monitoring and reporting program.

Groundwater Wells and Monitors

- (5) The *Owner* shall ensure that all groundwater monitoring wells which form part of the monitoring program are properly capped, locked and protected from damage.
- (6) Where landfilling is to proceed around monitoring wells, suitable extensions shall be added to the wells and the wells shall be properly re-secured.
- (7) Any groundwater monitoring well included in the on-going monitoring program that is damaged shall be assessed, repaired, replaced or decommissioned by the *Owner*, as required.
 - (a) The *Owner* shall repair or replace any monitoring well which is destroyed or in any way made to be inoperable for sampling such that no more than one regular sampling event is missed.
 - (b) All monitoring wells which are no longer required as part of the groundwater monitoring program, and have been approved by the *Director* for abandonment, shall be decommissioned by the *Owner*, as required, in accordance with *O.Reg. 903*, to prevent contamination through the abandoned well. A report on the decommissioning of the well shall be included in the Annual Report for the period during which the well was decommissioned.

Trigger Mechanisms and Contingency Plans

- (8) (a) Within one (1) year from the date of this *Approval*, the *Owner* shall submit to the *Director*, for approval, and copies to the *District Manager*, details of a trigger mechanisms plan for surface water and groundwater quality monitoring for the purpose of initiating investigative activities into the cause of increased contaminant concentrations.
- (b) Within one (1) year from the date of this *Approval*, the *Owner* shall submit to the *Director* for approval, and copies to the *District Manager*, details of a contingency plan to be implemented in the event that the surface water or groundwater quality exceeds any trigger mechanism.
- (9) In the event of a confirmed exceedance of a site-specific trigger level relating to leachate mounding or groundwater or surface water impacts due to leachate, the *Owner* shall immediately notify the *District Manager*, and an investigation into the cause and the need for implementation of remedial or contingency actions shall be carried out by the *Owner* in accordance with the approved trigger mechanisms and associated contingency plans.
- (10) If monitoring results, investigative activities and/or trigger mechanisms indicate the need to implement contingency measures, the *Owner* shall ensure that the following steps are taken:
- (a) The *Owner* shall notify the *District Manager*, in writing of the need to implement contingency measures, no later than 30 days after confirmation of the exceedances;
- (b) Detailed plans, specifications and descriptions for the design, operation and maintenance of the contingency measures shall be prepared and submitted by the *Owner* to the *District Manager* for approval; and
- (c) The contingency measures shall be implemented by the *Owner* upon approval by the *District Manager* .
- (11) The *Owner* shall ensure that any proposed changes to the site-specific trigger levels for leachate impacts to the surface water or groundwater, are approved in advance by the *Director* via an amendment to this *Approval*.

Changes to the Monitoring Plan

- (12) The *Owner* may request to make changes to the monitoring program(s) to the *District Manager* in accordance with the recommendations of the annual report. The *Owner* shall make clear reference to the proposed changes in a separate letter that shall accompany the annual report.
- (13) Within fourteen (14) days of receiving the written correspondence from the *District Manager* confirming that the *District Manager* is in agreement with the proposed changes to the environmental monitoring program, the *Owner* shall forward a letter identifying the proposed changes and a copy of the correspondences from the *District Manager* and all other correspondences and responses related to the changes to the monitoring program, to the *Director* requesting the *Approval* be amended to approve the proposed changes to the environmental monitoring plan prior to implementation.
- (14) In the event any other changes to the environmental monitoring program are proposed outside of the recommendation of the annual report, the *Owner* shall follow current *Ministry* procedures for seeking approval for amending the *Approval*.

9. CLOSURE PLAN

- (1) At least 3 years prior to the anticipated date of closure of this *Site*, the *Owner* shall submit to the *Director* for approval, with copies to the *District Manager*, a detailed *Site* closure plan pertaining to the termination of landfilling operations at this *Site*, post-closure inspection, maintenance and monitoring, and end use. The plan shall include but not be limited to the following information:
 - (a) a plan showing *Site* appearance after closure;
 - (b) a description of the proposed end use of the *Site*;
 - (c) a description of the procedures for closure of the *Site*, including:
 - (i) advance notification of the public of the landfill closure;
 - (ii) posting of a sign at the *Site* entrance indicating the landfill is closed and identifying any alternative waste disposal arrangements;
 - (iii) completion, inspection and maintenance of the final cover and landscaping;
 - (iv) *Site* security;
 - (v) removal of unnecessary landfill-related structures, buildings and facilities;
 - (vi) final construction of any control, treatment, disposal and monitoring facilities for leachate, groundwater, surface water and landfill gas; and
 - (vii) a schedule indicating the time-period for implementing sub-conditions (i) to (vi) above;
 - (d) descriptions of the procedures for post-closure care of the *Site*, including:
 - (i) operation, inspection and maintenance of the control, treatment, disposal and monitoring facilities for leachate, groundwater, surface water and landfill gas;
 - (ii) record keeping and reporting; and
 - (iii) complaint contact and response procedures;
 - (e) an assessment of the adequacy of and need to implement the contingency plans for leachate and methane gas; and
 - (f) an updated estimate of the *contaminating life span* of the *Site*, based on the results of the monitoring programs to date.
- (2) The *Site* shall be closed in accordance with the closure plan as approved by the *Director*.

10. WASTE DIVERSION

- (1) The *Owner* shall ensure that:
 - (a) all bins and/or waste storage areas are clearly labelled;
 - (b) all lids or doors on bins shall be kept closed during non-operating hours and during high wind events; and
 - (c) if necessary to prevent litter, waste storage areas shall be covered during high winds events.
- (2) The *Owner* shall transfer waste and recyclable materials from the *Site* as follows:

- (a) recyclable materials shall be transferred off-site once their storage bins are full;
 - (b) scrap metal shall be transferred off-site at least twice a year;
 - (c) tires shall be transferred off-site as soon as a load for the contractor hired by the *Owner* has accumulated; and
 - (d) immediately, in the event that waste is creating an odour or vector problem.
- (3) The *Owner* shall notify the appropriate contractors that waste and recyclable wastes that are to be transferred off-site are ready for removal. Appropriate notice time, as determined by the contract shall be accommodated in the notification procedure.
- (4) Collection, storage and transfer of Waste Electrical and Electronic Equipment shall be in accordance with the documents in the Schedule "A". If there is any discrepancy between the guideline titled "Collection Site Organizing & Operating Waste Electrical and Electronic Equipment (WEEE) Guidebook" dated March 11, 2010 as amended prepared by Ontario Electronic Stewardship and the documents in Schedule "A", the guideline shall take precedence.

SCHEDULE "A"

1. Application for a Certificate of Approval dated November 2, 1970 and signed by Mrs. Robbins, including the attached supporting documentation.
2. Environmental Compliance Approval Application dated January 3, 2013 and signed by Lynne Duguay, Clerk Administrator, the Corporation of the Township of Macdonald, Meredith and Aberdeen Additional, including the attached supporting documentation.

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

GENERAL

1. The reason for Conditions 1(1), (2), (4), (5), (6), (7), (8), (9), (10), (17), (18) and (19) is to clarify the legal rights and responsibilities of the *Owner* and *Operator* under this *Approval* .
2. The reasons for Condition 1(3) are 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.
3. The reasons for Condition 1(11) 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.
4. The reasons for Condition 1(12) 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* .
5. The reason for Condition 1(13) is to ensure that the successor is aware of its legal

responsibilities.

6. The reason for Condition 1(14) and (15) are that the Part II.1 *Director* is an individual with authority pursuant to Section 197 of the Environmental Protection Act to require registration on title and provide any person with an interest in property before dealing with the property in any way to give a copy of an ECA to any person who will acquire an interest in the property as a result of the dealing.
7. The reason for Condition 1(16) is to ensure that appropriate Ministry staff has 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 *Act* , the *OWRA* , the *PA* , the *NMA* and the *SDWA* .
8. Condition 1 (20) has been included in order to clarify what information may be subject to the Freedom of Information Act.

SITE OPERATION

9. The reasons for Conditions 2(1), 2(5) and 6(3) are to ensure that the *Site* is operated, inspected and maintained in an environmentally acceptable manner and does not result in a hazard or nuisance to the natural environment or any person.
10. The reason for Conditions 2 (2), 2(3) and 2(4) is to ensure that users of the *Site* are fully aware of important information and restrictions related to *Site* operations and access under this *Approval*.
11. The reasons for Condition 2(6) (a), (b) and (c) are open burning of municipal waste is unacceptable because of concerns with air emissions, smoke and other nuisance effects, and the potential fire hazard and to make sure burning of brush and wood are carried out in accordance with Ministry guidelines.
12. The reasons for Condition 2(7), 2(8) and 2(9) are to specify the hours of operation for the landfill site and a mechanism for amendment of the hours of operation, as required.
13. The reasons for Condition 2(10) and 2(11) are to ensure that the *Site* is supervised by properly trained staff in a manner which does not result in a hazard or nuisance to the natural environment or any person 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.

EMPLOYEE TRAINING

14. The reason for Condition 3(1) is to ensure that the *Site* is supervised and operated by properly trained staff in a manner which does not result in a hazard or nuisance to the natural environment or any person.

COMPLAINTS RESPONSE PROCEDURE

15. The reason for Condition 4(1) is to ensure that any complaints regarding landfill operations at this *Site* are responded to in a timely and efficient manner.

EMERGENCY RESPONSE

16. Conditions 5(1) and 5(2) are included to ensure that emergency situations are reported to the Ministry to ensure public health and safety and environmental protection.
17. Conditions 5(3), 5(4) and 5(5) are included to ensure that emergency situations are handled in a manner to minimize the likelihood of an adverse effect and to ensure public health and safety and environmental protection.

RECORD KEEPING AND REPORTING

18. The reason for Conditions 6(1) and 6(2) is to ensure that accurate waste records are maintained to ensure compliance with the conditions in this *Approval* (such as fill rate, site capacity, record keeping, annual reporting, and financial assurance requirements), the *EPA* and its regulations.
19. The reason for Conditions 6(4) and 6(5) is to ensure that detailed records of *Site* inspections are recorded and maintained for inspection and information purposes.
20. The reasons for Conditions 6(6) and 6(7) are 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.

LANDFILL DESIGN AND DEVELOPMENT

21. The reason for Conditions 7(1) to 7(5) inclusive 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.
22. Condition 7(6) is to provide the *Owner* the process for getting the approval for alternative daily and intermediate cover material.
23. The reasons for Condition 7(7) are to ensure that daily/weekly and intermediate cover are 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*.
24. Condition 7(8) is included to require the *Owner* to submit a Design and Operations Report to incorporate the changes to the design and operations of the *Site* into a complete document that

can used to assess compliance with the Ministry's requirements.

LANDFILL MONITORING

25. Reasons for Condition 8(1) are to ensure that off-site migration of landfill gas is monitored and all buildings at the *Site* are free of any landfill gas accumulation, which due to a methane gas component may be explosive and thus create a danger to any persons at the *Site*.
26. Condition 8(2) is included to provide the groundwater and surface water limits to prevent water pollution at the *Site*.
27. Conditions 8(3) and 8(4) are included to require the Owner to demonstrate that the *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.
28. Conditions 8(5), 8(6) and 8(7) are included to ensure the integrity of the groundwater monitoring network so that accurate monitoring results are achieved and the natural environment is protected.
29. Conditions 8(8) to 8(11) inclusive are added to ensure the *Owner* has a plan with an organized set of procedures for identifying and responding to potential issues relating to groundwater and surface water contamination at the *Site's* compliance point.
30. Conditions 8(12), 8(13) and 8(14) are included to streamline the approval of the changes to the monitoring plan.

CLOSURE PLAN

31. The reasons for Condition 9 are to ensure that final closure of the *Site* is completed in an aesthetically pleasing manner, in accordance with Ministry standards, and to ensure the long-term protection of the health and safety of the public and the environment.

WASTE DIVERSION

32. Condition 10 is included to ensure that the recyclable materials are stored in their temporary storage location and transferred off-site in a manner as to minimize a likelihood of an adverse effect or a hazard to the natural environment or any person.

Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). A561302 issued on March 17, 1980.

In accordance with Section 139 of the Environmental Protection Act, you may by written Notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 142 of the Environmental Protection Act provides that the Notice requiring the hearing shall

state:

1. 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;
2. 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:

3. The name of the appellant;
4. The address of the appellant;
5. The environmental compliance approval number;
6. The date of the environmental compliance approval;
7. The name of the Director, and;
8. 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:

The Secretary*
Environmental Review Tribunal
655 Bay Street, Suite 1500
Toronto, Ontario
M5G 1E5

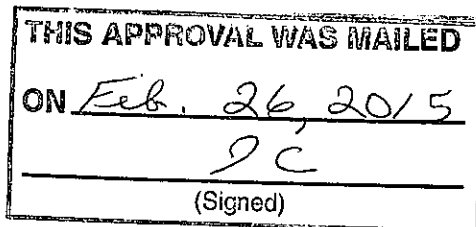
AND

The Director appointed for the purposes of
Part II.1 of the Environmental Protection Act
Ministry of the Environment
2 St. Clair Avenue West, Floor 12A
Toronto, Ontario
M4V 1L5

* Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349, Fax: (416) 314-3717 or www.ert.gov.on.ca

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

DATED AT TORONTO this 23rd day of February, 2015



Dale Gable, P.Eng.

Director

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

RM/

- c: Area Manager, MOE Sault Ste. Marie
- c: District Manager, MOE Sudbury
- Marshall Thompson, Tulloch Engineering Inc. ✓

AMENDMENT TO ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER A561302

Notice No. 1

Issue Date: November 22, 2017

The Corporation of the Township of Macdonald, Meredith and Aberdeen Additional
208 Church St
Echo Bay, Ontario
P0S 1C0

Site Location: MacDonald, Meredith & Aberdeen Additional Landfill
Lot 10, 11, Concession Section 28
Macdonald, Meredith and Aberdeen Additional Township, District of Algoma
P0S 1C0

RECEIVED

NOV 27 2017

Tulloch Engineering

You are hereby notified that I have amended Approval No. A561302 issued on February 23, 2015 for the use and operation of 27 hectare waste disposal/transfer site within a total site area of 63.3 hectares, as follows:

Condition 7(8) hereby revoked and replaced with the following:**Design and Operations Report**

7 (8) Revised Design and Operations Plan Item 3, Schedule "A" is hereby approved.

Item 3 is hereby added to the Schedule "A":

3. Report titled "Design and Operations Plan, Macdonald Meredith & Aberdeen Add'l Landfill Site" Prepared by Tulloch Engineering Inc.

The reason for this amendment to the Approval is to approve the Design and Operations Plan for the Site.

This Notice shall constitute part of the approval issued under Approval No. A561302 dated February 23, 2015

In accordance with Section 139 of the Environmental Protection Act, you may by written Notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 142 of the Environmental Protection Act provides that the Notice requiring the hearing 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:

The Secretary*
Environmental Review Tribunal
655 Bay Street, Suite 1500
Toronto, Ontario
M5G 1E5

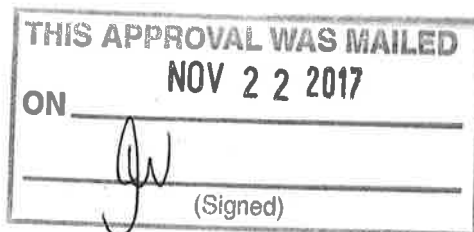
AND

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

*** Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349, Fax: (416) 326-5370 or www.ert.gov.on.ca**

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

DATED AT TORONTO this 22nd day of November, 2017



Dale Gable, P.Eng.

Director

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

RM/

- c: Area Manager, MOECC Sault Ste. Marie
- c: District Manager, MOECC Sudbury
- Marshall D. Thompson, Tulloch Engineering Inc.

AMENDMENT TO ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER A561302

Notice No. 2

Issue Date: September 3, 2019

The Corporation of the Township of Macdonald, Meredith and Aberdeen Additional
208 Church St
Echo Bay, Ontario
P0S 1C0

Site Location: MacDonald, Meredith & Aberdeen Additional Landfill
Lot 10, 11, Concession Section 28
Macdonald, Meredith and Aberdeen Additional Township, District of Algoma
P0S 1C0

You are hereby notified that I have amended Approval No. A561302 issued on February 23, 2015 and amended on November 22, 2017 for the use and operation of 27 hectare waste disposal/transfer site within a total site area of 63.3 hectares, as follows:

Conditions 8(12), 8(13) and 8(14) are hereby revoked and replaced with the following:

8. LANDFILL MONITORING**Changes to the Monitoring Programs, Trigger Mechanisms and Contingency Plans**

8. (12) The *Owner* may request to make changes to the monitoring program(s), trigger mechanisms and/or contingency plan to the *District Manager* in accordance with the recommendations of the annual report. The *Owner* shall make clear reference to the proposed changes in a separate letter that shall accompany the annual report.
8. (13) Within fourteen (14) days of receiving the written correspondence from the *District Manager* confirming that the *District Manager* is in agreement with the proposed changes to the environmental monitoring program, trigger mechanisms and/or contingency plans, the *Owner* shall forward a letter identifying the proposed changes and a copy of the correspondences from the *District Manager* and all other correspondences and responses related to the changes, to the *Director* requesting the *Approval* be amended to approve the proposed changes to the environmental monitoring plan prior to implementation.

Contingency Plans and Implementation

8. (14) (a) Within nine (9) months from the date of this *Approval*, the *Owner* shall submit to the *District Manager*, a plan with timelines to bring the site into compliance with respect to condition 8(2).
- (b) Within fourteen (14) days of receiving the written correspondence from the *District Manager* confirming that the *District Manager* is in agreement with the proposed plan of action, the *Owner* shall forward the final proposal and a copy of the correspondences from the *District Manager* and all other correspondences and responses related to the proposal, to the *Director* requesting the *Approval* be amended to approve the proposal.

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

- Conditions 8(12) and 8(13) are revised to streamline the approval of the changes to the monitoring programs, trigger mechanisms and contingency plans.
- The reason for the condition 8(14) is to require the *Owner* to bring the *Site* into compliance in a timely manner to ensure the long-term protection of the health and safety of the public and the environment.

This Notice shall constitute part of the approval issued under Approval No. A561302 dated February 23, 2015 as amended.

In accordance with Section 139 of the Environmental Protection Act, you may by written Notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 142 of the Environmental Protection Act provides that the Notice requiring the hearing 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:

The Secretary*
Environmental Review Tribunal
655 Bay Street, Suite 1500
Toronto, Ontario
M5G 1E5

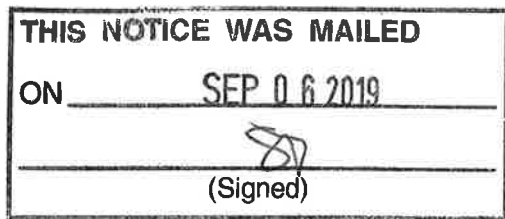
AND

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

* Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349, Fax: (416) 326-5370 or www.ert.gov.on.ca

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

DATED AT TORONTO this 3rd day of September, 2019



Mohsen Keyvani, P.Eng.
Director
appointed for the purposes of Part II.1 of the
Environmental Protection Act

RM/

c: Area Manager, MOECC Sault Ste. Marie
c: District Manager, MOECC Sudbury
Marshall D. Thompson, P. Eng., Tulloch Engineering Inc.

Appendix C

MECP Letter on Environmental Screening Process

Ministry of the Environment,
Conservation and Parks
Floor 1, 135 St Clair Ave W
Toronto, ON
M4V 1P5
Telephone: 437-776-5578

Ministère de l'Environnement, de la
Protection de la nature et des Parcs
1er étage, 135 av St. Clair O
Toronto, ON
M4V 1P5
Téléphone : 437-776-5578



August 24, 2020

Lynne Duguay, Clerk Administrator
The Corporation of the Township of Macdonald, Meredith and Aberdeen Additional
208 Church St
Echo Bay, Ontario
P0S 1C0

Dear Sir/Madam:

**Re: Application for Approval Waste Disposal Sites
Macdonald, Meridith & Aberdeen Additional Landifll Site
(non-haz contaminated soil acceptance)
Macdonald, Meredith and Aberdeen Additional Township,
District of Algoma
Reference Number 6820-BRCKRE**

I have completed the review of the above application.

This proposal requires approval under the Environmental Assessment Act (EAA). Section 18 of the EAA:

***PART III
DESIGNATION OF UNDERTAKINGS — ENVIRONMENTAL SCREENING PROCESS
AVAILABLE***

Environmental Screening Process

10. (1) An undertaking that is designated under this Part as an undertaking to which the Act applies is exempt from Part II of the Act if the undertaking is carried out in accordance with the Environmental Screening Process for Waste Management Projects. O. Reg. 101/07, s. 10 (1).

Change to geographic area

18. A change to a waste disposal site described in subsection 2 (1) or 11 (1) or (2) is defined as a major commercial or business enterprise or activity and is designated as an undertaking to which the Act applies, if the geographic area from which the site receives waste after the change would include any area from which the site was not authorized to receive waste under the Environmental Protection Act before the change. O. Reg. 101/07, s. 18.

Please provide proof of completion of the EAA requirements by September 30, 2020. If you do not provide this information by this date, the Ministry will consider you have withdrawn the application and close the file accordingly.

If you have any questions regarding the above, please contact me at the above phone number.

Yours truly,

Ranjani Munasinghe, P.Eng.
Senior Engineer

c: District Manager, MECP Sault Ste. Marie
Marshall Thompson P. Eng., Tulloch Engineering Inc.

Appendix D

Letter's to Affected Parties and Notice of Commencement

20-0031
August 12, 2020

Owner Name
Address

Dear (insert name of affected party),

Re: Macdonald Meredith and Aberdeen Add'l Landfill Site

The Township of Macdonald Meredith and Aberdeen Add'l operate a landfill site at 503 Watson Road East which is adjacent to your property. The Municipality is applying to the Ministry of the Environment, Conservation and Parks for an amendment to the Environmental Compliance Certificate No. A561302 for operation of the landfill. These changes are to amend the current ECA by allowing the reception of non-hazardous contaminated soil at the landfill from other jurisdictions in the District of Algoma. Currently, non-hazardous contaminated soil is only allowed from within the Township Macdonald Meredith and Aberdeen Add'l and the unincorporated Township of Kehoe as outlined in the following excerpts of the current ECA.

Approved Waste Types

- (1) (a) Only municipal waste as defined under *Reg. 347* being solid non-hazardous shall be accepted at the *Site* for disposal.
- (b) Notwithstanding condition 7 (1) (a), non-hazardous contaminated soil may be accepted at the *Site* for disposal.

Service Area

- (5) Only waste that is generated within the boundaries of the Township of Macdonald, Meredith and Aberdeen Additional and the unincorporated Township of Kehoe may be accepted at the *Site*.

Non Hazardous Contaminated Soil is typically soil with petroleum hydrocarbons present from the cleanup of gas stations and similar sites. It is suitable to be used as cover material over landfill waste as the volatile hydrocarbons will dissipate over time. The municipality are in need of interim and daily cover material and they have an opportunity to receive non-hazardous contaminated soil from a site in Sault Ste. Marie of a cleanup of a gas station. The municipality will also receive tipping fees for receiving this soil. Therefore, it is a win-win situation as the municipality will receive soil they need for daily and interim cover and they will also receive tipping fees that can be applied to ongoing landfill operations.

The Ministry of the Environment, Conservation and Parks requires that adjacent and abutting landowners and tenants and anyone else who has the potential to be affected by the proposal be notified of any proposed changes to the operation of a landfill and this letter is serving as the Municipality's notification to you. If you have any questions regarding the proposed changes please do not hesitate to contact myself by phone at 705-842-3372 ext 311 or by email at marshall.thompson@tulloch.ca



200 Main St. | T. 705 842.3372
PO Box 579 | F. 705 842.2658
Thessalon, ON | 800 797.2997
P0R 1L0 | thessalon@tulloch.ca

www.TULLOCH.ca

If you have any concerns or objections to the proposal they must be sent in writing to Part V Director - Mohsen Keyvani P. Eng., Waste Approvals, Environmental Approvals Branch, Ministry of the Environment, Conservation and Parks, 135 St. Clair Avenue West, Floor 1, Toronto, Ontario, M4V 1P5 within fifteen (15) days of the receipt of this notice. Alternatively these comments can be send by email to enviropemissions@ontario.ca quoting the Ministry Reference Number 6820-BRCKRE. We would also appreciate that these concerns or objections be copied to the municipality at the Township of Macdonald, Meredith and Aberdeen Add'l; 208 Church Street, P.O. Box 10, Echo Bay, Ontario; P0S 1C0 or by email at lduguay@onlink.net

Yours truly,

A handwritten signature in black ink that reads 'Marshall D. Thompson'.

Marshall D. Thompson, P.Eng.
TULLOCH ENGINEERING INC.

/MDT

Encl.

c.c. MECP Approvals Branch,
Township of Macdonald Meredith and Aberdeen Add'l

**Notice of Commencement
of Environmental Screening
Municipal Landfill
Township of Macdonald, Meredith
& Aberdeen Additional**

The Township of Macdonald, Meredith & Aberdeen Additional is commencing an Environmental Screening Process to allow for receiving non-hazardous contaminated soil from the District of Algoma to be used exclusively as daily and interim cover of landfill waste.

Ontario Regulation 101/07 Waste Management Projects in Part III outlines what undertakings for which the Environmental Screening Process is available to be used. From Section 18 (1), if the geographic area from which the site receives waste after the change would include any area from which the site was not authorized to receive waste under the Environmental Protection Act before the change it is can then follow the Screening Process. The current Environmental Compliance Approval No A561302 allows receiving waste from the municipal Township of Macdonald Meredith and Aberdeen Additional and the unincorporated Township of Kehoe. To expand the area to receive non-hazardous contaminated soil from across the District of Algoma will require the Environmental Screening Process to be followed.

The purpose of expanding the area is to receive non-hazardous contaminated soil that will be used for interim and daily cover. Tipping fees will be collected by the township for receiving this non-hazardous contaminated soil, typically soils with hydrocarbons from the cleanup of gas stations. This will provide a twofold benefit in that tipping fees will be collected by the municipality and the cost to import soil for cover purposes will be unnecessary. The intent is to receive only soil that can be used for daily and interim cover and there will be no change in the approved capacity of the landfill of 264,000 cu. m. which includes waste and cover. Cover materials typically represent 20% of the overall volume of waste and cover placed. There will be no change in the service area that domestic waste will be received from.

The Screening Process will be carried out in accordance with the Ministry of Environment, Conservation and Parks guidelines which are posted on the municipal website. The results of the screening will be documented in an Environmental Screening Report which will be made available for review. The public, Indigenous communities and agencies are invited to provide comment on the project. Further details are posted on the municipal website echobay.ca. Comments, questions, and concerns can be directed to the municipality.

Lynne Duguay, Clerk Administrator
208 Church Street; P.O. Box 10
Echo Bay, ON; P0S 1C0
Phone: 705-248-2441
Email: lduguay@onlink.net

Notice Date: September 17, 2020



200 Main Street
PO Box 579
Thessalon, ON
P0R 1L0

T. 705 842.3372
F. 705 842.2658
TF. 800 797.2997
thessalon@TULLOCH.ca
WWW.TULLOCH.ca

Project No. 20-0031
November 16, 2020

Affected Party or First Nation Community
Address
Attention:

email

RE: Macdonald Meredith & Aberdeen Additional Landfill

Tulloch Engineering are representing the Township of Macdonald, Meredith & Aberdeen Additional in completing an Environmental Screening Process to allow for receiving non-hazardous contaminated soil from the District of Algoma to be used exclusively as daily and interim cover of waste at the municipal landfill. The municipal landfill is located at 503 Watson Road East as outlined on the attached map.

Ontario Regulation 101/07 Waste Management Projects in Part III outlines undertakings for which the Environmental Screening Process is available to be used. From Section 18 (1), if the geographic area from which the site receives waste after the change would include any area from which the site was not authorized to receive waste under the Environmental Protection Act before the change it can follow the Screening Process. The current Environmental Compliance Approval No A561302 allows for the receiving of waste from the municipal Township of Macdonald Meredith and Aberdeen Additional and the unincorporated Township of Kehoe. To expand the area to receive non-hazardous contaminated soil from across the District of Algoma will require the Environmental Screening Process to be followed. A flowchart of the Screening Process is attached.

The purpose of expanding the area is to receive non-hazardous contaminated soil that will be used for interim and daily cover. The intent is to receive only soil that can be used for daily and interim cover and there will be no change in the approved capacity of the landfill of 264,000 cu. m. which includes landfill waste and cover material. Cover materials typically represent 20% of the overall volume of waste and cover placed. There will be no change in the current service area that domestic waste will be received from.

The Screening Process will be carried out in accordance with the Ministry of Environment, Conservation and Parks guidelines. The results of the screening will be documented in an Environmental Screening Report which will be made available for review. The public, Indigenous communities and agencies are invited to provide comment on the project. Comments, questions, and concerns can be directed to the consultant as follows.

Tulloch Engineering Inc.
200 Main Street; P.O. Box 579
Thessalon, ON; P0R 1L0
Tel: 705 842 3372
Fax: 705 842 2658
Email: marshall.thompson@tulloch.ca

We would appreciate receiving input by **December 18, 2020** to allow the municipality to address input received

and continue with the Screening Process.

Yours truly,

Marshall D. Thompson

Marshall D. Thompson, P.Eng.

TULLOCH ENGINEERING INC.

/Attach

cc Lynne Duguay, Township of Macdonald Meredith

Appendix E

MECP Delegation of Authority Letter regarding First Nations

**Ministry of the Environment,
Conservation and Parks**

199 Larch Street
Suite 1201
Sudbury ON P3E 5P9
Tel.: (705) 564-3237
Fax: (705) 564-4180

**Ministère de l'Environnement,
de la Protection de la nature et
des Parcs**

199, rue Larch
Bureau 1201
Sudbury ON P3E 5P9
Tél. : (705) 564-3237
Télééc.: (705) 564-4180



November 3, 2020

Mr. Marshall Thompson, P.Eng.
Project Engineer
Tulloch Engineering Inc.,
200 Main Street
P.O. Box 579
Thessalon, ON P0R 1L0

Dear Mr. Thompson:

**Re: Environmental Screening Process for Increased Service Area for Landfill
Township of Macdonald, Meredith and Aberdeen Additional
Ontario Regulation 101/07 Waste Management Projects**

The Ministry of Environment, Conservation and Parks (MECP) acknowledges that the Township of Macdonald, Meredith and Aberdeen Additional (Township) has indicated that this study is following the Environmental Screening Process under Ontario Regulation 101/07.

Based on the information submitted, the environmental screening is being carried out for a proposed change to the service area for the municipal landfill.

The Crown has a legal duty to consult Aboriginal communities when it has knowledge, real or constructive, of the existence or potential existence of an Aboriginal or treaty right and contemplates conduct that may adversely impact that right. Before the Township can proceed with this project, the Crown must ensure that its duty to consult has been fulfilled, where such a duty is triggered. Although the duty to consult with Aboriginal peoples is a duty of the Crown, the Crown may delegate procedural aspects of consultation to project proponents while retaining oversight of the process.

Your proposed project may have the potential to affect Aboriginal or treaty rights protected under section 35 of Canada's *Constitution Act 1982*. Where the Crown's duty to consult is triggered in relation to your proposed project, **MECP is delegating the procedural aspects of rights-based consultation to you through this letter.** The Crown intends

to rely on the delegated consultation process in discharging its duty to consult and maintains the right to participate in the consultation process as it sees fit.

Based on information you have provided to date and the Crown's preliminary assessment you are required to consult with the following communities who have been identified as potentially affected by your proposed project.

- **Batchewana First Nation**
- **Garden River First Nation**
- **Thessalon First Nation**
- **MNO Historic Sault Ste. Marie Métis Council – please cc Métis Nation of Ontario (MNO) on any correspondence going to the council**

Steps that you may need to take in relation to Aboriginal consultation for your proposed project are outlined in the “Code of Practice for Consultation in Ontario’s Environmental Assessment Process” which can be found at the following link: <https://www.ontario.ca/document/consultation-ontarios-environmental-assessment-process>

Additional information related to the Environmental Screening Process under Ontario Regulation 101/07 can be found at: <https://www.ontario.ca/page/guide-environmental-assessment-requirements-waste-management-projects>

Additional information related to Ontario’s *Environmental Assessment Act* is available online at: www.ontario.ca/environmentalassessments

You must contact the Minister and Director of Environmental Assessment Branch under the following circumstances subsequent to initial discussions with the communities identified by MECP:

- Aboriginal or treaty rights impacts are identified to you by the communities;
- You have reason to believe that your proposed project may adversely affect an Aboriginal or treaty right;
- Consultation has reached an impasse;
- An elevation request is expected.

The Minister and Director can be notified either by email or mail using the information provided below:

Minister Jeff Yurek
Ministry of Environment, Conservation and Parks
777 Bay Street, 5th Floor
Toronto ON M7A 2J3
minister.mecp@ontario.ca

and

Director, Environmental Assessment Branch
Ministry of Environment, Conservation and Parks
135 St. Clair Ave. W, 1st Floor
Toronto ON, M4V 1P5
EABDirector@ontario.ca

MECP will then assess the extent of any Crown duty to consult for the circumstances and will consider whether additional steps should be taken, including what role the Township will be asked to play should additional steps and activities be required.

Should you or any members of your project team have any questions regarding the material above, please contact me directly at (705) 507-5136 or by email at shelley.wainio2@ontario.ca.

Yours truly,

A handwritten signature in cursive script that reads "Shelley Wainio".

Shelley Wainio
Environmental Planner/EA Coordinator
Environmental Assessment Services Section
Environmental Assessment Branch

Appendix F
Comments Received

First comment - received on January 11, 2021

Township of Laird:

Good morning Marshall,

Sorry for the delay in replying to your letter of November 16, 2020.

The office was closed for two weeks after the last meeting of December 17, 2020.

Council made no comment on your correspondence.

Stay safe,

Phyllis

Second comment - received on November 25, 2020

MECP

Dear Mr. Thomson,

Thank you for your submission. I wanted to take this opportunity to provide a quick note for future reference that the initial notice of a project is typically entitled "Notice of Commencement" as the general public, indigenous communities and government agencies would recognize this as the initial step in a well established planning process. All the remaining information required as per Step 1 of Section B.2.1 of the *Guide to Environmental Assessment for Waste Management Projects* seems to be present. Good luck with the screening.

Regards,

Shelley Wainio

Environmental Planner/EA Coordinator

Appendix G

MMAA Landfill Design & Operations Report

Township of Macdonald, Meredith and Aberdeen Additional Landfill Site



Design and Operations Report February 2016

Prepared by:



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FIGURES

Figure 1 – Location Plan

2

APPENDICES

Appendix A Environmental Compliance Approval A561302
Appendix B Recycling and Household Special Waste Brochures
Appendix C Landfill Operational Log Book

DRAWINGS

16-2008-G1 Development, Operations & Monitoring
16-2008-G2 Proposed Waste Placement

1.0 INTRODUCTION

This report presents the revised Design and Operations Report for the Township of Macdonald Meredith and Aberdeen Additional Joint Landfill Site located in within the municipality on Watson Road in the District of Algoma. This Design and Operations Report has been prepared to satisfy the requirements of the amended Environmental Compliance Approval A561302 under Condition 7. Landfill Design - Clause (8) Design and Operations Report.

The landfill is owned and operated by the Corporation of the Township of Macdonald, Meredith and Aberdeen Additional. It operated under the Provisional Certificate of Approval (C of A) No. A561302 issued by the Ministry of the Environment (MOE) on March 17, 1980. The original C of A was revoked on February 23, 2015 and replaced with amended Environmental Compliance Approval A561302. The ECA amendment was initiated by the MOE to bring the landfill to current operation and monitoring standards. A copy of the original Certificate of Approval and the amended Environmental Compliance Approval A561302 is included in Appendix A.

The landfill site receives solid non-hazardous municipal waste generated within the boundaries of the Township of Macdonald Meredith and Aberdeen Additional and the Township of Kehoe. In addition non-hazardous contaminated soil may be accepted at the site.

2.0 LANDFILL PROPERTY

2.1 Location

The Township of Macdonald Meredith and Aberdeen Additional Landfill Site is located at 503 Watson Road in the geographic Township of Macdonald of the District of Algoma. It is located 6 km southeast of the hamlet of Echo Bay, Ontario and 25 km east of the City of Sault Ste. Marie. The landfill property consists of a total area of 63.1 (156 acres). The site is comprised of Lots 10 and 11 of Registered Compiled Plan H-770, part of the SE ¼ of Section 28 of the geographic Township of Macdonald. Within this property as defined by ECA A561302 the area of the waste disposal and transfer site is 27 hectares (66.7 acres). The site location of the landfill is outlined on Location Plan Figure 1 – Landfill Location Plan.

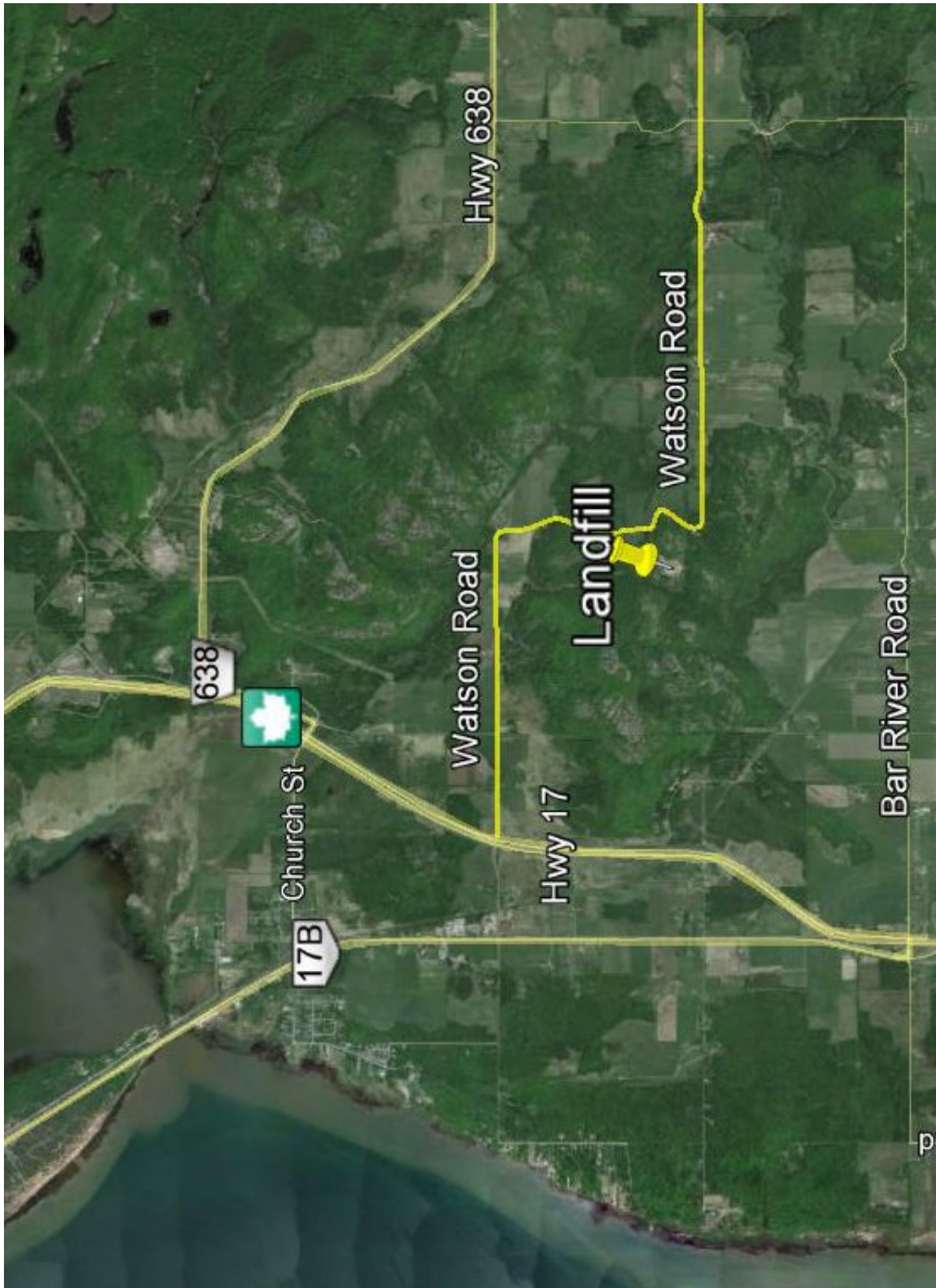


Figure 1 – Landfill Location Plan

2.2 Land Use

The property has an Official Plan designation as Rural in the Township of Macdonald Meredith and Aberdeen Additional Official Plan. All adjacent lands are all designated as Rural. The Zoning Bylaw has a designation of M2 - Industrial 2 Zone for the location of the landfill on the subject property. The remainder of the subject property and all adjoining properties have a Rural zoning designation. The Industrial 2 Zone designation allows for a non-residential use as follows:

- a) Waste Disposal Site
- b) Waste Recycling Depot

There are no changes required for the Official Plan or Zoning Bylaw designation for the landfill site property. The landfill operations will take place within the designated 27ha (66.7 acres) of the approved landfill footprint.

2.3 Physical Site Setting

The landfill is located west of Watson Road in a cleared area surrounded by trees and vegetation within the southeast quadrant of the property. The northeast quadrant of the landfill site in the area designated for the Contaminant Attenuation Zone (CAZ) is an open field which continues to be used for agricultural purposes. The remainder of the property which includes the southwest and northwest quadrants is covered with trees and is hilly with bedrock outcrops.

A small watercourse originates within the property at the midpoint of the property and flows northerly crossing Watson Road, Highway 17 and ultimately empties into Lake George. Surface water flow is varied due to the hilly terrain but the majority of the runoff from the landfill site would be collected into the watercourse although other runoff flows by surface flow off the property.

Access to the landfill is from Watson Road located on the east side of the property. Watson Road can be accessed from Highway 17 Four Lane to the west and from municipal roads to the east including Fords Road, Cemetery Road and McCarrel Lake Road.

3.0 LANDFILL DESIGN

3.1 Layout

The final layout of the landfill is outlined on Design Drawing 16-2008-G2 in detail. This layout was developed based on placement of existing waste at the site since the waste disposal site opened and various parameters as follows.

- Setback from Property Lines
- Setback from Watercourses
- Minimum Fill Gradient of 20:1 (5%)
- Maximum Fill Gradient of 4:1 (25%)
- Existing Access Road and Hydro Corridor
- Surface Drainage considerations

3.2 Landfill Waste

The landfill is approved to receive the following waste types as outlined in Condition 7 Landfill Design - Clause (1) of the ECA A561302.

- (a) Only municipal waste as defined under Reg. 347 being solid non-hazardous shall be accepted at the site for disposal.
- (b) Notwithstanding Condition 7.(1)(a), non-hazardous contaminated soil may be accepted at the Site for disposal.

Waste brought to the site is disposed of by placing it over the side of an embankment in an area fill method of landfilling. The waste is then landfilled, compacted and covered with interim cover material on a regular basis. The Municipality has implemented a bag tag program for disposal of household wastes. Each household received 105 bag tags that equate to an average of two garbage bags per week per household. Residents are not limited by what they can dispose any week but by the overall total for the year. The program is intended to encourage more recycling by diverting recyclable materials from the landfill that may normally be included with the regular household waste. Larger waste is placed directly into a landfill area for compaction and cover.

3.3 Recycling

The Municipality strongly promotes recycling efforts. The Municipality has constructed a joint attendant's office/share shed/recycling bin area. The program collects the following in blue bins:

- 1 bin - paper
- 3 bins - cardboard and boxboard
- 2 bins - Commingled No. 1 to No. 6 plastics, metal food containers as well as juice boxes and Styrofoam food trays
- 1 bin - glass jars

These blue recycling bins are located under cover at the landfill site. In addition, the Municipality also maintains blue recycling bins within the community of Echo Bay, Ontario at the Water & Sewage Treatment Plant. A brochure on the recycling materials taken through the blue bins program is included in Appendix B.

The multiuse building also contains a "Share Shed", a location for residents to drop off items that they no longer use but would have useful value to other residents. The Share Shed was opened in 2006 and has proved extremely popular with a significant number of items being reused.

The Municipality collects used tires as a courtesy to area residents and is part of the Ontario Tire Stewardship Program as a Collector. The Municipality has an agreement with a hauler from Sudbury to remove the tires.

The Municipality is enrolled in the Waste Electrical and Electronic Equipment program (WEEE) through Ontario Electronic Stewardship (OES). A covered storage bin is set up on site to collect electronics which is hauled away by Green for Life Algoma. A brochure on this program is included in Appendix B.

The Municipality has an agreement with the City of Sault Ste. Marie for the disposal of household special waste including motor oils, batteries, and paints. Residents dispose of these wastes directly at the Household Special Waste Facility at 115 Industrial Park Crescent in the City of Sault Ste. Marie. A summary of materials received at this site is included in Appendix B.

4.0 SITE LAYOUT

4.1 Roads

The landfill site has one access road to the site from Watson Road. The access point is on the east limit of the site. The access road directs residents to report to the attendant where they can inspect vehicles and the waste they intend to dispose of. This gives the attendant an opportunity to direct material to areas for disposal or recycling as well as reject waste not suitable for disposal. The waste disposal and recycling areas are beyond the site attendant's office and are all relatively in close proximity allowing the site attendant to observe all operations. There are also trails within the site that allow four wheel drive access to monitoring wells and surface water sampling sites. Access Roads, Trails and the hydro corridor are outlined on Drawing 16-2008-G1.

4.2 Gates & Fencing

The access to the site is controlled by a gate at the entrance off of Watson Road. The gate is locked whenever the landfill site is not open to the public so that placement of waste is supervised by the site operator. There is no perimeter fencing for the site required given the rugged terrain surrounding the landfill area.

4.3 Screening

The landfill footprint consisting of waste areas and operational features including the building housing the site attendant's office, share shed and recycling centre is well screened from Watson Road and adjacent residences. This screening is provided by a significant forest buffer and the terrain around the footprint consists of higher bedrock bluffs that provide visual and noise screening from the site.

4.4 Surface Water Drainage

Surface Water Drainage on the site consists of roadside ditching for the access road. As the landfill is being developed as an area fill design there is limited need to divert surface water away from the landfill. The active face of the landfill is directed towards the north while runoff from the south is directed westerly to a roadside ditch and easterly towards the watercourse.

5.0 WASTE PLACEMENT

5.1 Fill Method

The landfill uses the area fill method of landfilling. Originally the landfill utilized excavated trenches for placement of landfill and covering with the excavated material. As locations for placement of trenches were used up the landfill shifted to the area fill method. The location of the landfill building is built over landfill waste. The landfill waste is now placed to the north of the landfill building.

Landfill waste or disposal is required to be delivered directly to the landfill by residents or arranged for disposal through a third party service provider. All residents are required to check in with the site attendant at the site office prior to placement of waste. At that time special instructions can be provided to the resident on directing the location of wastes or recyclable material. Waste is placed in defined locations to facilitate the disposal, placement, compaction and interim covering of waste. In regards to waste that is to be landfilled the following areas of designated waste are differentiated.

Household Waste (Garbage Bags)

Miscellaneous Waste (Furniture, Construction Material, larger waste)

Shingles

Ashes

5.2 Operating Hours

The landfill site operates three days a week – Tuesdays, Thursdays, and Saturdays. The hours for the landfill site are outlined in the following Table.

Hours of Landfill Operations			
Season	Tuesday	Thursday	Saturday
Summer April 1 – September 30	12 noon to 8 pm	12 noon to 5 pm	8 am to 5 pm
Winter October 1 – March 31	12 noon to 5 pm	12 noon to 5 pm	9 am to 5 pm

5.3 Winter Operations

The landfill site requires special operation measures during winter conditions because of the impact of snow and cold on access and on the landfill waste and cover material.

Access Roads

To ensure that accessibility to the landfill is maintained during the winter the municipal roads department completes snow plowing of the access roads to waste disposal locations. As needed, on the steep access road sections winter sand is placed to aid traction.

Waste

The waste placed during the winter is subject to snow cover and freezing. The waste is compacted and covered when conditions permit in the area fill method of landfilling. The winter season experiences lower volumes of waste as seasonal residents of household waste due to lower population with seasonal residents and the less property cleanups being conducted at that time of year. The ECA outlines that waste shall be covered weather permitting biweekly.

Cover Material

Material for interim cover of landfill waste is susceptible to freezing prior to placement. The municipality typically stockpiles contaminated soil that has been brought to the landfill for future use as cover material. The material typically consists of sands and gravels as this type of material is more likely to be contaminated from petroleum spills. Sands and gravels are less susceptible to freeze if stored in a stockpile. This material is then available for interim cover.

5.4 Equipment & Procedures

Landfill waste or disposal is required to be delivered directly to the landfill by residents or arranged for disposal through a third party service provider. All residents are required to check in with the site attendant at the site office prior to placement of waste. At that time special instructions can be provided to the resident on directing the placement of wastes or recyclable material. Waste is placed in defined locations to facilitate the disposal, placement, compaction and interim covering of waste. In regards to waste that is to be landfilled the following areas of designated waste are differentiated.

Ashes

Ashes are placed into a shallow pit to prevent the placement of potential hot coals igniting wood waste or household waste. As the volume of ashes placed is relatively minimal the placement location needs to be relocated only occasionally.

Shingles

Shingles are placed in a designated dumping location away from other waste to avert the problem with tire punctures from nails within the shingles. Shingles are periodically covered with interim cover material.

Household Waste

Household waste is considered waste that is contained within garbage bags and is the everyday household waste that is generated. This is placed by residents in a designated location at the base of a 2.5m embankment to facilitate placement. The top of the embankment is protected with large concrete blocks to prevent vehicles from crossing over the embankment. Waste is typically moved from the base of the embankment on a biweekly basis weather permitting into a waste fill area. The waste is compacted in place utilizing a bulldozer. The waste is then covered with interim cover material to a depth of 150mm (6") using a bulldozer and backhoe. Material used for cover is typically granular material that has been deposited at the site as non-hazardous contaminated soil resulting from cleanup of petroleum contaminated service sites.

Miscellaneous Waste

Miscellaneous waste is defined as waste that is not typical household waste collected in garbage bags and tends to be larger waste not normally deposited of by residents. Types of waste that would be categorized as miscellaneous waste is old furniture, construction materials, garden waste and other larger waste types. These types of wastes are placed directly in designated location for landfilling. They are then compacted with a bulldozer and covered with interim cover on an occasional basis.

Equipment

The municipality utilizes the following equipment for the transporting, compaction and interim covering of waste:

- Bulldozer – John Deere 750D
- Backhoe – Volvo BL70

5.5 Supervision & Monitoring

The municipality has staff dedicated to oversee the landfilling operations. This includes a landfill site supervisor (public works superintendent) and site attendants. The landfill will have a landfill site attendant on duty at all times that the landfill is open to the public supervising and monitoring the activities.

Waste acceptance procedures are as follows.

1. Residents are expected to make the site attendant aware that they are entering the site by stopping at the site attendant's office. The attendant will determine that the vehicle owner is a resident of the Township of Macdonald Meredith and Aberdeen Additional as well as the type of waste for disposal. The attendant will monitor the placement of waste to ensure they are in a tied garbage bags with a current bag tag affixed. Attendant will monitor the placement of recycling materials including placement of cardboard, paper, comingled (metal, plastic, Styrofoam, cartons) and glass bottles into the recycle bins to ensure that no unsuitable materials are disposed

- of. The attendant will direct placement of other items including tires, metal to the scrap metal bin, wood waste to the burn barrel and larger waste items to the drop zone in the Area Fill Cell. The attendant will receive and record payment for materials received subject to tipping fees.
2. The site attendant will ensure that inappropriate types of waste including materials considered hazardous household waste is not disposed of within the landfill site. The resident will be directed to bring hazardous household waste to the City of Sault Ste. Marie Household Special Waste Depot located at 115 Industrial Park Crescent. The depot is open Thursdays to Saturdays from April to October.
 3. The site attendant will keep a landfill log book to record daily activities at the landfill site. Records of rejected waste and material removed from the site are also maintained in the log book including occurrences of placement of interim cover. The following are items that will be recorded in the log book.
 - Record estimated amount of household waste placed
 - Record of larger waste placed directly in area cell
 - Record of moving, compacting and interim covering of waste
 - Waste wood burning completed
 - Replacement of scrap metal bin
 - Removal of tires
 - Removal of electronics
 - Removal of recycled materials
 - Rejection of waste and reason
 - Complaints received
 - Operational problems

5.6 Handling of Miscellaneous Wastes

Shingles

Shingles that are deposited at the landfill are deposited in a separate location and covered periodically. The placement of shingles in a separate location is to minimize the issues with tire punctures resulting from driving over nails embedded in shingles as it provides site attendants to manage the placement of shingles and clean up shingles in the designated area.

Wood Waste

Wood waste that is clean such as brush, wood and untreated lumber is directed to the burn barrel where it is burned to reduce the amount of waste being landfilled. Pressure treated, painted or stained wood is not accepted at the burn barrel due to the toxic fumes that would result from burning this wood.

Ashes

Ashes are deposited in a dedicated area separate from other waste. This ash disposal area is a small pit away from any potential burnable material. This dedicated area for ashes is to address an issue with hot ashes that residents will occasionally dispose that cause fires to be ignited in either the household waste disposal area or in the burn barrel.

5.7 Housekeeping Practices

Wind Blown Litter

Wind-blown litter is cleaned up typically six times per year by site attendants and municipal summer students. The litter is collected into garbage bags and disposed of in the landfill.

Access Road

The existing access road is surface treated so that placement of dust suppressants is not required. Filling of potholes is conducted when necessary on the surface treatment by the municipal public works staff.

Share Shed

The placement of surplus items within the share shed is well used by area residents. Although a significant quantity of items left are reused, the share shed needs to be occasionally purged of items that are taking up usable shelf space for an extended period of time. Therefore the site attendants will periodically remove unusable items and place into the landfill.

6.0 SITE CLOSURE

At least three years prior to the anticipated date of closure of this Site, the Township of Macdonald Meredith and Aberdeen Additional shall submit to the Director for approval, with copies to the District Manager, a detailed Landfill Site Closure plan pertaining to the termination of landfilling operations at the site, post-closure inspection, maintenance and monitoring, and end use. The plan shall include but not be limited to the following information as detailed in ECA A561302 Section 9 Closure Plan.

- Plan showing site appearance
- Description of the end use of the site
- Procedures for closure of the site
- Post-closure care of the site
- Assessment of need to implement contingency plans for leachate and methane gas
- Estimate of contaminating life span of the site

6.1 Final Contours

The final contours of the landfill shall consist of final maximum slopes of 4:1 (25% grade) and minimum slope of 20:1 (5% grade). The site will be filled progressively so that the final contours will be achieved without the need to complete extensive regrading. Drawing 16-2008-G2 outlines the preliminary final layout of the landfill with extension of waste progressively filled from north to south and raised to its final grade as it progresses.

6.2 Final Cover

The minimum thickness of 600 mm of compacted clay and an additional 150 mm of topsoil will be placed. The clay cover will be compacted in 300 mm lifts and compacted to at least 95% of the maximum standard dry proctor density. Clay material will be sourced locally as it is readily available in the area. The clay will form an impermeable layer to ensure rainfall will runoff, thus reducing the amount of leachate that can be generated. The final cover will be seeded with trefoil to control erosion and be monitored for vegetative growth. The vegetative cover will protect against erosion and encourage transpiration. It is expected that over time the site will have a natural regrowth of native trees develop across the site.

7.0 MONITORING

A certified Professional Geoscientist or Engineer possessing appropriate hydrogeological training and experience shall execute or directly supervise the execution of the monitoring and reporting program.

7.1 Surface Water

Surface water samples from four surface water sites location as identified on drawing 16-2008-G1 will be obtained and analyzed at least three (3) times per year (Spring, Summer and Fall) which is at least 60 days apart.

All samples shall be analyzed for parameters listed in *Schedule 5 of the Ministry's Landfill Standards: A Guideline on the Regulatory and Approval Requirements for New or Expanding Landfilling Sites, January 2012*. Spring and summer samples shall be analyzed for the parameters listed in Column 4 of Schedule 5 (Indicator List for Surface Water) and the fall samples shall be analyzed for the parameters listed in Column 3 of Schedule 5 (Comprehensive List for Surface Water). The temperature and the pH of the water sample will be recorded during the sampling event.

7.2 Groundwater

Groundwater samples from all wells in the above-described monitoring network will be obtained and analyzed at least three (3) times per year (Spring, Summer and Fall) which is at least 60 days apart.

All samples shall be analyzed for parameters listed in Schedule 5 of the Ministry's *Landfill Standards: A Guideline on the Regulatory and Approval Requirements for New or Expanding Landfilling Sites, January 2012*. Spring and summer samples shall be analyzed for the parameters listed in Column 2 of Schedule 5 (Indicator List for Groundwater and Leachate) and the fall samples shall be analyzed for the parameters listed in Column 1 of Schedule 5 (Comprehensive List for Groundwater and Leachate). Groundwater elevations in all monitoring wells shall be measured during each monitoring event prior to obtaining water quality samples.

7.3 Reporting

An annual report shall be prepared as detailed in Environmental Compliance Approval A561302 under Section 6. Inspections, Record Keeping and Reporting Clause (7)

- an accurately scaled site plan
- an accurately scaled location map
- a water table contour map based on current data
- stratigraphic cross-sections
- borehole logs for all monitoring wells
- tables illustrating historical water chemistry and water level data
- graphs illustrating historical water quality trends with time for key leachate indicator parameters
- an assessment of monitoring data to evaluate compliance with the requirements of Ministry's Guideline B-7 and the PWQO's
- recommendations for future monitoring and/or remedial actions
- a section detailing the field sampling protocols and QA/QC measures

7.4 Monitoring Plan Changes

The Township of Macdonald Meredith and Aberdeen Additional may request changes to the monitoring program(s) to the District Manager in accordance with the recommendations of the annual report. The municipality shall make clear reference to the proposed changes in a separate letter that shall accompany the annual report.

7.5 Trigger Mechanism

At the recommendation of Hydrogeologist Peter Richards of Waters Environmental Geosciences Inc. we are proposing the collection of one additional year of water sample data prior to identifying landfill monitoring trigger criteria that are tailored and specific to the site. At present there is limited data available for the surface water collection site at the property boundary. The collection of one or two years of additional data will facilitate a reasonable approach to developing the landfill monitoring trigger criteria.

7.6 Landfill Gas

No active landfill gas collection system exists at the landfill site and there is no landfill gas monitoring program currently required.

The only building on site is the joint site attendant office / share shed. The share shed was designed by an engineering consultant after excavation of test holes at the site. To eliminate any issue with landfill gas the structure was constructed as a slab on grade with a vapour barrier placed on the granular fill prior to pouring the concrete slab.

7.7 Monitoring Well Maintenance Activities

During completion of groundwater well sampling three times a year the monitoring well shall be inspected to ensure that the well is in good condition and the locks are intact.

Any discovered deficiencies to the well will be reported in the log book as well as reported to the municipality. Repairs to the well will be completed within three months weather permitting.

8.0 SITE MANAGEMENT

8.1 Inspection Activities

The inspection activities for the landfill are recorded in the daily log book. The following information is recorded in the log book. A copy of a blank page of the log book is included in Appendix C.

- Record of Waste Collected
 - Household Waste
 - Shingles
 - Trailer Loads
 - One-half Ton Loads
 - Tandem Loads
 - Dump Trailer Loads
- Record of Removal of Tires
- Record of Removal of Scrap Metal
- Removal of Electronic Bin
- Record of Burns
- Other Relevant Info (Refusals etc.)
- Operational Notes (Observations, Deficiencies, Repairs, Concerns, Duties Performed)
- Deficiencies Discovered
- Recommendation for Remedial Action

A monthly Workplace Inspection is completed by municipal staff of the Attendants Office / Share Shed. This inspection utilizes a checklist that allows the inspector to confirm that the building is kept in a safe condition.

8.2 Site Operator Training

The site operator has received formal training at the Small Landfill Operations course put on by WESA (Water and Earth Sciences Associates). The site attendants have received training on site operations from the site operator and previous site attendants. Formal training will be completed when a landfill course is available within Northern Ontario. The site operator and site attendants have been made aware of landfill practices through review of Small Landfill Operations course book available at the landfill site office. A copy of the amended ECA A561302 is available for review at the landfill site office.

8.3 Contingency Plans

8.3.1 Fire

The following *Fire Response Action Plan* is to be implemented to control any fires within the subject property. Potential fires may include an accidental fire during the burning of wood waste within the designated burn barrel, the disposal of live ashes within embers or an inadvertent fire resulting from activity within the landfill. The *Fire Response Action Plan* would be triggered once a fire is noted to have taken place, excluding a controlled fire within the designated burn barrel. All site attendants should be trained in fire procedures and should be familiar with the *Fire Response Action Plan* and the location of the *Fire Response Equipment*. Immediate fire containment and clean-up is the priority of this *Fire Response Action Plan* in order to mitigate any environmental damage.

Following is a summary of the *Fire Response Action Plan*.

1. The person responding to the fire would initially ensure that they are fully equipped with all required safety equipment as necessary (work boots, work gloves, fire extinguisher, shovel).
2. The person shall move people and vehicles safely away from the location of the fire.
3. The source of the fire will be immediately determined and extinguished with available equipment and adjacent fuel sources removed from the path of the fire.
4. If the fire cannot be immediately safely extinguished Call 911 to arrange for the Macdonald Meredith Fire Department to respond to the fire at 503 Watson Road.
5. After the fire is extinguished monitor the fire location to ensure that the fire is fully extinguished by checking for hot spots on a regular basis.
6. Make a record of the fire incident within the daily log book and inform the municipal office at 705-248-2441.
7. The *Fire Response Equipment* will include the following items:
 - A written description of the *Fire Response Action Plan*,
 - A *Fire Response Kit* containing the following items as a minimum:
 - A 5lb ABC Fire Extinguisher
 - A Round Mouth Shovel

- A Garden Rake
- 2 Five Gallon Buckets

In addition to the above *Fire Response Action Plan*, the following general measures should also be implemented on the site:

- A designated site for ashes shall be available for residents
- Wood waste to be burned should only be placed in the burn barrel under the supervision of the site attendant
- Burning of the wood waste within the burn barrel should be kept under the full time observation of the site attendant
- Fully extinguish the fire within the burn barrel at the end of the day
- Do not burn within the burn barrel on excessively windy or dry days
- In the case of a municipal fire ban or a provincial restricted fire zone the landfill will not receive wood waste
- An onsite 4,500 L (1,000 ig) bulk water tank shall be available for additional water source in fighting fires and shall be refilled immediately after use
- On site fuel should be stored in safe locations

8.3.2 Medical Emergency

Following is a summary of the *Medical Emergency Action Plan* for the landfill site.

1. Assess Medical Emergency.
2. If necessary Call 911 – Site Address 503 Watson Road
3. Administer First Aid.
4. After Medical Emergency is complete document the incident in the Daily Logs.
5. Arrange for replenishing First Aid Kit and/or servicing automated external defibrillator (AED) as required
6. The *Medical Emergency Response Equipment* will include the following items:
 - A written description of the *Medical Emergency Action Plan*,
 - A *Medical Emergency Response Kit* containing the following items as a minimum:
 - A First Aid Kit
 - An automated external defibrillator (AED)

8.4 Stormwater Management

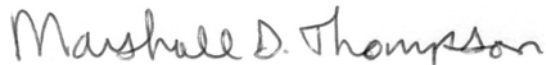
The municipality shall take all appropriate measures to minimize surface water from coming in contact with landfill waste. Temporary berms and ditches will be constructed around the active waste disposal areas as necessary to prevent extraneous surface water from coming in

contact with the active working face. The prevention of stormwater coming in contact with waste will minimize the generation of leachate.

9.0 SUMMARY

This Design and Operations Report for the Macdonald Meredith & Aberdeen Additional Landfill Site was prepared to fulfill the requirements of the amend Environmental Compliance Approval A561302. The landfill was operating under the provisional certificate of approval that was limited in providing direction on the functioning of the landfill site. The municipality had applied to the MOECC to amend the C of A to include an additional property purchased by the municipality to function as a Contaminant Attenuation Zone to the north of the landfill site. The MOECC in reviewing the application choose to implement a number of conditions related to the operation, monitoring and closure of the landfill site. The site will continue to be operated in a manner that is consistent with the generally accepted best management practices for natural attenuation landfills in the Province of Ontario.

Respectively Submitted,



Marshall D. Thompson, P.Eng.

TULLOCH ENGINEERING INC.

Appendix H
Notice of Completion

Notice of Completion of Environmental Screening Process Township of Macdonald, Meredith & Aberdeen Additional Landfill

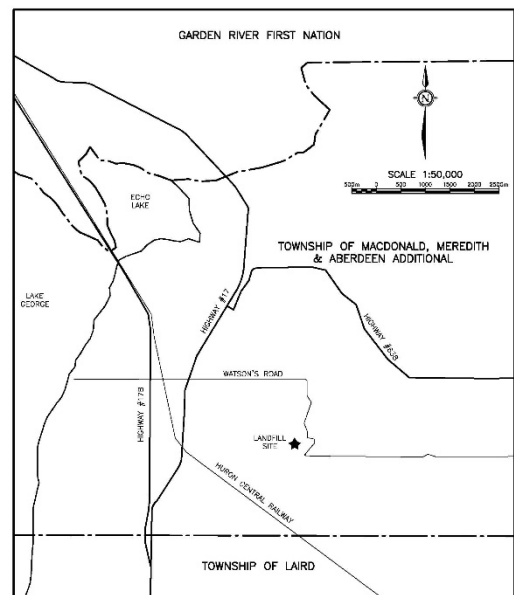
The Township of Macdonald, Meredith & Aberdeen Additional has completed an Environmental Screening Report under the Environmental Screening Process in accordance with O.Reg. 101/07 s.10, Waste Management Projects, under the Environmental Assessment Act (EAA). This Environmental Screening Process was completed to assess expanding the service area to allow the landfill to accept non-hazardous contaminated soil from the entire District of Algoma. The soil will be used exclusively for daily and interim cover. The current amended Environmental Compliance Approval No A561302 allows receiving waste from the municipal Township of Macdonald Meredith and Aberdeen Additional and the unincorporated Township of Kehoe. The Environmental Screening Process identifies advantages, disadvantages, and potential impacts that the undertaking might have on the surrounding environment.

The Screening Process was carried out in accordance with the Ministry of Environment, Conservation and Parks guidelines. The process showed that there are no known environmental impacts, concerns or issues that will result from the proposal.

The process involved public consultation at various stages beginning with a Notice of Commencement. A second notice was included in the Municipal Newsletter shortly after, followed by a letter to affected parties, government agencies, and First Nation communities. Two comments were received with no concerns.

The Environmental Screening Report is available for review and has been posted on the Township's website. Copies can be emailed or printed and mailed upon request. Due to the current COVID-19 restrictions, copies are not available at the Library or Municipal office for review. The Environmental

Screening Report, posted on February 10, 2021, will be available for review for a period of sixty (60) days. Interested persons will be able to provide written comment on the proposal until April 11, 2021. Comments should be directed to the Township and the Consulting Engineer:



The Township of Macdonald, Meredith, and Aberdeen Additional

208 Church Street, P.O. Box 10
Echo Bay, ON P0S 1C0
Phone: +1-705-248-2441, Fax: +1-705-248-3091
E-mail: lduguay@onlink.net
Attention: Lynne Duguay, Clerk Treasurer

Tulloch Engineering Inc.

200 Main Street, P.O. Box 579
Thessalon, ON
P0R 1L0
Phone: +1-705-842-3372
E-mail: thessalon@tulloch.ca

If concerns arise regarding this project, which cannot be resolved in discussion with the Municipality, a person or party may bring their concerns to the Director of the MECP Environmental Assessment and Permissions Branch to request that the project be elevated to an individual Environmental Assessment. Request must be received by the Minister at the address below within 60 calendar days of the Notice of Completion. If there is no request received by April 11, 2021, the Municipality will complete and submit the Statement of Completion.

Director, Environmental Assessment and Permissions Branch

Ministry of the Environment, Conservation, and Parks

2 St. Clair Ave West, Floor 12A

Toronto, ON

M4V 1L5

Fax: 416-314-8452

enviopermissions@ontario.ca

All elevation requests must include the following information:

- the name of the Project and Proponent,
- the basis of the request,
- that the project be elevated to an individual environmental assessment,
- the nature of the specific environmental concerns that remain unresolved,
- the benefits of requiring the proponent to undertake an individual environmental assessment,
- information about any efforts to discuss/resolve these concerns/environmental effects with the Proponent,
- details of any correspondence between the Person and the Proponent, and
- any other matters considered relevant by the requesting person.

A copy of the written elevation request should also be sent to the Township and the Consulting Engineer.

Unless stated in the submission, all personal information included in an elevation request will become part of the public record file for the project and will be available to any person upon request.

The Township of Macdonald, Meredith, and Aberdeen Additional

Lynne Duguay, Clerk Administrator

208 Church Street, PO Box 10

Echo Bay, ON, P0S 1C0

Phone: 705-248-2441

Email: lduguay@onlink.net

Notice date: February 10, 2021