

THE CORPORATION OF THE TOWNSHIP OF HILTON

A G E N D A

Special Meeting of Council

June 16, 2025 – 7:00 pm

Council Chamber - Hilton Township Municipal Building

[Click Here to Join Through Microsoft Teams](#)

Meeting ID: 280 890 620 932 0

Passcode: Kh3b9pM7

1. Call to Order
2. Declarations of Pecuniary Interest
3. Motion to Accept Agenda as presented
4. Delegations: none
5. Landfill Discussion re:
 - a) Current By-Law # 575-Agreement between the Village of Hilton Beach and the Township of Hilton
 - b) Correspondence from 2008 & 2009 re operating costs/agreement negotiations
 - c) Landfill Usage: Breakdown provided by the Village of Hilton Beach dated April 17, 2025
Breakdown calculations to be done by Hilton Township
 - d) Correspondence received from the Village of Hilton Beach dated April 10, 2025, re Recycling
 - e) Correspondence sent to the Village of Hilton Beach dated May 20, 2025, with response dated June 12, 2025
 - f) Design Operations Plan dated October 4, 2022
6. Confirmatory By-law
7. Adjourn

THE CORPORATION OF THE TOWNSHIP OF HILTON

BY-LAW NO. 575

Being a By-Law to amend Exhibit "A" to
By-Law No. 433, being an agreement for
the operation of a Waste Disposal Site.

WHEREAS municipalities may amend by-laws previously passed by
them;

AND WHEREAS the Council of the Corporation of the Township of
Hilton deems it necessary and expedient to amend Exhibit "A" to By-Law No. 433
entering into an agreement with the Incorporated Village of Hilton Beach for
the operation of a Waste Disposal Site;

NOW THEREFORE the Council of the Corporation of the Township of
Hilton hereby enacts as follows:

1. The Section of Exhibit "A" to By-Law No. 433 of
the Corporation of the Township of Hilton entitled
"Waste Disposal Site" be deleted in its entirety
and Exhibit "B" attached to and forming part of
this By-Law be substituted therefore.
2. The Reeve and Clerk are hereby authorized to sign
the agreement contained in Exhibit "B" to this By-Law
on behalf of the Corporation of the Township of Hilton.
3. This By-Law comes into force on the date of its final
passing and into effect on the 1st day of January, 1991.

Read a first and second time this 6th day of November, 1991.

Read a third and final time and passed this 6th day of November, 1991.



REEVE



CLERK

EXHIBIT "B"

AGREEMENT

BETWEEN the Incorporated Village of Hilton Beach and the Corporation of the Township of Hilton made this 6th day of November, 1991.


WHEREAS the Parties hereto wish to share certain facilities for the provision of a waste disposal site and the costs for the operation and maintenance thereof, together with the costs incidental thereto;


NOW THEREFORE, the Parties hereto, agree as follows:

1. To maintain and operate a waste disposal site owned by the First Party on the North half of Lots 3 and 4, Concession 15, in the said Township.
2. The First Party shall be responsible for the overall supervision of the waste disposal services and will bill the Second Party regularly for Fifty Per Cent (50%) of the costs, providing appropriate details justifying the amounts.
3. The Second Party shall be responsible for the maintenance and the snow removal and sanding of the access to the disposal area from the corner of the Base Line and M & N Line and shall provide the Clerk of the First Party with a detailed summary of these costs. This will form a part of the total site costs and will be cost shared equally by the two Parties.
4. That this Agreement may be terminated by either Party at the end of any fiscal year provided that six months notice in writing had been provided to the other Party.


In Witness Whereof the Parties have agreed hereto on the 6th day of November, 1991.

VILLAGE OF HILTON BEACH


D.T. Desjardin, Reeve


Gloria Fischer, Clerk

TOWNSHIP OF HILTON


S. J. Fischer, Reeve


E. Ann Langer, Clerk



INCORPORATED VILLAGE OF HILTON BEACH

By-Law # 573

Being a By-law to amend Exhibit "A" to By-law #454, being an agreement for the operation of a Waste Disposal Site.

WHEREAS municipalities may amend a by-law previously passed by them;

AND WHEREAS the Council of the Incorporated Village of Hilton Beach deems it necessary and expedient to amend Exhibit "A" to By-law #454 entering into an agreement with the Corporation of the Township of Hilton for the operation of a Waste Disposal Site;

NOW THEREFORE the Council of the Incorporated Village of Hilton Beach ENACTS AS FOLLOWS:

1. The Section of Exhibit "A" to By-law #454 of the Incorporated Village of Hilton Beach entitled "Waste Disposal Site" be deleted in its entirety and ~~EXHIBIT~~ ^{EXHIBIT} Schedule "B" attached to and forming part of this By-law be substituted thereto.
2. The Reeve and Clerk are hereby authorized to sign the Agreement contained in Exhibit "B" to this By-law on behalf of the Incorporated Village of Hilton Beach.
3. This By-law comes into force on the date of its final passing and into effect on the 1st day of January, 1991.

Read a first and second time this 30th day of October, 1991.

Read a third and final time and passed this 30th day of October, 1991.

VILLAGE OF HILTON BEACH


D.T. Desjardin, Reeve


Gloria Fischer, Clerk

LANDFILL MEETING
November 27th, 2008

The meeting was called to order at 7:40 p.m. Members present were Pat Gar-side, Dave Leask and Wilfred Stevens. Valerie Obarymskyj also was in attendance for the Township.

The minutes of the June 16th meeting was reviewed. No changes were noted.

The document entitled "Hilton Township Questions/Concerns Regarding Village's Propose Terms for New Landfill Agreement" was circulated and discussed.

The Township representatives indicated that they were in agreement to pay 60% of the costs of the landfill but did not agree with the additional lump sum payment proposed by the Village. During the discussions it was clarified that the Township was in agreement to share all costs on the 60:40 formula – operating + capital + replacement. (1)

All concurred that the facility is owend by the Village and that the final say in decisions would remain with the Village. However the Township wants a committee established that could discuss landfill issues and operation such as this committee that was established to negotiate the new agreement.

(2) The issue of the tippage fees was discussed. It was noted that the fees included all tippage fees and not just those collected by the landfill attendant

It was acknowledged by the Village that a reserve has not yet been established for the landfill.

(3) It is the Township's position that by not putting the tippage fees into a reserve and to pay a lump sum payment for the capital, closure and replacement costs is "paying twice".

It was decided to bring these discussions back to the respective Councils and to meet again on December 17th.

HILTON BEACH LANDFILL
Summary of Tipping Fees
2004 - 2007

	2004	2005	2006	2007	Total
Household	1,751	1,282	2,137	2,345	7,515
Bulk	-	750	1,025	150	1,925
Sludge from MMAA	1,605	2,100	2,968	3,657	10,330
	3,356	4,132	6,130	6,152	19,770

Bulk

05: Wessell - building

06: Lajoie - material available for cover

07: Karhi - small building

2008 11 29

December 5, 2008

Village of Hilton Beach
P.O. Box 25
Hilton Beach, Ontario
P0R 1G0

Dear Mayor Stevens and Members of Council:

Re: Landfill Agreement

This letter will confirm that at its regular meeting on December 3, 2008, Council for the Township of Hilton reviewed the Minutes of the Landfill Committee Meeting held November 27, 2008. Hilton Council is aware that the Village will also be addressing terms for the new landfill agreement at its December 10, 2008 meeting. In an effort to have a finalized agreement in place early 2009, Hilton Council would like to address certain points in the Committee Minutes prior to the next committee meeting.

As a backgrounder to the following comments, a copy of the document provided to the Landfill Committee is attached for easy reference (ie. "Hilton Township Questions/Concerns Regarding Village's Proposed Terms for New Landfill Agreement").

Referring to notation #1 in the Landfill Meeting Minutes: Hilton Township committee members agreed to share all operating and capital costs on a 60/40 basis, with Hilton Township covering the 60%. Hilton Township members, however, did not state that 'replacement' costs should be shared on the same basis. Hilton Township members reiterated that replacement costs are already being addressed with the waiving of tippage fees for the dump.

It was the Village Council's recommendation at a joint meeting on April 21, 2004, that tippage fees would no longer be used to offset the share of costs paid by each municipality, but rather, be held in a reserve fund for starting a new dump site. Since that time, there have been numerous occasions, either at the annual joint meetings, or during the landfill committee meetings, when the status of such funds has been questioned. Each time the response has been that the actual amount was unknown but that it was minimal. After a review of the Village's Financial Information Returns for the period 2004 – 2007, the actual amount is shown to be \$19,770 which Hilton Township Council does not consider to be an insignificant amount. It was acknowledged at the committee meeting that these funds had not been transferred into a reserve fund as agreed upon by both councils but that it was something that still could be done. Hilton Township Council is now asking for confirmation these funds will be transferred to such a Reserve Fund prior to the end of 2008.

It is on the basis of our agreement to waive our share of the tippage fees that Hilton Township is not prepared to address an additional payment for 'replacement' cost.

Referring to notation #2 in the Landfill Committee Minutes: It was noted at the committee meeting that the tippage of \$19,770 included revenue from the disposal of a few homes in the Village. There was no mention it also included revenue from sludge accepted from MacDonald Meredith. Hilton Township's concern with the sludge is that it was not included in the Village's calculation for its share of usage and it certainly has an effect on the longevity of the site. In addition, if there are maintenance costs associated with the sludge, of which Hilton Township is paying a share, the question becomes why this revenue would be kept separate from other tippage fees intended to benefit the dump.

Referring to notation #3 in the Landfill Committee Minutes: This statement is not an accurate reflection of the Township's position. First of all, capital expenditures are not a part of this issue. The Township agreed to pay 60% of all capital costs. The issue is with replacement and closure costs. If the Township continues to be asked to waive its share of all tippage fees and asked to pay 60% of a proposed annual figure to address replacement costs, this does amount to paying twice. Again, the entire premise for waiving the tippage fees was to set up a reserve for future costs associated with dump closure and dump replacement. If we continue to waive our share of the tippage fees, the Township believes that addresses the replacement cost issue and an additional fee is not warranted.

Secondly, with regard to closure costs, the Village, itself, has determined such costs to be very low given the long life expectancy of the landfill site. In its FIRs during the years 2004 – 2007, the Village has reported annual costs of \$365 - \$395 as its estimate for closure costs. Council for Hilton Township believes the amount that has already been collected in tippage fees over the past four year period, more than adequately addresses the closure cost issue.

Also attached is a "Memorandum of Agreement" the Township suggests should formalize the proposed agreement between our two municipalities. Strictly an oversight, this agreement was not provided at the last committee meeting, but again, in an effort to expedite this matter, Hilton Township would appreciate the Village Council reviewing the document. It was suggested by our insurance representative as a more appropriate agreement than our previous by-law that mainly addressed costs. The document was drafted by our lawyer and subsequently provided to Algoma Insurance for its comments. Several changes were made as the result of recommendations by Mr. Rob Walz.

The Landfill Committee will be meeting again on December 17, 2008. It is hoped that both parties will be able to reach an agreement resulting in a compliant, well managed landfill that will serve the ratepayers of both communities for many years to come.

Sincerely,

James See
Reeve – Hilton Township

5) b) v)

INCORPORATED VILLAGE OF HILTON BEACH

3064 HILTON ROAD, P.O. BOX 25
HILTON BEACH, ONTARIO - P0R 1G0

PHONE (705) 246-2242
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E-MAIL: info@hiltonbeach.com
WEBSITE: www.hiltonbeach.com

2009 01 13

Council
Township of Hilton
Box 205
Hilton Beach, ON
P0R 1G0

Dear Council:

Re: Landfill agreement

After consideration of the discussions held and correspondence exchanged over time, Council proposes a three year agreement with the operating and capital costs being split 60% for the Township and 40% for the Village plus \$3,600 to be paid annually by the Township.

As time is of the essence, Council asks for a reply by January 30th. If the above is not accepted then the Village will calculate a flat fee for service rate.

It is the desire of this Council, and we are sure of your Council, to have an agreement in place by March 31st, of this year. Let's work to ensure that this goal is achieved.

Yours sincerely,



Gloria Fischer
Clerk-Treasurer

5) b)vi)

January 15, 2009

Village of Hilton Beach
P.O. Box 25
Hilton Beach, Ontario
P0R 1G0

Dear Mayor Stevens and Members of Council:

Re: Landfill Agreement

This letter will confirm receipt of the Village's January 13, 2009 correspondence detailing new terms for a landfill agreement between our two municipalities.

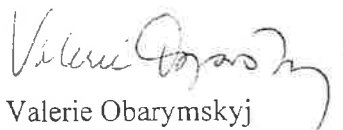
Hilton Township Council will not accept the proposed terms of the agreement.

Originally, the Village of Hilton Beach proposed terms that would involve Hilton Township taking on a 60% share of the operating expenses and an annual lump sum payment of \$3,600. Hilton Township advised at that time that it could not agree to paying a lump sum amount for which no accounting could be provided. In lieu of a lump sum, Hilton Township offered to take on 60% of both operating and capital expenditures, despite holding no ownership in the property. Hilton Township also agreed that all final decisions regarding the dump operation would remain with the Village. Hilton Township also agreed to continue to waive its share of any tippage fees, as per our 2004 agreement with the Village, recognizing these fees would build toward future replacement/closure costs.

The most recent proposal from the Village, asking for Hilton Township to cover 60% of operating expenses, 60% of capital expenses and pay a lump sum payment of \$3,600 does little to support the concept of our two municipalities working together. On a personal level, our two members of the Landfill Committee find this proposal extremely disheartening after an almost two-year period of meetings and discussions.

Please provide us with the flat fee for service as soon as possible so the amount can be considered in our budget deliberations and our ratepayers can be advised.

Sincerely,



Valerie Obarymskyj
Clerk

Township of Hilton

From: Robert Walz [rwalz@algomains.com]
Sent: Friday, January 23, 2009 9:26 AM
To: Township of Hilton
Subject: Marina Questionnaire.doc
Attachments: Marina Questionnaire.doc

Hi Valerie,

We need the last page of this signed. As far as the dump goes, the insurance company understands that it is controlled by the Village. As it is on your property we must show it on your application. The liability for controlling and running it is applied to the Village's premium, not yours.

Please send the last page of this application back as soon as possible. Thanks,

Have a great weekend,
:Rob

Best Regards,

Robert J Walz

Robert Walz, A.R.M., C.I.P., C.A.I.B.
Partner, Associate Risk Manager, Chartered Insurance Professional

Algoma Insurance Group
856 Queen St. East, Sault Ste. Marie ON
P6A 2B3

888-525-4882 phone - toll free
705-949-6555 phone
705.949.3513 Fax

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5) b) viii)

INCORPORATED VILLAGE OF HILTON BEACH

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2009 02 11

Council
Township of Hilton
Box 25
Hilton Beach, ON
P0R 1G0

Dear Council:

Upon considering the information on the operating costs of the site for the past five years and projections for 2009 it was decided that the fee for 2009 to the Township would be \$9,025.

This fee works out to \$26 per household for the Township while the cost of the facility to the Village is \$34 per household. The original reason for reviewing the fees was to more fairly distribute the costs between the two municipalities. The average operating costs for the past five years showed a far greater disparity with the Township paying \$16 per household and the Village \$44. With this phase-in approach the cost sharing will better reflect the respective usage by the two municipalities.

The number of households was used as the comparator because it is the variable on which the levies for hazardous waste, recycling and the Algoma Health Unit, all providing environmental services, are based.

When one compares the per-household cost for either municipality to that paid for most other services such as the fire department (VHB \$125), library (VHB \$56), policing (VHB \$97), land ambulance (VHB \$181) and social housing (VHB \$135) it puts the costs of operating this site into perspective. Each municipality pays over \$16/household for recycling and hazardous waste disposal.

This Council suggested that the committee still meet to discuss items such as the merits of having the recycling bins situated at the landfill and a capital program. This committee could meet and make recommendations in time for a decision to be made prior to the budgets being set each year. The fee-for-service will be reviewed annually and will reflect the operating and capital costs.

It is the intention of this Council to increase the maintenance at the landfill and to improve the appearance of the site.

Yours sincerely,



Gloria Fischer
Clerk-Treasurer

February 18, 2009

Village of Hilton Beach
P.O. Box 25
Hilton Beach, Ontario
P0R 1G0

Dear Mayor Stevens and Members of Council:

This letter will confirm receipt of the Village's February 11, 2009 correspondence detailing the 2009 fee for Hilton Township residents to use the landfill. The Township of Hilton is prepared to forward payment in the amount of \$9,025 upon receipt of an invoice.

The fee 'per household' comparison presents a biased view of how costs are actually being shared with the implication being the Village is paying more. The Township's per household cost is based on over double the Village households so will undoubtedly appear lower even though the Township now covers the majority of the costs. It does not address the fact that over two-thirds of the Township households are seasonal, with many being used only three months of the year. The comparison by household does not address the landfill usage by the Village's restaurants (3), motel, automotive shop, waterfront centre businesses, marina, community hall, festivals (Arts at the Dock/Summer Festival/Community Night, etc), nor does it consider how the commercial tax revenue from those users, along with retaining 100% of the tippage fee revenue, helps to reduce the landfill cost for Village households. As mentioned several times throughout the past two years of landfill committee meetings, fair dump costs should be measured by usage and 'households' alone do not accurately reflect dump usage.

Contrary to the reference about households being the common comparator for environmental services, it should be clarified that the Algoma Health Unit bases our levies on *population*; hazardous waste levies are based on *permanent* households only, recognizing the huge disparity in use between permanent (Hilton Township: 116 HH) and seasonal (Hilton Township: 238 HH) users; only recycling costs are based on both seasonal and permanent households.

Hilton Township landfill committee members see no point in continuing to meet to discuss the recycling bins or capital program. The past two-year period of meetings have shown that suggestions or recommendations from the Township have little bearing on the final decisions of the Village. The Township Council will confirm, however, that it is not prepared to pay for recycling bins at both the Village landfill and the Highway 548 turnoff. If the Village proceeds with installing bins at its landfill, the Township will withdraw from the Highway operation.

As the landfill operation is no longer of a joint nature between our two municipalities, please advise if you have made alternate plans for the plowing and grading of the dump road. If you still wish to contract the services of the Hilton Township Roads Department, please confirm prior to March 4, 2009 so that we may provide our cost and terms for this service.

Sincerely,

James See
Reeve – Hilton Township

5) c) i)

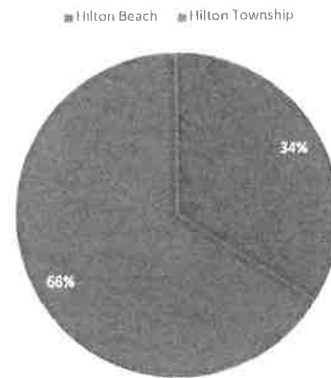
Landfill Usage Breakdown - April 17/2025

	Hilton Beach	Hilton Township
Residential Dwellings	134	335
Businesses	47	19
Total	181	354
Percent Usage	34	66

Estimated Effective Dwellings from Businesses

Hilton Beach	Hilton Township
General Store	3
Marina	9
Trailer Park	25
Mad Jacks	1
Tilt'n Hilton	7
Forbes Park	2
	16
	19

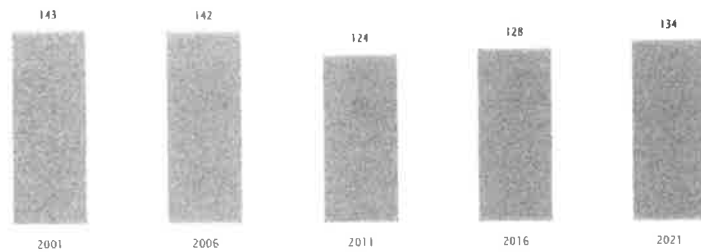
% LANDFILL USAGE BY DWELLING



Hilton Beach

Total Private Dwellings

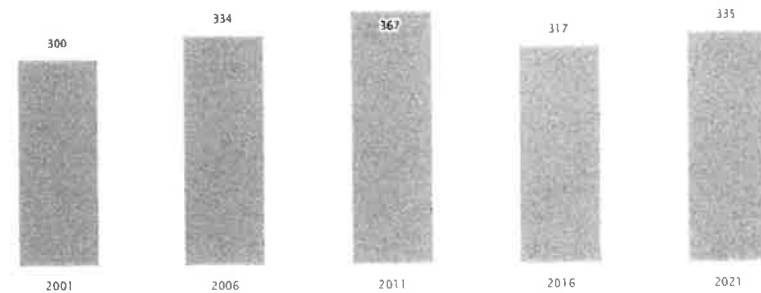
Source: Statistics Canada - Census
Last Updated: February 2022



Hilton Township

Total Private Dwellings

Source: Statistics Canada - Census
Last Updated: February 2022



5) c)ii)

Hilton Township landfill usage					
Business	Sites/Slips	Seasonal	Bags per unit	Weekly Bags	Total
Busy Beaver Trailer Park	30	6 months			
*note: 60 sites, only uses 28-30					
Township Office				2	2
Big Point Park					
Twin Lakes Park					
MTO Building					
As per MPAC-Total Residential Dwellings:	389				
As per MPAC-Commercial & Industrial Total:	12				
As Per MPAC-Total Property Count:	401				
As per MPAC-MPAC Total Population:	289				
As per 2021 Census Population:	382				
Village of Hilton Beach landfill usage					
Business	Sites/Slips	Seasonal	Bags per unit	Weekly Bags	Total
Marina	160	6 months			
Hall					
Mad Jack's		4 months			
Tilt'n Hilton					
Hilton Beach General Store					
Island Villa (apartments)					
Forbes Park					
Library					
Hilton Beach Inn					
Alfano Automotive (?)					
Hilton Beach Trailer Park	79	6 months			
Water Front Center:					
Mariners Lounge		6 months			
Post Office					
Hair dressers					
Island Oasis					
Dental Hygenist					
Village Office					
As per Village -Total Residential dwellings:	134				
As per Village -Total Commercial/Industrial:	47				
2021 Census Poplution:	198				

5d/1)

INCORPORATED VILLAGE OF HILTON BEACH

3100 BOWKER STREET, P.O. BOX 25
HILTON BEACH, ONTARIO - P0R 1G0

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FAX (705) 246-2913

E-MAIL: info@hiltonbeach.com
WEBSITE: www.hiltonbeach.com

April 10, 2025

Township of Hilton
2983 Base Line
P.O Box 205
Hilton Beach, ON
P0R 1G0

RE: Recycling

Dear Council,

The Ontario Government will transition the Blue Box/Recycling Program in 2026 to a producer-responsible system. This means that municipalities will not be responsible for collection. This new system will not include recycling collected from industrial, commercial or institutional locations.

Circular Materials is responsible for Depot Operations Agreements with Municipalities. The Hilton Landfill transitioned on April 1st with the contract ending December 31st 2025.

In many meetings and letter writing, Circular Materials has refused to accept that Hilton Township was a user of the recycling at the Landfill even though you do not have your own freestanding blue box depot. Hilton Township was not on the transition schedule for 2025 along with the Village of Hilton Beach.

The original signed contract back in October 2024 was amended in February 2025 to remove Hilton Township's non-eligible sources using documents/data from DataCall to do their calculations. In doing so, CM will charge the Village back on their calculations each month of what Hilton Township's portion of NES (non-eligible sources) based on \$200 per tonne. This could range from \$75.00-\$100.00 per month as discussed with CM.

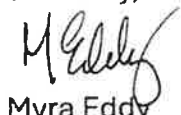
The current contract will re-imburse the Village of Hilton Beach for 9 months at \$584.55 then reduce it by Hilton Township's NES.

Council would like Hilton Township Council to consider re-imbursing the Village by the calculated reduction each month from April 1 – December 31st, 2025. RPG is to provide documentation/spreadsheets to verify the amounts and can be provided to Hilton Township.

Please see the attached resolutions.

Thank you for your consideration and understanding of the situation.

Sincerely,



Myra Eddy
Village of Hilton Beach.

Encl/me

5d)iii)
9

Village of Hilton Beach

Resolution No. _____

Meeting: March 12, 2025

Moved by S.B. 

Seconded by S.C. _____

WHEREAS Circular Materials is the Common Collection System Administrator and is responsible for the procurement of collection, depot hauling and receiving facility services on behalf of all PRO and producers.

WHEREAS Circular Material does not recognize the Township of Hilton as being on the Transition Schedule starting April 1, 2025, along with the Village of Hilton Beach and considers any Hilton Beach's recycling to be Non-Eligible.

WHEREAS the original contracted amount for Circular Materials to pay to the Village of Hilton Beach combined the tonnes from both the Village of Hilton Beach and Hilton Township.

WHEREAS the tonnes collected from Hilton Township is to be charged back to the Village of Hilton Beach at a rate of \$200 per tonne.

BE IT RESOLVED THAT Council agrees to the Amended Contract of \$584.55 less Hilton Beach tonnes per month with Circular Materials for recycling at the Hilton Landfill from April 1st to December 31st, 2025.



CARRIED

5d)iv)

9(a)

Village of Hilton Beach

Resolution No. 202530

Meeting: March 12, 2025

Moved by S.C.

Seconded by S.B. Brown

BE IT RESOLVED that the Village of Hilton Beach send a letter to the Township of Hilton requesting re-imbursement for the costs calculated by Circular Materials as being non-eligible from April 1st to December 31st, 2025.

B.D.

CARRIED

RECORDED VOTE YES NO

Mayor Robert Hope

Councillor Sarah Brown

Councillor Sally Cohen

Councillor Brian Delvecchio

Councillor Kelly Rathwell

Village of Hilton Beach



CORPORATION OF THE TOWNSHIP OF HILTON

2983 BASE LINE, HILTON BEACH, ONTARIO P0R 1G0

Phone (705) 246-2472

Fax (705) 246-0132

Email: admin@hiltontownship.ca

Website: hiltontownship.ca

May 20, 2025

Sent: in person

Village of Hilton Beach
3100 Bowker Street
P.O. Box 25
Hilton Beach, ON P0R 1G0

RE: Landfill and Recycling

Dear Council:

At the regular Council meeting of the Township of Hilton held on May 15, 2025, Council discussed the Minutes of the Landfill Committee/Council meeting held on April 16, 2025.

In previous years, the Landfill Committee was composed of four members and a Secretary. The Council of the Township of Hilton would like to request that the Council of The Village of Hilton Beach organize a Landfill Committee that appoints two (2) Councillors and a Secretary to align with the Township of Hilton's Committee of two (2) appointed Council members.

The Council of the Township of Hilton has reviewed the attached chart of the Landfill Usage Breakdown dated April 17, 2025, that was provided by the Village of Hilton Beach and has requested that further information regarding how your final calculations were determined regarding the number of bags per establishment be provided to the Council of the Township of Hilton to better clarify the end results specified in the spreadsheet.

Also, the Council of the Township of Hilton has deferred responding to the letter received from the Council of the Village of Hilton Beach with request to consider re-imbursing the calculated reduction each month from April 1, 2025, to December 31, 2025, as determined by Circular Materials, until further information is received as per the above noted request.



CORPORATION OF THE TOWNSHIP OF HILTON

2983 BASE LINE, HILTON BEACH, ONTARIO P0R 1G0

Phone (705) 246-2472

Fax (705) 246-0132

Email: admin@hiltontownship.ca

Website: hiltontownship.ca

Council is looking forward to continuing to work together toward the mutual goal of finding a solution that benefits both the Village of Hilton Beach and The Township of Hilton.

Thank you for your consideration and we look forward to the next Landfill Committee meeting.

Sincerely,

Sara Dinsdale
CAO/Clerk-Treasurer
Township of Hilton

Encl: 1

5e)iii)

Received
JUN 12 2025

INCORPORATED VILLAGE OF HILTON BEACH

3100 BOWKER STREET, P.O. BOX 25
HILTON BEACH, ONTARIO - POR 1G0

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Corporation of the Township of Hilton
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RE: Landfill

Dear Council,

Council reviewed your letter dated May 20th at their June 11th Council meeting. This Council would like to continue to have all the members part of the Landfill Committee. It is felt that each individual member has knowledge and will be able to contribute to the conversation.

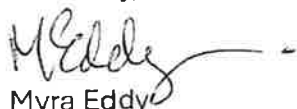
It was also discussed about having our two councils meet to have a joint meeting. The landfill and other topics could be discussed at that time.

If this is of interest, perhaps we could set up a meeting date for both Councils.

Unfortunately, we do not have any additional information to provide to you regarding the bag count. The information was taken, and charts were created in three scenarios being dwellings, population and full-time residents. This breakdown was requested by a council member and forwarded to your office.

We appreciate your willingness to meet and discuss the landfill to answer questions and learn more about the site.

Sincerely,



Myra Eddy
Clerk Treasurer.



FINAL

Design & Operations Plan

Hilton Beach Landfill Site
Hilton Township, Ontario

Prepared for:

The Village of Hilton Beach
3100 Bowker Street, P.O. Box 25
Hilton Beach, ON P0R 1G0

October 4, 2022

Pinchin File: 307418



Issued To: The Village of Hilton Beach
Issued On: October 4, 2022
Pinchin File: 307418
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A handwritten signature in black ink that reads "Andrew McCormick".

Author: Andrew McCormick
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A handwritten signature in black ink that reads "Tim McBride".

Reviewer: Tim McBride, B.Sc., P. Geo., QP_{ESA}
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1.0 INTRODUCTION

The following Design & Operations Plan (D&O Plan) was prepared for the Hilton Beach Landfill Site (hereafter referred to as the Site) located on Lots 3 and 4, Concession 15, Hilton Township, District of Algoma, Ontario. The Site is active and is owned and operated by The Village of Hilton Beach (Client). A key map indicating the location of the Site is provided as Figure 1 (all Figures are found in Appendix I).

The Site is operated under the Ontario Ministry of the Environment, Conservation and Parks (MECP) Amended Environmental Compliance Approval (ECA) Number **A560901**, issued on March 2, 2022. The Site is approved for the use and operation of a 44.5 hectare (ha) landfill site for the disposal of domestic and commercial wastes and a waste transfer station.

As per Section 3.2 of the Amended ECA A560901, the Owner shall:

"prepare a Design and Operational Report (D&O) and submit it to the Director for approval by February 1, 2024. The D&O shall, at a minimum contain the following:

- a. Description of the site and surrounding features;*
- b. Waste quantities and characteristics;*
- c. Areal delineation of current waste limits which should be surveyed, described and shown on a figure;*
- d. Analysis of historical landfilling area, volumes and theoretical capacity calculations for the site;*
- e. Detailed description of landfill development for the life of the landfill;*
- f. Detailed description of waste transfer site;*
- g. Description of the operation of the site for both the landfill and waste transfer site;*
- h. Description of environmental monitoring and annual reporting;*
- i. Complaint response procedure;*
- j. Site closure;*
- k. Contingency plans; and*
- l. Figures and tables to support sections of the report.*

This D&O Plan has been completed to provide a strategy to optimize the remaining waste disposal capacity and includes industry standards and best management practices that should help reduce the long-term and potential environmental impacts to associated receivers.



1.1 Site Location and Legal Description

The Site is located at Universal Transverse Mercator (UTM) coordinates 515,4206 meters (m) Easting and 276,089 m Northing, Zone 17, relative to the North American Datum (NAD) 83. The Site coordinates are captured from Autodesk Civil3D.

The Site is located on North ½ of Lots 3 and 4, Concession 15, Township of Hilton, in the Algoma District, Ontario, approximately 2.69 kilometers (km) southwest of Hilton Beach, Ontario. The Site is located along the south side of an unnamed access road approximately 970 m west of Base Line and approximately 1.36 km east of Twin Lakes. The location of the Site is presented on Figure 1 and the existing Site Layout is provided as Figure 2.

1.2 Background

The Site is an active waste disposal site which is owned and operated by the Corporation of the Village of Hilton Beach. The Site was originally approved under ECA Number A560901, which was issued on August 31, 1972, for a 44.5 ha landfill site for the disposal of solid, non-hazardous waste consisting of 85% domestic waste and 15% commercial waste. The ECA was registered on title on October 4, 1983.

A notice to the ECA (Notice 1) was approved in 1998, which permitted the disposal of up to 200 cubic meters (m³) per year of sewage sludge from the Village of Hilton Beach. An ECA (Air – Number 8-6162-98-006) was approved at the Site in 1998 for a wood composting operation at the Site. However, the composting operation was not established and this ECA is not currently in use at the Site.

An additional notice to the ECA (Notice 2) was approved in 2001, which allows for the disposal of 350 m³ per year of sewage sludge from the Townships of Macdonald, Meredith, Aberdeen to be deposited in the trenches at the Site, in addition to the 200 m³ per year of sewage sludge accepted from the Village of Hilton Beach.

An agreement between the Township of Hilton and the Village of Hilton Beach was reached on November 6, 1991, which allows for the disposal of waste from the Township of Hilton and the Village of Hilton Beach at the Site. This service agreement remains active.

An amended ECA Number **A560901**, was issued by the MECP on March 2, 2022. A copy of the Amended ECA is provided in Appendix II.

1.3 Scope of Work

The scope of work included the preparation of the D&O Plan as outlined in the Pinchin proposal entitled *“Proposal for Waste Management Environmental Consulting Services, Hilton Beach Landfill Site, Hilton Township, District of Algoma, Ontario”* and dated March 23, 2022. The scope of work has been



developed in accordance with applicable MECP guidelines and legislation. This D&O Plan has also been developed in accordance with Ontario Regulation 232/98, and the MECP's "*Landfill Standards, A Guideline on the Regulatory and Approval Requirements for New or Expanding Landfilling Sites*", dated January 2012 (the MECP Landfill Standard).

This D&O Plan describes Site design and development, environmental control measures, daily operations and maintenance, contingency measures, site closure, and post closure monitoring and maintenance. It is required that the D&O Plan be maintained current at all times.

The scope of work completed by Pinchin included the following:

- Obtain the background information necessary to fulfill the understanding of the Site history and development, and complete a thorough background information research on the waste disposal Site's servicing requirements, operational needs, and history;
- Conduct a walkthrough of the Site documenting the existing conditions and operational plan;
- Conduct a topographical survey to determine the existing site conditions;
- Consolidate all of the information gathered from the background research, Site walkthrough and topographic survey to prepare this D&O Plan report. The D&O Plan includes, but is not be limited to, the following:
 - Service area for the Site and the waste types to be landfilled or transferred off-site for recycling or further processing;
 - A site plan (collected during the topographic survey activities) indicating the locations of access roads, on-site roads, site boundaries, waste footprint, buffer areas, fences, gates, buildings, and waste receiving and storage areas;
 - Site operating plans depicting the area that has already been filled and the location and dimensions of potential future development phases;
 - A detailed description of waste receiving protocols to ensure that only approved waste types are received at the Site;
 - A detailed description of how wastes are stored and transferred off-site and the frequency of removal of such wastes from the Site;
 - Details of the signs required at the site, including the sign at the front gate and the Signs at the other waste handling locations throughout the Site;
 - Screening of the Site from the public, both visual and the protection from the noise impact;



- 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;
- 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;
- The operating hours of the Site and the hours for the various activities to be undertaken at the site, including waste compaction, waste coverage, clean wood burning, and removal of wastes collected for transfer;
- Details on winter operations;
- Thickness of the daily cover, frequency of the application, characteristics of the material and its source and the method of application;
- Thickness of the intermediate cover, frequency of the application, characteristics of the material and its source and the method of application;
- The equipment used, the frequency and the procedures used for waste compaction;
- Details on Site supervision and monitoring of the activities at the Site, including inspections of the incoming wastes;
- 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;
- Details on housekeeping practices undertaken to control noise, dust, litter, odour, rodents, insects, and other disease vectors, scavenging birds or animals;
- Location of the clean wood burning area and the procedures for the burning, including frequency, supervision, and measures to keep the unacceptable waste from the burn area;
- 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 topsoil and the vegetation proposed for the closed waste mound, as well as the timeframe for the progressive final cover placement;
- Monitoring program for the surface and the groundwater during operations and post closure;
- Landfill gas control or management required at the Site, if any;



- 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;
- Inspection activities proposed for the Site, including the frequency of the activities and the personnel responsible for them;
- Details of training provided for the personnel responsible for the activities at the Site;
- Details of a conceptual closure strategy for the existing waste deposits;
- Contingency plans for the emergency situations that may occur at the Site; and
- Storm water management, including the location and the design of any works required.

1.4 Objectives

The concept for the D&O Plan is to allow for the long-term development and continued use of the Site as a solid waste landfill, such that the impact to the surrounding environment will be minimized and the diversion of waste materials to recycling is maximized, thereby optimizing the Site life through the strategic progressive development.

The objectives of the D&O Plan are to assess the existing conditions at the waste disposal site, the current methodology by which waste is received and to establish a development plan, which will maintain and optimize the development capacity of the waste disposal site. The development and operation of the Site were assessed in terms of sound engineering principles, good management practices, cost effectiveness, and minimization of both short- and long-term risk to public health and the environment.

2.0 DESIGN CONSIDERATIONS

2.1 Service Area

With the exception of the sewage sludge approved via Notice 2, only waste that is generated within The Corporation of the Village of Hilton Beach and Hilton Township shall be accepted at the Site. The population of the Village of Hilton Beach is 171 people (according to the 2016 Census from Statistics Canada). In discussions with the Site Operator, it is estimated that the Site services approximately 600 people during the winter months and 1,000 people during the summer months, from the Village of Hilton Beach and Hilton Township.



2.2 Land Use and Zoning

The Site is located on township owned property on an unmarked road, off of Base Line in the Algoma District. As such, it is subject to zoning requirements. The zoning designation is WD – Waste Disposal. The primary use intent of the WD zone is waste disposal (St. Joseph Island Zoning By-Law, 2011). Figure 2 depicts the property lines and the location of the existing Site operations.

2.3 Adjacent Land Use

The Site is located within the Algoma District in a predominantly undeveloped area on the west side of Highway 548, approximately 3 km southwest of Hilton Beach, Ontario. The land use within 1 km of the Site is predominantly rural zoning. The nearest dwellings are located approximately 0.7 km northeast of the Site, on Base Line.

Based on a search of the MECP Ontario Well Record Map, there are no drinking water wells located within 500 m of the Site. The Site is surrounded by a densely wooded area immediately to the north, east and south, with a low-lying marshy area located to the west.

2.4 Summary of Site Physical Setting

The following sections provide a summary of the Site topography, geology, and hydrogeology.

2.4.1 Topography and Surface Water Drainage

Topography and surficial geology surrounding Hilton Beach is the result of several glaciations. The majority of the area has moderate relief, having been overridden and depressed by glacial ice and then overlain by minor deposits consisting of clays, silts, and sands.

The Site is in a forested, undulating to rolling, area of moderate relief. The local topography around the Site is relatively flat with a slight average negative grade towards the west. The minimum elevation on Site is 224 m above sea level (masl) in the vicinity of the west and rises to a maximum elevation of 255 masl in the east portion of the Site. The site-specific topographic elevation contours as collected by Pinchin in 2022 are presented on Figure 3.

Hilton Beach is located approximately 2.2 km east of the Site and Twin Lakes is located approximately 1.1 km west of the Site. An unnamed pond/surface water body is located approximately 525 m west of the Site property boundary and is connected to the discharge/outflow of Twin Lakes. The unnamed pond flows southeast along Koshkawong River, before eventually discharging into Lake Huron near Milford Haven.

Surface water drainage from the landfill is inferred to flow to the west towards the unnamed pond. The unnamed pond appears to have little seasonal variation with similar water levels observed during each



visit to the Site. Surficial drainage of the Site is primarily via over land flow, with no defined ditches, swales, or water courses.

It is assumed that the local unconfined and shallow bedrock groundwater aquifer is hydraulically connected to various surrounding water bodies, most notably the unnamed pond to the west. In addition, there are no Provincially Significant Wetlands identified in the surrounding watershed system.

2.4.2 *Geology*

The bedrock geology of the area surrounding the Site reportedly consists of migmatitic rocks and gneisses of undetermined protolith, commonly layered biotite gneisses and migmatites; locally includes quartzofeldspathic gneisses, orthogneisses, paragneisses (NDMNRF, 2019).

The surficial geology of the Site has been described as consisting of the following overburden deposits:

- Course-textured glaciolacustrine deposits (consisting of sand, gravel, minor silt and clay);
- Organic deposits (consisting of peat, mulch, marl); and
- Bedrock-drift complex deposits in Precambrian terrain (primarily till).

Based on the information provided to Pinchin at the time of preparation of this report, previous intrusive investigations (such as borehole drilling or test pit excavations) have not been conducted at the Site to confirm the site-specific subsurface geology.

2.4.3 *Hydrogeological Setting*

There are currently no groundwater monitoring wells established at the Site to confirm the depth to the water table or determine inferred groundwater elevation contours and flow direction.

Local overburden groundwater flow is assumed to flow to the west towards the unnamed pond/surface water body and in the general direction of the immediate topographical downward slopes.

2.5 **Waste Disposal History**

The existing Site plan is presented on Figure 2. It is estimated that the Site has been in operation as a combined area fill and trench and fill method landfill since its approval in 1972. Historical waste deposits have been reported to be located along the northwest portion of the Site, adjacent to the active demolition disposal area. The assumed historic waste disposal area and current active areas are also illustrated on Figure 2.

The Site is approved for a 44.5 ha landfill area; the boundaries of the approved fill area are not defined in the ECA. The Site is operated by the Corporation of the Village of Hilton Beach. The Site is currently open to the public within the operating hours. The current ECA does not specify a maximum daily or annual



waste receipt/disposal rate. Volumes of waste deposited at the Site are tracked by Hilton Beach Landfill staff through estimated garbage bag counts.

Current landfill operations appear to consist of trench filling of domestic waste in the northeastern portion of the Site and area filling (progressive slope method) of domestic and construction & demolition waste in the southwestern portion of the Site.

Cover material appears to be available on Site and consists of soil from the trench excavations, stockpiled at the south of the active fill area. Waste compaction (utilizing a bulldozer) and interim cover placement on the active face occurs as-needed, approximately twice per year.

Scrap metals, white goods, wood, tires and blue box recyclable items are source separated for the purpose of recycling and reuse programs in place at the landfill. A cleared storage area for metals and white goods is located off the access road, near the entrance and to the south-central portion of the Site. A segregated tires pile is also located near the entrance of the Site, just northwest of the attendant office. The recyclable items depot and the wood and ash storage areas are located within the east central portion of the site.

2.6 Site Capacity and Lifespan

The available volume remaining in the Site is dependent upon the area limitations of the Site placed by the ECA, and applicable provincial statutes and regulations. The primary constraint is the 44.5 ha area for landfilling approved in ECA Number A560901 and the maximum theoretical capacity of the proposed conceptual final design. As the total area of Lot 3 and Lot 4 is 45.5 ha (i.e., 22.725 ha each) the actually allowable waste disposal footprint would be 22.33 ha in order to account for the 100 m buffer zone.

As the Site currently appears to be operating as a combination of area filling and trench filling methods for waste deposition, the conceptual final design for the Site includes capacity for below grade waste deposition by future trench and fill operations, as well as above grade waste deposition by future area fill operations. Based on the limitations of the Site footprint and the proposed conceptual final contours, the theoretical remaining capacity of the Site was determined to be approximately 144,410 m³ (consisting of approximately 70,000 m³ of below grade waste and approximately 74,410 m³ of above grade waste).

Based on the estimated service population of 1,000 people per year and an estimated waste generation rate of approximately 293 kg/person/year (Government of Canada, 2022), the annual waste deposition rate for the landfill is estimated to be approximately 420 m³/year. Given the remaining capacity of the Site of 144,410 m³ and the annual waste deposition rate of 420 m³/year (and applying a 1.5 safety factor and a 20% allowance for interim cover), the estimated remaining lifespan of Phase I of the Site is in excess of 30 years (i.e. a standard solid waste planning period). It is important to note that waste deposition is somewhat variable, resulting in changes to the average annual deposition rate being estimated over time.



Given the limited data available to calculate the disposal rates, remaining capacity and lifespan of the Site, it is recommended that regular topographic surveys of the full Site be undertaken on an annual basis, in order to facilitate accurate remaining capacity and site life estimates. Comparison of subsequent topographic surveys will enable the estimate of accurate in-place waste volume and deposition rates.

3.0 SITE DESIGN

The Site design is based on the MECP Landfill Standard (MECP, 2012) requirements, and current landfill industry standards commonly used in the Province of Ontario. In several cases, maximum or minimum values are given, which reflect the upper and lower limit of the range of acceptable values.

3.1 Buffer Zones

A buffer zone is defined in the MECP Landfill Standards (MECP, 2012), as a green belt or zone located on-Site between the waste fill area and the Site boundaries that allows for contaminant attenuation and provides enough space around the waste fill area to accommodate vehicle entry, exit and turning; to permit access to all areas of the Site for monitoring, maintenance, and environmental control activities; and to provide sufficient space to accommodate all anticipated structures, equipment and activities. The buffer area must surround the waste fill area. The buffer area should consist of cleared, undeveloped areas, with bare mineral soils and minimal vegetative growth. O. Reg. 232/98 indicates that the buffer area must be a minimum of 100 m wide unless the Site Owner can demonstrate that a smaller buffer (minimum of 30 m) can satisfy all the buffer area purposes.

The Site facilities and features that have been established at the Site are presented on Figure 2. An approximate buffer zone of 100 m was incorporated in the final design around the proposed future landfill footprint, as indicated on Figure 2.

3.2 Final Contours

The proposed final top of waste contours for the landfill area are illustrated on Figure 5 and the final top of cover contours are illustrated on Figure 6.

The area available for future landfilling within the existing 44.5 ha approved waste disposal area was limited by the existing topography and the 100 m buffer. The proposed future fill area based on these limitations was determined to be approximately 22.33 m², as presented on Figure 5.

The design slope used for the Site is noted to meet the minimum criteria of 5 percent (20 horizontal to 1 vertical (20:1)) and the maximum criteria of 25 percent (4 horizontal to 1 vertical (4:1)), specified by MECP guidelines. The use of minimum slope criteria is necessary to provide adequate surface water runoff and reduce infiltration, and consequently leachate production, particularly after long-term



consolidation of the disposed waste has occurred. A maximum slope criterion relates to soil erosion during storm events and ensures that slopes are manageable for construction and maintenance equipment. The grade around the perimeter of the landfill area will facilitate the incorporation of perimeter surface water drainage ditches in the final cover construction.

The maximum elevation of the landfill (i.e., to top of final cover) will be 255 masl, being approximately 30 m above surrounding ground elevation (nominal ground elevation of 224 masl).

3.3 Interim Cover

At landfills accepting municipal solid waste, application of cover to the active face fulfills a number of functions including minimizing erosion of landfilled waste, minimizing wind blown litter, reducing odours, discouraging vermin and vector activity, and improving vehicular access to the active disposal area. Due to the size of the Site, the low volume of waste received daily, and the small area utilized as a tipping face, the application of daily cover is not required. Interim cover soil is currently applied to the active waste disposal area twice per year. In accordance with Condition 3.20 of the Site's ECA, a minimum thickness of 150 mm of cover material should be applied to active working face every month.

Cover material is stockpiled on Site, nearby to the active tipping face. Additional cover material may consist of clean fill material purchased as necessary. Clean fill or other inert fill (i.e., earth, rockfill or waste of a similar nature that contains no putrescible materials and/or soluble, decomposable chemical substances, subject to acceptance protocol) brought to the landfill for disposal can also be segregated and stockpiled for use as waste cover soil or road construction material.

During development of the landfill, areas which are not considered part of the active disposal area but are scheduled to receive additional lifts of waste at some future time over 90 days, should be covered with an interim cover. Prior to resuming landfilling, the interim cover is to be removed to promote hydraulic connection between waste lifts. As much of the interim cover should be removed as is practical and the remaining material will be broken up or scarified.

3.4 Final Cover

A progressive, final cover should be used throughout the Site in order to minimize infiltration and leachate generation. As final contours are reached, the final cover should be progressively placed. The traditional soil cover system is illustrated on Figure 7.

3.4.1 Traditional Soil Cover

Low permeable soil material is to be placed directly over the uncompacted waste in continuous, uniform, loose lifts not exceeding 0.2 m in thickness. In accordance with the standard industry practices, the low



permeable soil must be compacted to a minimum of 95 percent of the material's Standard Proctor Maximum Dry Density (SPMDD) and at or to 4% above the optimum moisture content. The low permeable soil must have a minimum of 60 percent fines (silt and clay), by weight, passing the No. 200 sieve (0.074 mm opening), of which a minimum of 15 percent is clay (0.002 mm).

This material should be placed to achieve an in-situ hydraulic conductivity of 1×10^{-6} cm/sec. A 150 mm vegetative topsoil cover is to be placed over the cover material as specified in the following section.

3.4.2 *Topsoil and Vegetative Cover*

Topsoil should be secured from suitable off-Site sources and placed directly over the low permeable soil cover material. Organic composted material from the Site may be mixed with the topsoil to obtain an organic content in the range of 5 percent to 20 percent. The mixed topsoil should be fertile, agricultural soil typical for the area of the Site. The topsoil should be free of clay, impurities, plants, weeds, and roots. The pH of the topsoil should range from 5.4 to 7.

The vegetative cover should be established, as soon as practically possible, after the placement of the topsoil layer, to minimize erosion of the topsoil layer. A typical grass seed mixture, which is used at landfills and which may be used at the Site, is as follows:

- 30 percent - Tall Fescue
- 20 percent - Annual Rye Grass (nurse crop)
- 20 percent - Creeping Red Fescue
- 10 percent - Timothy
- 10 percent - Birdsfoot Trefoil
- 5 percent – White Dutch
- 5 percent – Alsic Clover

The above seed mixture has been successful in establishing a heavy root mat in a short period of time to minimize soil erosion, sustain periods of drought, and does not require excessive maintenance.

3.4.3 *Perimeter Ditching*

Currently, surface water drainage at the Site is controlled by infiltration of precipitation to the ground and overland flow towards the low-lying marsh to the southwest. The landfill and surrounding topography are similar in elevation as the closure design strategy has been developed to follow this shape, blending the waste deposits with the surrounding terrain. Following implementation of the final cover system, surface water drainage should be managed by a network of perimeter ditching, in order to direct any heavy precipitation or spring freshet away from the landfill to minimize infiltration and/or ponded of water on the



cap. The perimeter ditches should be constructed in a trapezoidal shape, with a bottom width of 1 m and side slopes of 2 horizontal to 1 vertical (2H:1V). These perimeter drainage ditches should be field fit and directed towards the low-lying area located immediately west and southwest of the Site. The low lying area would act to direct water away from the landfill and slow down runoff and surface water flow received from the drainage ditches prior to discharge to any surface water receivers located to the west and south.

3.4.4 *Leachate Seeps*

As leachate infiltrates through the closed waste cells, it may encounter a confining unit (i.e., thick compacted waste layer, interim cover layer, etc.) which prevents continued downward migration of the leachate, resulting in lateral breakouts which compromise the vegetated final cover layer and create a leachate seep. A leachate seep is a moist/wet area where groundwater leachate reaches the surface of the landfill. Leachate seeps present potential issues such as slope stability of the cell due to soil erosion and increased environmental impacts as the seep brings the contaminants back up to the surface and impedes the leachate treatment process at the Site (i.e., natural attenuation). Therefore, any leachate seeps identified on the closed cells at the Site must be repaired by:

- Excavating within the area of the leachate seep to locate the confining layer;
- Break up/remove the confining layer;
- Backfill the area with a porous material, to encourage downward migration of the leachate and prevent further lateral movement; and
- Replace/repair the final cover in that area.

4.0 **SITE DEVELOPMENT**

4.1 **Material Placement**

The Site has historically and currently operated as a combination of area fill method and trench and fill method landfilling. During Pinchin's visit to the Site in the spring of 2022, it was observed that area filling (progressive slope method) is currently occurring in the western portion of the Site and trench filling is currently occurring in the eastern portion of the Site.

Vehicles drive up the access road to the designated dumping locations and toss waste into the active subgrade trench/fill area. The area in which this occurs is called the tipping face. Users are encouraged to dump only at the current tipping face, to reduce wind-blown litter and prevent people from accidentally falling into the active fill area. To prevent vehicles from accidentally backing up into the fill area, a timber wheel stop should be located along the edge of the tipping face.



The proposed future development of the Site shall continue to consist of a combination of trench and area fill operations, with waste deposited below grade (trench fill) as well waste deposited above grade (area fill). The following sections describe the best practices for both area filling and trench and fill methods of waste disposal.

4.1.1 Trench Fill Operations

A trench and fill operation is described in the "*Operating Manual for Small Waste Disposal Sites*" (Ontario Ministry of the Environment, 2009) as a process in which users deposit waste directly into a rectangular pit (trench) excavated in one area of the Site, a bulldozer or other suitable piece of equipment is periodically driven into the trench to collect and compact the waste at one end of the trench, and then apply a layer of cover. When the trench is full, a final covering layer of soil is applied, and another trench is constructed. Additional trenches are excavated as required until the Site limits and/or maximum capacity are reached, and then the entire site is closed.

The following criteria must be taken into consideration when deciding on where to develop new trenches:

- It is preferable to locate new trenches beside and parallel to the previous trench;
- The proposed trench area must not be subjected to flooding;
- The seasonal high water table mark must be at least 1 meter below the proposed bottom of the trench;
- A firebreak/buffer zone of at least 30 m must be maintained between the proposed trench and the surrounding forest;
- The short edge (width) of the trench should be oriented along and parallel to the Site's predominant wind direction to reduce wind-blown litter;
- The trench should be reasonably deep to maximize fill volume and reduce the need for heavy machinery while still ensuring the safe structural integrity of the trench;
- The trench must be long enough to allow for at least one vehicle to back up to the side of the trench for depositing of wastes, however there is no restriction on maximum trench length, although longer trenches will require more fencing and related maintenance;
- A vehicle and equipment access ramp must be built at the end of the trench opposite the side where the working face is to be started to allow access to the trench for periodic compaction and covering of the wastes. For safety, the grade of the ramp must not exceed 1 unit of vertical for every three units of horizontal; and



- The desired total volume of the trench should be determined based on anticipated waste deposit rates, available area for the trench, and the above trench location and size constraints.

In trench and fill operations, the vehicles back up to the edge of the trench and toss waste into the trench. The area in which this occurs is called the tipping face. The tipping face is typically located along the long side (length) of the trench and restricted to an area only large enough to accommodate one vehicle to dump at one time. To prevent vehicles from accidentally backing up into the trench, it is recommended that concrete or timber wheel stops be installed along the edge of the trench at the tipping face. For a new trench, the tipping face should be located at the end of the trench opposite the access ramp. The tipping face of a trench should remain in the same location until the trench in that section fills up to a level of 60 cm below ground level. Once that section of the trench is full, a bulldozer or backhoe should be driven into the trench via the access ramp at the non-filled end of the trench, and the wastes compacted and covered. The tipping face should then be shifted down the length of the trench so that users would be dumping at right angles to the new, compacted working face. Examples of the recommended side and three-dimensional profiles are included as Figure 8 (Ontario Ministry of the Environment, 2009).

4.1.2 Area Fill Operation

An area fill operation is described in the "*Operating Manual for Small Waste Disposal Sites*" (Ontario Ministry of the Environment, 2009) as a process in which a certain thickness of waste is added above ground level over a specified area. Rather than filling the entire area at once, waste is deposited into cells, which are smaller sized areas. The use of cells minimizes the amount of exposed waste, resulting in better litter, animal, and vermin control than is observed at less organized area fill operations. One cell should be completely built up with waste to the desired height and covered with appropriate covering material before another cell is started. Generally, cells are initially built up against a raised soil berm or the side of an excavated area with a 5% to 25% slope and new cells should be built against the previous one(s), until the entire area is filled to the same level with waste. The recommended slope angle is to ensure safety for the public and equipment operators working at the bottom of the active face. Examples of the recommended side and three-dimensional profiles are included as Figure 9.

4.2 Sequential Waste Deposition

The proposed waste disposal areas of Phase 1 (5.0 ha) are presented on Figure 4 and include the historical waste area (0.9 ha), the proposed area fill (1.2 ha) and combined area fill and trench fill area (2.3 ha), as well as the Sewage Biosolids/sludge area (0.6 ha). Waste deposition at the Site is proposed to continue within the available remaining fill area; no further waste deposition, above or below grade, can occur within the historic fill area depicted on Figure 4, although this area may require some regrading.



Phase 2 is considered to be the balance of the Site outside (north) of the identified Phase 1 area within the 100 m buffer area (22.33.x ha).

Within the remaining available fill areas, deposition of waste below grade can only occur in the northwestern and central portions due to the presence of existing buried waste deposits within the south and west portions and the presence of the sludge trenches in the north portion. The area available for below grade waste deposition is identified on Figure 10a.

In conjunction with the development of the available trench fill area, additional waste placement may proceed above grade using the area fill method to fill in the remainder of the available waste disposal footprint, until the proposed final top of waste contours are achieved, as presented in Figure 5. The proposed above grade development of the Site should occur in smaller cells, which are to be filled to predetermined elevations and graded to the predetermined slopes as waste is deposited, as described in Section 4.1.2. The proposed sequential development of the above grade waste deposition area is presented in Figure 10b. Based on the estimated fill rate of 420 m³/year (plus the 1.5 factor of safety and 20% interim cover rate) and the available capacity for waste deposition, it is estimated that the Site will reach capacity in excess of 30 years.

Throughout the development of the Site, the extent of the active disposal working face should be limited to an approximate size of 25 m x 25 m (625 m²) or smaller in order to minimize potential operational problems associated with odour and litter. In addition, minimizing the active area will also serve to reduce precipitation/snow melt that contacts waste and therefore cannot be shed as surface water (i.e., must be allowed to infiltrate through the underlying waste).

The establishment of temporary berms around the active working face minimize the potential contact of stormwater with the waste, thereby reducing potential leachate generation and environmental impacts of the Site.

A progressive filling and closure plan will also be utilized throughout development of the Site, in order to reduce leachate generation. Final cover should be placed progressively on areas of the landfill that have reached final contours (this should include any historical/existing waste disposal areas that are currently at the final design elevations and may be capped with a final cover system). Interim cover will be placed on disposal areas which will remain inactive for more than 90 days, after which landfilling will resume until final contours are reached. Interim cover should be removed from reuse prior to the resumption of landfilling, in order to promote hydraulic connection between waste lifts. The timely placement of interim and final cover will reduce leachate generation by promoting surface water runoff and thereby minimizing infiltration into the landfill.



4.3 Compaction

Waste compaction (using mechanical equipment) and appropriate interim cover (Section 3.3) should be applied to the working face twice per year. To maximize the Site's capacity, waste should continue to be compacted by driving a bulldozer, an excavator, a sheep's foot or other piece of heavy equipment directly over the active fill area. The heavy equipment's weight is used to crush and compact the waste as much as possible. Waste should be compacted and covered in 30 to 60 cm layers that have a slope of at least 3 horizontals to 1 vertical. Compacted waste must adhere to the elevation of the final top of waste contours, to allow for the additional 60 cm of final cover and 15 cm of topsoil to be applied to reach the final top of cover contours.

Additional compaction could be achieved by using a compactor. This would increase the projected lifespan of the Site. However, the purchase of a compactor is not anticipated to be required at this time.

4.4 Cover Material Requirements and Sources

The application of interim cover material over the compacted waste reduces the problems associated with windblown waste, odour and exposure to birds, bears, and other wildlife. Interim cover should be applied following compaction a minimum of twice per year. An approximate thickness of 150 mm of interim cover (soil) should be applied to the working face following compaction of the waste (Ontario Ministry of the Environment, 2009) in the following circumstances:

- Once an entire cell has been filled to capacity;
- If animal, insect, other vermin, or odour problems become severe; and
- If the Site is scheduled to be or has been closed to waste disposal for a period of greater than 30 consecutive days.

It appears as though soil material has been piled on-Site nearby to the active tipping face and could be used as a source of cover material. As trenches are excavated at the Site, soil can continue to be stored on-Site for use as cover material. If additional interim cover is required, it can be imported from nearby sources.

Once each trench or area cell has reached capacity, final cover as described in Section 3.4 should be applied within a minimum of 365 days of reaching the final contours. A vegetative cap should be encouraged to reduce methane emissions and prevent rainfall from penetrating into the waste creating additional leachate.



4.5 Material Segregation and Special Storage Areas

Material segregation directly affects the lifespan and operating costs of the landfill site. Segregation of recyclable material for sale and off-Site recycling minimizes the volume of waste that must be landfilled, thus increasing the lifespan of the facility. The segregation of clean wood and brush for annual burning also reduces the demand for landfill space.

At the time of the site visit conducted by Pinchin in the spring of 2022, it was confirmed that segregated areas for the diversion of metals and white goods, tires, wood and recyclable items (glass, cans and plastics; cardboard and paper) are maintained at the Site. Burning currently takes place at the Site as needed, once per year. In accordance with the Condition 3.16 of the Site's ECA, recyclables, metals and white goods must be removed from the Site as needed or at least once per year. The locations of the material segregation areas are presented on Figure 2 and photographs are presented in Appendix III.

The following waste segregation procedures should be established or maintained at the Site to promote waste diversion and increase the lifespan of the landfill.

4.5.1 Metal Waste

All metal wastes brought to the Site should be placed in the pile designated exclusively for metal and white goods. Metal waste can include refrigeration appliances that have been tagged to certify them as refrigerant-free. The tag must state: the date of the removal, the name of the person who removed the refrigerant, their certificate number with expiry date, and a statement that the equipment no longer contains any refrigerant.

A scrap metal dealer should be periodically asked to remove the metal waste from the Site.

4.5.2 Tires

Used tires disposed of at the Site, should be stored in a designated area for recycling, or disposed of directly in the main fill area along with other wastes. Environmentally and financially, it would be advantageous to register as a Tire Collector with the "Used Tires Program" of the Ontario Tire Stewardship (OTS) organization (<http://rethinktires.ca/program-participants/collector/>). The 2002 Waste Diversion Act made tire manufacturers and first importers (Stewards) responsible for developing, operating, and funding a used tire diversion program. Under the program, the Stewards sign agreements with Tire Collectors to provide them with financial incentives to:

- Accept used passenger light truck tires, medium truck tires and tires from off-road vehicles free of charge;
- Store the tires in accordance with MECP and Ontario Fire Marshall Regulations and in a manner that ensures they remain free of foreign materials and excessive moisture;



- Arrange for free pick-up of the tires with an OTS registered Hauler when the minimum number of tires agreed to with OTS (usually 75 in northern Ontario) have accumulated; and
- Record and report on the types and quantities of tires collected.

The used tires should be hauled to processors that convert them into recycled rubber that is then used to manufacture new products.

4.5.3 *Clean Wood Waste and Brush*

The only waste that is permitted to be burned at a waste disposal site is clean wood and brush. Clean wood waste is defined as wood that has not been painted or treated (Ontario Ministry of the Environment, 2009). Composite wood materials are not considered clean wood waste as they contain wood and non-wood materials that have the potential to release toxic compounds when burnt.

The area designated for clean wood and brush should be located away from the main fill area, the active fill area, the areas designated for other types of waste and the Site boundaries to reduce the risk of fire spreading (Ontario Ministry of the Environment, 2009). The designated wood area should be clear of vegetation and surrounded by a 0.5 m high soil berm on all sides except for a portion of one side large enough to allow for single vehicle access to the pile.

All burning of clean wood waste and brush at the Site:

- Must be completed in compliance with an NDMNRF burning permit, to ensure compliance with Ontario Regulation 207/96 under the Forest Fires Prevention Act;
- Must be controlled and supervised;
- Must be conducted within the bermed clean wood and brush area;
- Means to extinguish the fire if the need arises must be available; and
- Must be done during daylight hours.

4.5.4 *Contaminated Soil*

The Site Owner or Operator may occasionally receive a call to accept contaminated soil at the Site. If the Site Operator receives a call, they must refer it to the Site Owner. The Site Owner is not obligated to accept contaminated soil; however, they may wish to accept it to use as future cover material.

The Site Owner must contact the MECP for approval as the acceptance of the contaminated soil must, in all cases, be approved by the MECP and the soil must not be considered "leachate toxic waste" by meeting the criteria as prescribed by Schedule 4 Leachate Quality Criteria, established by Ontario Regulation 558/00.



If the soil meets the leachate criteria and is approved by MECP, it must be handled as follows:

- Soil should be deposited outside of any existing fill area, in an empty area segregated from other wastes and active fill areas of the Site, while remaining inside the approved fill area boundary;
- The soil should be spread out as much as practical to facilitate in the breakdown/off-gassing of any remaining contaminants; and
- When sufficient time, as recommended by the MECP on a case-by-case basis, has elapsed, the soil should be collected, and reserved for use as cover material at the Site (Ontario Ministry of the Environment, 2009).

4.5.5 Asbestos Waste

Asbestos is a naturally occurring mineral fiber. It was used in numerous building materials for its strength and ability to resist heat and corrosion before its dangerous health effects were discovered. As a result of the hazards associated with asbestos in the workplace, it is considered a designated substance under Ontario Regulation 490/09 and is therefore subject to its own regulation. A designated substance is defined as "a biological, chemical or physical agent or combination of agents for which a regulation has been developed to prohibit, regulate, limit or control worker exposure".

It is incumbent upon the generator of the waste material to determine if it does, or does not, contain asbestos and to manage its removal and transportation to an approved landfill for disposal in accordance with O. Reg. 490/09 and Reg. 347.

As a general rule, asbestos waste is usually only hazardous if it is uncontained or not managed properly thereby increasing the likelihood of the release of asbestos fibres into the air. The following procedure should be followed if asbestos waste is to be disposed of at the Site:

- If waste materials have been received at the Site and it is suspected as containing asbestos, the waste shall be treated as containing asbestos unless testing indicates otherwise;
- Redirect any asbestos waste disposal requests to the Site Owner;
- All asbestos waste loads must be pre-approved at least 48-hours prior to disposal in order to ensure adequate resources are available including a landfill attendant and a landfill operator at the site to manage the asbestos waste;



- Every person directly handling asbestos waste, supervising the unloading of asbestos waste in bulk or cleaning asbestos waste residues from containers, vehicles or equipment shall wear protective clothing and personal respiratory equipment while so doing;
- Prior to unloading or disposal, the waste shall be visually inspected to ensure that it is properly bagged or contained and is free from punctures, tears or leaks;
- Off/unloading of asbestos waste should be carried out so that no loose asbestos or punctured, broken or leaking containers of asbestos are landfilled. During the transportation or unloading process, any asbestos waste that is loose or in a container that is punctured, broken or leaking shall be packaged, immediately on discovery, in a six-mil polyethylene bag;
- The asbestos waste shall be placed in the disposal area in a manner which avoids damage to the containers and to prevent dust and spillage;
- Asbestos waste may be deposited at a landfilling site only while the depositing is being supervised by the operator of the site or a person designated by the operator for the purpose and the person supervising is not also operating machinery or the truck involved;
- Asbestos waste must be deposited in a separate area or a dedicated trench that has been adapted for the purpose of asbestos disposal (or are otherwise suitable for that purpose). This area shall be suitably sized and in a location away from the active landfilling face. The deposition area shall also be at least 1.25 metres below the surface of the disposal area to ensure that daily cover material remove in the future does not encounter the asbestos waste;
- Where asbestos waste is deposited, at least 125 centimetres of garbage or cover material must be placed immediately over the deposited asbestos waste in such a manner that direct contact with compaction equipment or other equipment operating on the site is avoided;
- Asbestos shall not be stockpiled at the landfill for burial at a later date;
- Caution should be exercised to ensure that bags or containers are not broken open before they are covered. If an asbestos container is ruptured, it should be re-packed by trained personnel prior to burial;



- Asbestos waste should not be handled during windy conditions if possible. Every person directly or indirectly involved in the transportation, handling or management of asbestos waste shall take all precautions necessary to prevent asbestos waste from becoming airborne; and
- Detailed location and maps of asbestos disposal locations should be recorded and maintained to minimize the risk of exposing asbestos waste during future activities at the landfill.

4.5.6 Sewage Biosolids/Sludge

This Site is permitted to accept a maximum of 550 cubic metres per year (m^3/year) of sewage biosolids from the Townships of Macdonald, Meredith, Aberdeen Additional, and the Incorporated Village of Hilton Beach. The total volume of sewage biosolids received at the Site shall not exceed:

- 350 m^3/year from the Townships of Macdonald, Meredith and Aberdeen Additional; and
- 200 m^3/year from the Incorporated Village of Hilton Beach

The dewatering trenches constructed along the northeast portion of the Site shall consist of the following design and construction standards:

- Each trench will have a minimum length of 30 m (not exceeding a maximum length of 75 m) and no wider than 5 m;
- The trenches will not extend beyond 1.5 m below ground surface and will have a maximum wall slope of 1:1 and the slope of the bottom of the trench shall not exceed 1:75;
- The bottom of each trench will be graded to slope away from the location where the hauled sewage is discharged into the trench;
- The maximum depth of the trenches will have a minimum separation distance of 1.5 m between the lowest point of the trench and the water table;
- The maximum depth of the trenches will have a minimum separation distance of 3.0 m between the lowest point of the trench and bedrock;
- Trenches will be constructed with a minimum setback distance of 30 m from the property boundary; and
- Individual trenches shall be situated a minimum of 5 m apart from other trenches.



5.0 SITE FACILITIES

A record of the existing Site facilities is presented in the photographic log provided in Appendix III.

5.1 Fencing and Gates

The entrance to the on-Site access road is equipped with a lockable gate, to prevent unauthorized access to the Site and to prohibit vehicle entrance and uncontrolled waste disposal outside landfill operating hours.

The perimeter of the Site is not currently fenced, however, due to the remoteness and size of the Site, as well as the surrounding forested areas, additional fencing is not considered necessary.

5.2 Signs

The Site must be properly signed with clearly visible and understandable signs. The following signage is required:

- As required under Condition 3.7 of the Site's ECA, a sign or signs located at the Site entrance must include the following:
 - The name of the Site and Owner;
 - The number of the ECA;
 - The operating hours of the Site;
 - The type of wastes that are approved for receipt at the Site;
 - The telephone number to which complaints may be directed;
 - A twenty-four (24) hour emergency telephone number (if different from above);
 - and
 - A warning against dumping outside the Site.
- Additional signage at the entrance or throughout the Site may include (Ontario Ministry of the Environment, 2009):
 - Only authorized users are permitted;
 - The Site is to be used at own risk and that bears, or other animals may be present on Site;
 - No Scavenging;
 - A list of Acceptable and Unacceptable Wastes;



- The vermin and insect infestation control measures (if any) that are being employed on Site;
- The speed limit for on-Site roads (e.g. 20 km/h);
- Waste is to be segregated and deposited only in their appropriate area(s);
- A statement that refrigeration appliances are accepted only if they are tagged by a person with an Ozone Depletion Prevention Certificate confirming that all refrigerants have been removed in compliance with O.Reg. 189/94;
- The contact information (names and phone numbers) for the Site Operator for routine questions and in case of emergencies; and
- Signs within the Site that direct users to the appropriate disposal areas (e.g., wood waste, scrap metal, public dumping area, no dumping zones).

The signage at the Site is currently limited to the hours of operation and the accepted and non-accepted types of waste. Additional signage is required to meet the ECA requirements described above. As a minimum, it is recommended that a sign be posted at the site entrance with the site name, ECA number, operator name and contact information. Additionally, signs should be posted within the Site to identify the designated waste segregation areas to ensure waste types are properly deposited. The need for additional signage should be reviewed from time to time by landfill staff for adequacy and implemented as required.

5.3 On-Site Access Roads

Current access to the Site is provided by an access road from the Site entrance, located approximately 450 m north off of Base Line Road. The existing Site access road is depicted on Figure 3. The on-Site access road is a compacted sand roadway which can accommodate two-way traffic. The road leads directly up to the active tipping face, segregated piles and turn around area.

6.0 SITE OPERATIONS

6.1 Site Management and Supervision

The *General Waste Regulation* (O. Reg. 347) states that access to a landfilling site shall be limited to such times as an attendant is on duty and shall be restricted to use by persons authorized to deposit waste in the fill area. The role of a Site attendant is to monitor all Site activities, which should help ensure that best practices are carried out by Site users, reduce the potential for unauthorized types of waste to be deposited, and keep the Site cleaner. The operating hours chosen should reflect the size of the local population, volume of waste typically deposited and seasonal variations in waste generation (e.g. summer peak periods, etc.) (Ontario Ministry of the Environment, 2009).



O. Reg. 347 requires that all incoming waste be inspected prior to being received to ensure that the Site is approved to accept such waste.

The Site Owner is the Corporation of the Village of Hilton Beach. The Site management and supervision measures in place include a locked gate located at the intersection of the main access road and the on-Site road.

The following sections outline the duties and responsibilities generally assigned to Site Owners, Site Operators and Site Attendants as described in MECP document "*Operating Manual for Small Waste Disposal Sites*", dated January 2009.

6.1.1 Duties and Responsibilities of the Site Owner

The Site Owner is the legal owner of the Site meaning the individual, company, or organization to which a waste disposal site ECA has been issued (Ontario Ministry of the Environment, 2009). The Owner of this Site is the Corporation of the Village of Hilton Beach.

The Site Owner retains legal responsibility, overall authority, and responsibility for the Site, its' operations, and compliance with this D&O Plan, the ECA conditions, any applicable Acts and Regulations (e.g. *Environmental Protection Act (EPA)*, Ontario Regulation 347 – General Waste Management (O. Reg. 347), etc.), and any direction from the MECP. Failure to abide by the Site's ECA, requirements of the EPA or O. Reg. 347, could result in enforcement action by the MECP (Ontario Ministry of the Environment, 2009).

The Site Owner is also responsible for ensuring the Site Operator operates the Site in compliance with this D&O Plan, the Site's ECA and all applicable Acts and Regulations and the Service Agreement and that the Site is operated in a safe manner, both for employees and users, at all times, and that all applicable workplace health and safety requirements are followed. It is recommended that the Site be operated as follows:

- Only solid non-hazardous domestic and commercial waste from the service area listed in Section 2.1 may be accepted;
- All incoming waste must be inspected prior to accepting it at the Site to ensure that it is approved for acceptance;
- All wastes at the Site are to be managed and disposed of in accordance with O. Reg. 347;
- The Site must be operated in a safe and secure manner which minimizes the impacts of dust, odour, noise, litter, vectors, and vermin on the general public, Site personnel, and the natural environment;



- Signage must be prominently post at the Site entrance stating the hours of operations, the Owner's name, staff contact, and telephone number;
- A log of complaints received must be maintained, and when a complaint is received the MECP must be contacted within 48 hours of receipt a complaint, and a written description of the complaint and the actions taken to address it must be provided to MECP within 7 days;
- Daily inspections of the Site's equipment and facilities must be conducted to ensure the Site is maintained in good working order at all times, and a log of deficiencies that have the potential to negatively impact the environment must be maintained;
- In the event a spill or leak occurs:
 - All measures necessary to contain and clean it up must begin immediately;
 - The spill, all actions taken to clean it up, and measures necessary to prevent future spills must be recorded in the daily log;
 - The spill must be immediately report it to the MECP; and
 - All waste materials from the spill must be managed and disposed of in accordance with O. Reg. 347.
- Records of all inspections, monitoring, and other activities associated with the Site are maintained at the Corporation of the Village of Hilton Beach office in paper or electronic file.

6.1.2 Duties and Responsibilities of the Site Operator

The Site Operator is the individual, company or organization that is in charge of operating a waste disposal site on a day-to-day basis. The Site Operator is the Corporation of the Village of Hilton Beach.

The Site Operator has overall authority and responsibility for day-to-day Site operations and must ensure that the Site is operated in accordance with this D&O Plan, the conditions of the Site's ECA, and all applicable Acts and regulations. Failure to operate the Site in accordance with the above-mentioned documents and the service agreement for the Site could result in enforcement action by the Corporation of the Village of Hilton Beach and/or the MECP (Ontario Ministry of the Environment, 2009).

The Site Operator is responsible for:

- Retaining a Site Attendant(s) and ensuring that the person(s) is(are) appropriately trained;



- Ensuring a trained Site Attendant is on duty whenever the Site is open for the deposition of wastes, and that they carry out their duties as described in this D&O Plan, the ECA and all applicable Acts and Regulations and the Service Agreement; and
- Ensuring that the Site is operated in a safe manner, both for employees and users, at all times, and that all applicable workplace health and safety requirements are followed (Ontario Ministry of the Environment, 2009).

The Site Operator may also be assigned the responsibility for:

- Arranging for and applying proper waste covering and compaction;
- Conducting litter clean-up around the site away from the main working face; and/or
- Repairing road surfaces, signage, fencing, gates, etc. away from the main working area.

6.1.3 Duties and Responsibilities of the Site Attendant

The Site Attendant is the on-Site supervisor who is in charge of all waste disposal activities while on duty.

The on-duty Site Attendant ensures that this Plan, the ECA and all other requirements related to waste disposal activities are followed on a day-to-day basis. The Site Attendant is instrumental in ensuring that:

- Site operations do not negatively impact the local environment;
- Authorized users are provided with a convenient and safe facility for waste disposal; and
- The Site is operated as efficiently as possible.

At a minimum, the Site Attendant should be responsible for carrying out the following duties:

- Opening and closing the Site according to posted hours of operation;
- Ensuring that only authorized users deposit waste at the Site;
- Ensuring that only authorized wastes are deposited at the Site by conducting a visual inspection of wastes brought to the Site;
- Ensuring that scavenging does not occur at the Site;
- Ensuring that refuse is only deposited at the current working face or tipping face of the Site;
- Employing appropriate emergency response procedures as required; and

Notifying the Site Operator if conditions at the Site are deteriorating. This is especially important when conditions, if not corrected, may deteriorate to the point where they threaten to violate the operational requirements listed in this Plan, the ECA, and/or the applicable Acts and Regulations.



6.2 Hours of Operation

In accordance with the Site's ECA, operations at the Site may be conducted daily between 7:00 am and 8:00 pm. Within this timeframe, the Owner has operational flexibility to establish and change the hours the Site receives waste.

At the present time, the days and hours of operation for the Site are as follows:

- Saturdays – 10:00 am to 3:00 pm
- Sundays – 12:00 pm to 4:00 pm

During the spring and summer months (May 15 to September 15), additional hours are as follows:

- Wednesdays – 12:00 pm to 5:00 pm
- Mondays of the long weekend – 12:00 pm to 4:00 pm

Should revisions to the hours of operation be needed, they should be approved by the required operating authority. Sufficient public notification should be provided, and updated signage should be posted at the Site entrance to reflect the changes.

6.3 Authorized Site Users

The Site is authorized to accept the disposal of solid, non-hazardous, domestic and commercial waste from the users in the Hilton Beach Village and Township of Hilton Beach surrounding area. The Site operator collects bagged waste and transports it to the Site daily. It is estimated that the current population being served is approximately 600 to 1,000 people.

6.4 Emergency Response

The Site Operator should be equipped with some form of reliable communications (e.g. radio, cellular phone if service is available, or satellite phone) while on duty. The procedures that should be followed depending on the emergency are stated below.

6.4.1 Fire Control

Fire is a continual risk at the landfill site due to decomposition of waste, disposal of smouldering waste, vandalism, and generation of landfill gases.

If a fire is detected at the landfill site, the Site Operator must ensure his or her own safety, then immediately contact the following phone numbers:

Fire Department	911;
NDMNRF Report a Forest Fire	1-888-863-3473;



MECP Spills Action Centre 1-800-268-6060; and

Site Owner 705-246-2242 (Village of Hilton Beach).

A fire extinguisher should be kept on Site, stored in the operators shed or other on-Site building. In case of fire, the preferred method of extinguishing a fire involves smothering the fire with sand cover material. The sand should be pushed over the burning area in a thickness of 1-2 m. Water should be used as a last resort, since water will accelerate leachate production. A stockpile of sand cover material should be maintained near brush/wood piles in case of fire, and the brush/wood piles should be no larger than 25 m³ and 5-6 m high.

6.4.2 Medical

Should the Site Operator or a user be in need of emergency medical care, the Site Attendant should immediately contact the following phone numbers:

Emergency Medical Services 911; and

Site Owner 705-246-2242 (Village of Hilton Beach).

6.4.3 Environmental Spill

Should a spill of hazardous materials occur, or any other situation develops that poses an immediate threat to the environment, the Site Operator should contact the following phone numbers:

MECP Spills Action Centre: 1-800-268-6060; and

Site Owner 705-246-2242 (Village of Hilton Beach).

6.4.4 Personal Safety/Site Security

Should the Site Operator fear for personal safety due to threat of physical violence by any person, he or she should avoid physical confrontation at all cost, and contact the following phone numbers:

Ontario Provincial Police 911; and

Site Owner 705-246-2242 (Village of Hilton Beach)

6.5 Record Keeping

Records of waste disposal activities are needed to properly assess the effectiveness and efficiency of site design and operation, their effect or relationship to any nuisance and environmental impacts, and the occurrence of any public complaints or concerns. Record keeping helps maintain high operational standards, is required for the annual operations report (where required by MECP), and to plan for future site activities.



The Corporation of the Village of Hilton Beach as the Site Owner is responsible for ensuring that records of the activities undertaken at the Site are kept. The Site Operator is responsible for keeping the required records. The Site Operator or Attendant (if applicable) is responsible for recording the required information.

Records should be kept and include the following information as outlined in the MECP document Landfill Standards Guidelines (Ontario Ministry of the Environment, 2010), as well as Conditions 3.25 and 3.26 of the current ECA:

- The type, date and time of arrival, hauler, and quantity (estimated volume as received) of all waste and cover material received at the Site;
- The area of the Site in which waste disposal operations are taking place;
- Any complaints from the public received by the Owner and/or Operator and a description of the action taken by the owner in response;
- A calculation of the total quantity (estimated volume as received) of waste received at the Site during each operating day and each operating week;
- A record of litter collection activities and the application of dust suppressants;
- A record of inspections of any control, treatment, disposal or monitoring facilities; and
- 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.

6.6 Visual Screening

The Site has a natural visual buffer of trees and brush between the Site and surrounding areas in all directions.

6.7 Dust Control

Dust generation is common at most landfill sites due to the handling of soils and movement of vehicles along gravel and dirt roads. Dust impacts typically result from landfill site traffic, landfill operations, soil borrow operations, and wind erosion. Dust in the vicinity of a landfill site should not be problematic under normal conditions and is usually controllable under extreme dry/windy conditions.

The vehicular traffic at the Site has not resulted in significant historic dust impacts, over extended periods of time. During normal landfill operations some dust is created, however, the buffer zones surrounding the landfill area, in conjunction with the perimeter Site screening treeline, generally contain and attenuate the dust levels. Due to the remoteness of the Site and the low-use frequency, generation of dust on the Site



should not be a problem. If dust raised by vehicle traffic becomes a problem, the application of a water-based dust suppressant is an acceptable method to treat on-Site roads. It is recommended that calcium chloride be avoided if possible as performance of the landfill as a natural attenuation type facility is evaluated via chloride concentrations and the application of calcium chloride could provide confounding influences.

6.8 Litter Control

Litter can be an issue from an aesthetic perspective and present a safety and health hazard. To ensure that litter does not become problematic at the Site during normal or extremely windy conditions, the following control measures could be implemented:

- All vehicular traffic transporting waste to and around the Site should be adequately loaded to prevent debris from blowing out of the vehicle;
- Waste cover soil should be placed over the working face of the landfill, as required, in order to minimize blowing debris;
- The active face of the landfill should be kept to a minimum, especially on windy days. This may be accomplished by placing waste cover soils over a portion of the active face, should windy conditions warrant this action;
- Windblown litter should be recovered and returned to the active working face; and
- Landfill staff should continue to monitor and collect windblown debris, as conditions dictate, to prevent it from leaving the boundaries of the Site.

6.9 Odour Control

In general, landfills have the potential to emit two types of odours: waste odour and landfill gas odour. Waste odour is generated by recently deposited waste at the active face and landfill gas odour is generated by the anaerobic decomposition of organic waste materials. In addition, odour emissions can also result from leachate seeps, ponded leachate, or stagnant water on the surface of the landfill entering into an anaerobic state. It is not anticipated that Site operations will cause significant problems with respect to odour.

6.10 Noise Control

Potential noise impacts from the Site will generally result from operation of the landfill construction and stationary equipment. The operation of the equipment should be conducted in such a manner as to minimize noise impacts, whenever possible. Operation of landfill equipment should be carried out only during daylight hours to reduce the noise impacts to surrounding residents unless emergency corrective



action dictates the use of such equipment during non-daylight hours. It is not anticipated that Site operations will cause a significant problem with respect to noise given the site-specific conditions.

All landfill equipment associated with the development, operation or closure of the Site should comply with the "*Model Municipal Noise By-law Publication NPC-115 - Construction Equipment*" (MECP, August 1978), where applicable. In addition, a landfill equipment program should be maintained in accordance with the manufacturer's specifications with particular attention being given to maintaining and where feasible, improving the noise muffling systems.

In accordance with the "Noise Guidelines for Landfill Sites" (MECP, October 1998), the stipulated noise levels resulting from operation of landfill equipment are not to exceed the following allowable criteria:

- 55 dBA during any hour of the day (7:00 a.m. to 7:00 p.m.); and
- 45 dBA during any hour of the night (7:00 p.m. to 7:00 a.m.).

In the case of stationary noise sources, the allowable limits during the daytime and nighttime are 50 dBA and 45 dBA, respectively, as specified in "*Environmental Noise Guideline – Stationary and Transportation Sources – Approval and Planning (NPC-300)*" (MECP, August 2013).

If further noise control measures are determined to be required for the Site under future operating conditions, then a contingency measure would consist of a monitoring program and possibly the construction of an acoustic barrier(s) at select locations along the Site property boundary, if required. The need for and exact locations and configurations of such a barrier(s) would be determined subsequent to completion of noise measurements. Based on the results of the noise measurements, a detailed design would be undertaken for the acoustic barrier(s) and submitted to the MECP for approval.

6.11 Vector and Vermin Control

The terms vector and vermin refer to objectionable insects, rodents, and birds that may establish a habitat at a landfill. Common landfill vector and vermin include flies, rats, and gulls. The impact of these species is of concern from both a health and aesthetic perspective. Landfill operations are required to control vector and vermin on the landfill Site property.

There has not been a significant problem with vectors and vermin at the Site. However, should vector and vermin become problematic then the following control measures could be undertaken:

- Should an outbreak of flies occur at the site then an insect exterminator should be contracted to control the population on an as required basis;
- Should rodents come to inhabit the site, then extermination should be conducted by a licensed exterminator, on an as required basis; and



- Should the presence of gulls at the site become problematic, increased daily cover should be utilized.

6.12 Scavenging

Both Ontario Regulation 347 (O. Reg. 347) and O. Reg. 232/98 prohibit scavenging at a landfill site. Scavenging is the uncontrolled removal of waste materials from a landfill site. Scavenging is prohibited due to safety concerns, and the potential for damage to environmental controls, monitoring equipment and other works at a landfill.

Currently, the following measures have been implemented at the Site to prevent scavenging:

- Recyclable and recoverable materials such as metals are segregated from the incoming waste streams and are removed off-Site for subsequent recycling, on an as-required basis;
- The gate is locked outside of approved operating hours to prohibit vehicle entrance when the Site is closed;
- Interim cover is applied to the active face of the landfill; and
- There is a treed buffer surrounding the Site that is comprised of coniferous trees dense enough to visually buffer the site and to discourage access to the site at any location other than the site entrance.

6.13 Winter and Wet Weather Operation

Winter operations require advanced planning for Site preparation, snow removal, and the stockpiling and storage of cover material.

Many operational problems occur as a direct result of the failure to prepare an adequate disposal area in advance of winter. An area sufficient to hold more than the expected volume of waste should be prepared in advance. In addition, stockpiles of cover material, areas for piling snow, as well as snow fences, to minimize and control snow drifting, should be placed prior to the onset of winter.

During winter months, the active fill area should be located in such a manner, as to be protected from prevailing winds and, where possible, located with a southern exposure. Up to twice the estimated area for disposal during the winter months should be prepared to minimize problems associated with heavy snow and equipment failure. During the winter months, flatter grades may be required at the working face to facilitate the movement of equipment.

Sufficient quantities of waste cover soil should be stockpiled on-Site to satisfy waste cover soil requirements during the winter months.



Snow ploughing and a designated snow storage area should be considered in advance of winter conditions. A snow disposal area should be created adjacent to the active landfill area to allow the removal of snow from the tipping face and any other active landfill areas. This area should be located such that snow melt will not flow into the active landfill area. Should snow require removal and piling after ploughing, then a suitable area for snow storage should be located, which will not interfere with daily landfill operations.

Waste disposal operations are particularly hard on disposal equipment during the winter months. As such, the Site equipment should be cleaned and maintained on a daily basis to ensure adequate operation.

During wet weather operations, surface water should be directed away from the active fill area by means of temporary earth berms constructed upgradient of the active area. Under extremely wet weather conditions, the disposal operations may be temporarily relocated to a drier working area, to accommodate vehicular traffic at the working face.

On-Site equipment required to be used for continued landfill operations during rainfall events, should be provided with closed cabs.

Site roadways should be maintained in a passable condition during wet weather conditions. Should washouts of the Site roadways occur due to rainfall events, then the roadways will be reconstructed in a timely fashion and in a manner consistent with the design presented in this report.

7.0 LANDFILL GAS MANAGEMENT

7.1 General

Landfill gas is a colourless and flammable gas generated by methanogenic bacteria during the decomposition of organic material under anaerobic conditions. The rate of landfill gas production depends on the interrelationship of many factors, of which waste composition and age, temperature, moisture content, pH, quantity and quality of nutrients and microbial populations are the principal factors. The length of time that a landfill may generate landfill gas can be in excess of 50 years.

Landfill gas is composed of a variety of chemical compounds which reflect the type of wastes that are placed at the landfill site. In general, landfill gas is composed of approximately 50 to 55 percent (%) methane by volume, 40 to 45 % carbon dioxide by volume, and less than 1 % other gases such as sulphur species and volatile organic compounds. The concerns with landfill gas are:

- Methane gas creates an explosive hazard under certain conditions (between 5 to 15 % by volume in air);
- Landfill gas will reduce or replace the percentage of the natural atmosphere in enclosed structures, thus creating an oxygen deficient environment;



- The potential for health effects depending on the concentrations of trace gas compounds (e.g. hydrogen sulfide); and
- The potential for landfill gas to migrate through the subsurface soils and create off-Site impacts to neighboring receptors.

Landfill gas has two primary methods of emanating from the landfill site. These two methods are emission of the landfill gas to the atmosphere either under controlled release conditions (designed venting and/or collection structures) or uncontrolled conditions (venting through the landfill cover), and/or the migration of the landfill gas within the surrounding subsurface until a venting location is encountered.

The migration of landfill gas is dependent on the soil conditions at the landfill site, the landfill gas generation rate, the landfill site design, and weather conditions throughout the year. The migration of landfill gas will occur in the higher permeable soil stratigraphic units that are present around the landfill site. The landfill gas generation rate will govern the amount of gas available to migrate and impact the landfill gas migration, since landfill gas will usually rise. A perched water table or frost layer will impact the distance of landfill migration since the boundary layer will create a reduced exfiltration area for the gas. As such, landfill gas monitoring programs should include monitoring events during inclement weather conditions that would impact the extent of landfill gas migration.

The concern with methane gas is that it creates an explosive hazard under certain conditions. The concentration level at which methane has the potential to explode is called the Explosive Limit. Methane is explosive when mixed with air at concentrations between 5% by volume in air (vol %) and 15 vol %. At concentrations below 5 vol % and above 15 vol %, methane is not explosive. Therefore, the Lower Explosive Limit (LEL) of methane is 5 vol % and the Upper Explosive Limit (UEL) is defined at 15 vol %. Methane is lighter than air and is likely to dissipate unless trapped inside enclosed spaces.

7.2 Landfill Gas Monitoring

Ontario Regulation 232/98 (O. Reg. 232/98) provides threshold criteria for landfill gas concentrations at new or expanding landfill sites. The criteria outlined in O. Reg 232/98 provides a basis for assessing the potential impacts due to methane gas migration. The concentration limits specified in the Regulation are:

- Less than 2.5 vol % in the subsurface at the property boundary;
- Less than 1.0 vol % volume in any on-site building, and in the area immediately outside the foundation if the building or structure is accessible to any person or contains electrical equipment or a potential source of ignition; and



- Less than 0.05 vol % in any off-site building, and in the area immediately outside the foundation if the building or structure is accessible to any person or contains electrical equipment or a potential source of ignition.

With respect to landfill gas monitoring at the Site, any buildings or structures at the Site would be required to 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 should be conducted in all buildings or structures on-Site, especially enclosed structures which at times are occupied by people. Currently, these types of structures are not present at the Hilton Beach Landfill Site.

The nearest dwellings are located approximately 700 m northeast of the Site, on Base Line. Given the current volume of waste in place at the Site, it is not anticipated that methane gas generation would present an issue for the nearby dwellings. The need for landfill gas monitoring probes should be assessed in the future with the further development of the Site to monitor landfill gas migration prior to the nearby receptors (the residential properties on Base Line).

8.0 STORMWATER MANAGEMENT

Currently, surface water drainage at the Site is controlled by infiltration of precipitation into the Site and overland flow towards the west. Surface water drainage has not been an issue at the Site and it is anticipated that all non-contact stormwater can continue to be managed through a combination of discharge via diffuse overland runoff and infiltration. No surface water drainage issues such as ponding have been observed at the Site during site visits completed by Pinchin. During operation of the Site, temporary soil berms should be established around the active working face to minimize the potential contact of stormwater with the waste.

The closure design strategy has been developed to follow the surrounding topography, blending the waste deposits with the surrounding terrain. At Site closure, the application of the final cover layer will reduce the amount of infiltration at the Site and may increase the amount of surface water runoff. Therefore, following installation of the final cover system, surface water drainage should be managed by a network of perimeter ditching, in order to direct any heavy precipitation or spring freshet away from the landfill to minimize infiltration and/or ponding of water on the cap. The perimeter ditches should be constructed in a trapezoidal shape, with a bottom width of 1 m and side slopes of 2 horizontal to 1 vertical (2H:1V). The low topographic relief of the Site may preclude the use of ditching and the diversion of storm and melt water may need to be conveyed by a series of shallow swales. These perimeter drainage ditches and/or swales should be field fit and directed towards the low-lying vegetated area to the east of



the Site. The low-lying area would act to slow down runoff and surface water flow received from the drainage ditches and direct water away from the landfill.

9.0 LEACHATE MANAGEMENT

With respect to leachate management, it is proposed that the Site continue to operate as a natural attenuation landfill, which will utilize the attributes of the Site's natural setting for the attenuation of leachate on Site. The findings of future hydrogeologic investigations and annual monitoring results would confirm the suitability of the Site as a natural attenuation Site. The effectiveness of the leachate management system under continued operation of the Site should be evaluated through a developed long-term monitoring program for the Site based on a hydrogeological assessment.

9.1 Contaminant Attenuation Zone

Attenuation of the leachate at the Site is accomplished primarily through filtration, dilution, dispersion, and adsorption processes (i.e., natural attenuation). A defined contaminant attenuation zone (CAZ) has not been established for the Site.

9.2 Annual Monitoring and Reporting

9.2.1 Groundwater and Surface Water Monitoring

There is no groundwater or surface water monitoring program in place at the Site. Groundwater and surface water should be monitored throughout the active life of the Site and following closure. Groundwater flow is currently assumed to be towards the west and southwest, based on the topography of the Site and the proximity of the low-lying wetland area located to the west.

Under condition 4.1 of the Site's ECA, the Client intends to retain a qualified professional to assess the Site to determine if a groundwater and/or surface water monitoring program and an off-site groundwater and surface water mitigation plan are required for the Site. If a monitoring program and/or mitigation plan are required, then the Client shall submit it to the Director for approval by February 1, 2024.

The performance of the Site, with respect to the impact on surface water quality to the nearby surface water receivers and groundwater quality within the aquifer in the vicinity of the Site, should be assessed on an annual basis, as provided in Annual Water Quality Monitoring Reports.

The evaluation of surface water quality should involve comparison of measured surface water quality results to the Provincial Water Quality Objectives (PWQO), Aquatic Protection Values (APV) and the Canadian Water Quality Guidelines (CWQG).

The evaluation of groundwater quality should involve comparison of measured groundwater quality results from monitoring wells to the Ontario Drinking Water Quality Standards (ODWQS), formerly the



Ontario Drinking Water Objectives (ODWO). In addition, annual monitoring reports examined the potential impact of landfill operations on local groundwater quality using the MECP's Guideline B-7 (formerly the Reasonable Use Concept (RUC)).

Groundwater impacts for new proposed landfill sites are assessed at the property boundary in consideration of Guideline B-7. The Guideline B-7, the "reasonable use concept" (RUC) approach, is the MECP's groundwater management strategy for mitigating the effect of contamination on properties adjacent to its source. It establishes procedures for determining the reasonable use of groundwater on a property adjacent to sources of contaminants and establishes limits on the discharge of contaminants from facilities which dispose of waste into the shallow subsurface.

The application of "reasonable use" is outlined in Procedure B-7-1 "*Determination of Contaminant Limits and Attenuation Zones*". The procedure determines the maximum concentration (C_m) of a particular contaminant that would be acceptable in the groundwater beneath an adjacent property and is calculated in accordance with the relationship:

$$C_m = C_b + x (C_r - C_b)$$

C_b – This is the background concentration of the particular groundwater contaminant in consideration before it has been affected by human activities. From this it is possible to calculate the extent of human activities impact on contaminant levels.

C_r – In accordance with the Ontario Water Management Guideline, this is the maximum concentration of a particular contaminant that should be present in the groundwater. This value is dependent on property's use of the groundwater as outlined in B-7. It also allows for the total amount of contamination. Pinchin conservatively assumes that the reasonable use of the groundwater on-site is potentially for potable drinking purposes (i.e., uses the ODWQS).

x – As determined by the MECP, this constant determines the extent which the contamination has on the groundwater's use. For drinking water x is 0.5 for non-health related parameters or 0.25 for health-related parameters. For other reasonable uses it is 0.5.

Contamination concentrations which exceed C_m may have an appreciable effect on the use of an adjacent property and as such the Site should be managed in a manner to minimize environmental damage, or the operation should be modified. It is acceptable to modify the operation of the disposal site to meet the specified limits. However, if these limits are exceeded, all waste disposals, except for that done in conjunction with a reasonable plan for closure or with remedial activities, should be terminated until the specified limits have been met, or until monitoring data indicate that these limits will be met.

Determination of the replacement of contaminated water supplies and the abatement of the contaminant



plume must be made on a case-by-case basis in accordance with "*Resolution of Groundwater Quality Interference Problems*", Guideline B-9.

10.0 SITE CLOSURE

10.1 End Use

There is presently no end use plan formalized for the Site. It is anticipated that most of the Site area will be returned to a naturalized condition, with no land use planned for it. The final contours proposed for the D&O Plan will allow for a revegetated, passive land use area to an elevation and overall condition consistent with the surrounding natural environment.

10.2 Closure Plan

A detailed Site Closure Plan in compliance with Section V of the Site's ECA should be prepared 2 years prior to the Site reaching approved final contours. This plan should be prepared with regard to the requirements outlined in the MECP Landfill Standards (MECP, 2012), and should include, but not be limited to, details on:

- Proposed end use;
- Final contour configuration;
- Design and construction of final cover;
- Landscaping;
- Site facilities (if any);
- Closure procedures;
- Closure schedule;
- Surface water control;
- Post-closure inspection, maintenance, and monitoring;
- Record keeping;
- Contingency plans; and
- Updated contaminating lifespan estimate.

The Site Closure Plan must be submitted to the MECP for review and approval prior to implementation.



11.0 TERMS AND LIMITATIONS

This D&O Plan was prepared for the Village of Hilton Beach (Client) for the Hilton Beach Landfill Site (Site). Conclusions derived are specific to the immediate area of study. The D&O Plan was prepared in general compliance with currently acceptable practices for environmental site investigations and specific Client requests, as applicable to this Site.

This report was prepared for the exclusive use of the Client, subject to the terms, conditions, and limitations contained within the duly authorized work plan for this project. Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, is the sole responsibility of such third parties. Pinchin accepts no responsibility for damages suffered by any third party as a result of decisions made or actions conducted.

If additional parties require reliance on this report, written authorization from Pinchin will be required. Pinchin disclaims responsibility of consequential financial effects on transactions or property values, or requirements for follow-up actions and costs. No other warranties are implied or expressed. Furthermore, this report should not be construed as legal advice. Pinchin will not provide results or information to any party unless disclosure by Pinchin is required by law.

Pinchin makes no other representations whatsoever, including those concerning the legal significance of its findings, or as to other legal matters touched on in this report including, but not limited to ownership of any property, or the application of any law to the facts set forth herein. With respect to regulatory compliance issues, regulatory statutes are subject to interpretation and these interpretations may change over time.

12.0 REFERENCES

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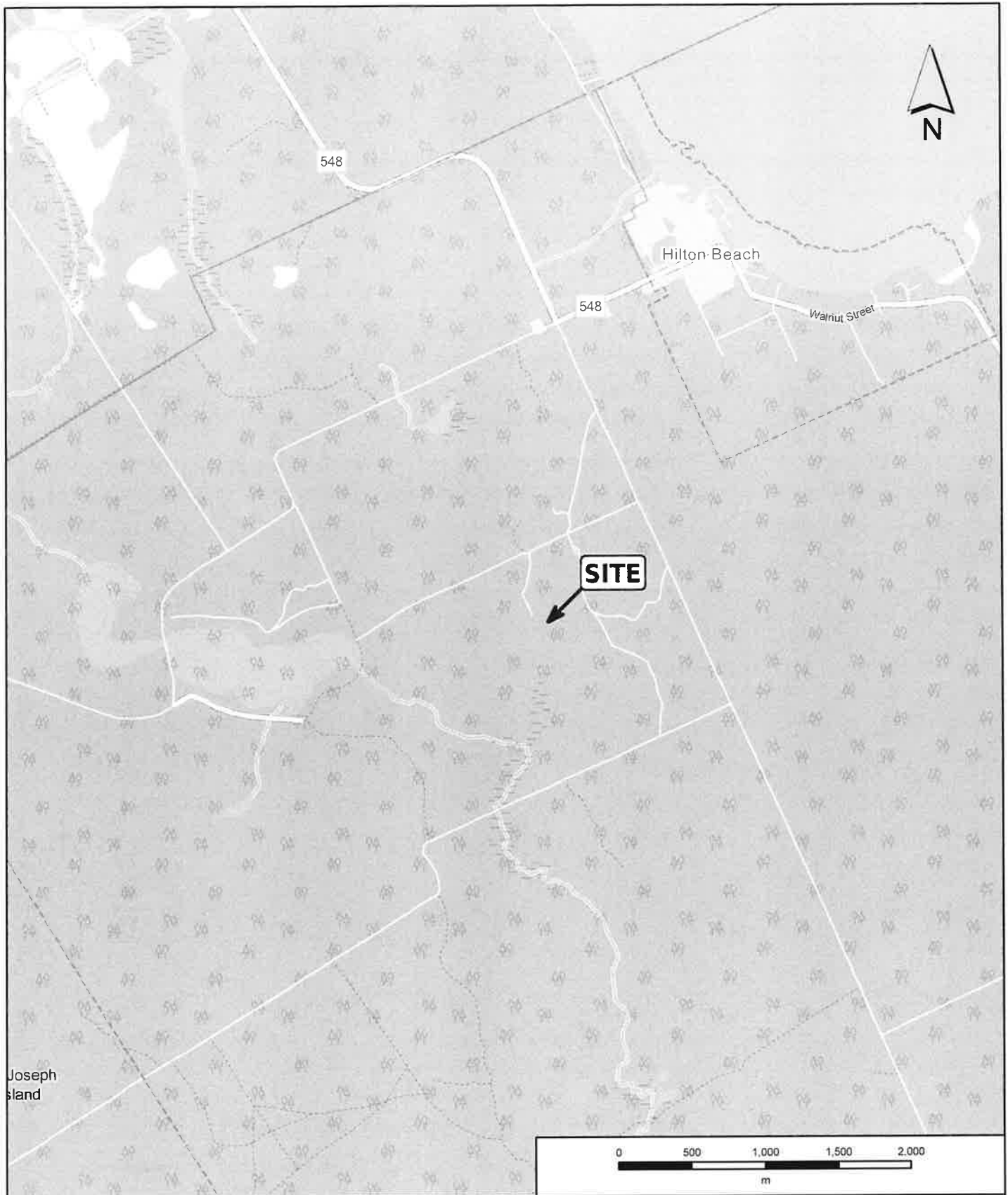
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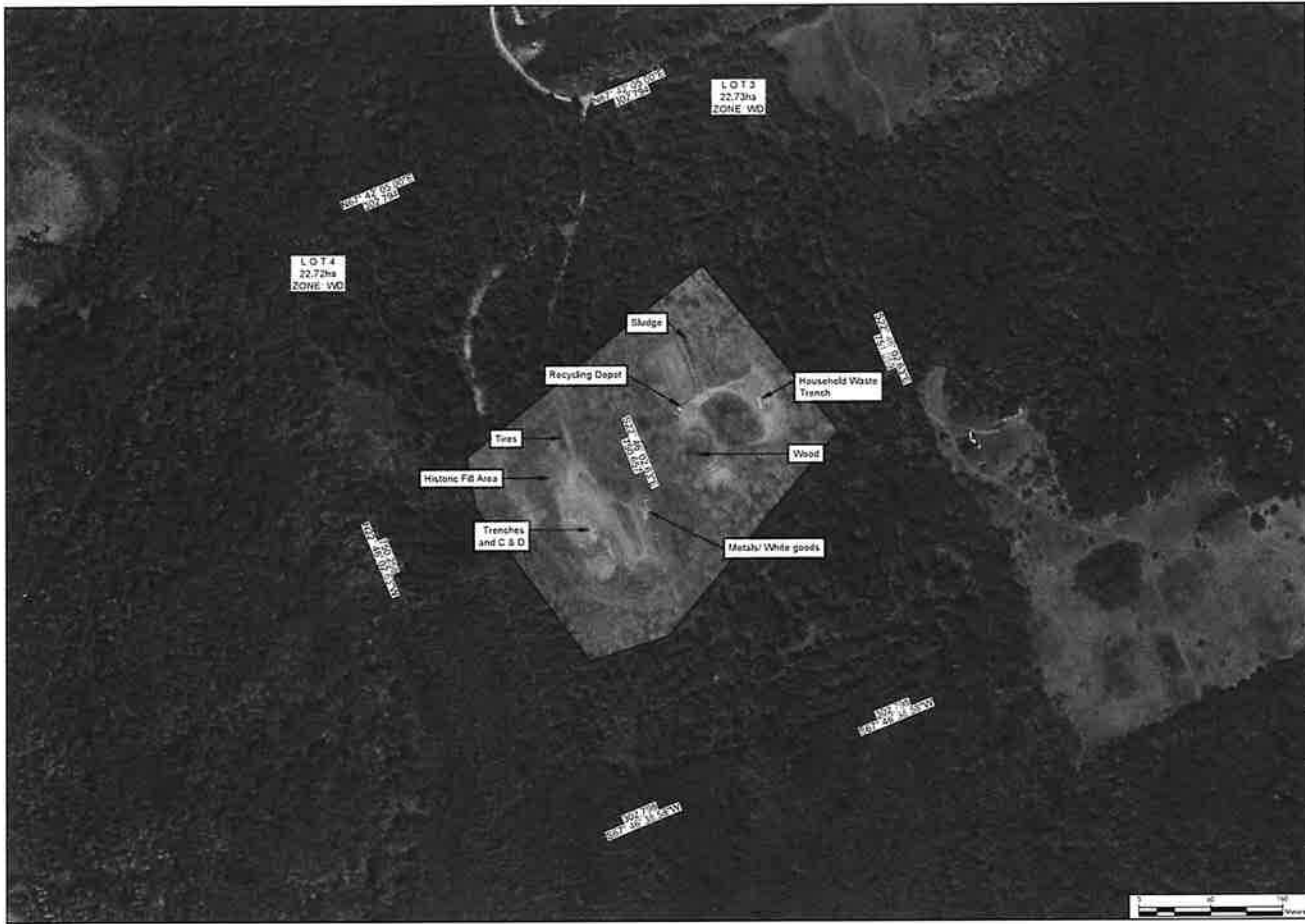
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APPENDIX I
Figures



	PROJECT NAME					
	HILTON BEACH LANDFILL DESIGN AND OPERATIONS PLAN					
	CLIENT NAME					
	THE CORPORATION OF THE VILLAGE OF HILTON BEACH					
	PROJECT LOCATION					
	HILTON BEACH, ONTARIO					
FIGURE NAME					FIGURE NUMBER	
KEY MAP					1	
PROJECT NUMBER	SCALE	DRAWN BY	REVIEWED BY	DATE		
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PROPERTY LINE
100m BUFFER

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INTERPRETATION



HILTON BEACH LANDFILL
DESIGN AND OPERATIONS PLAN

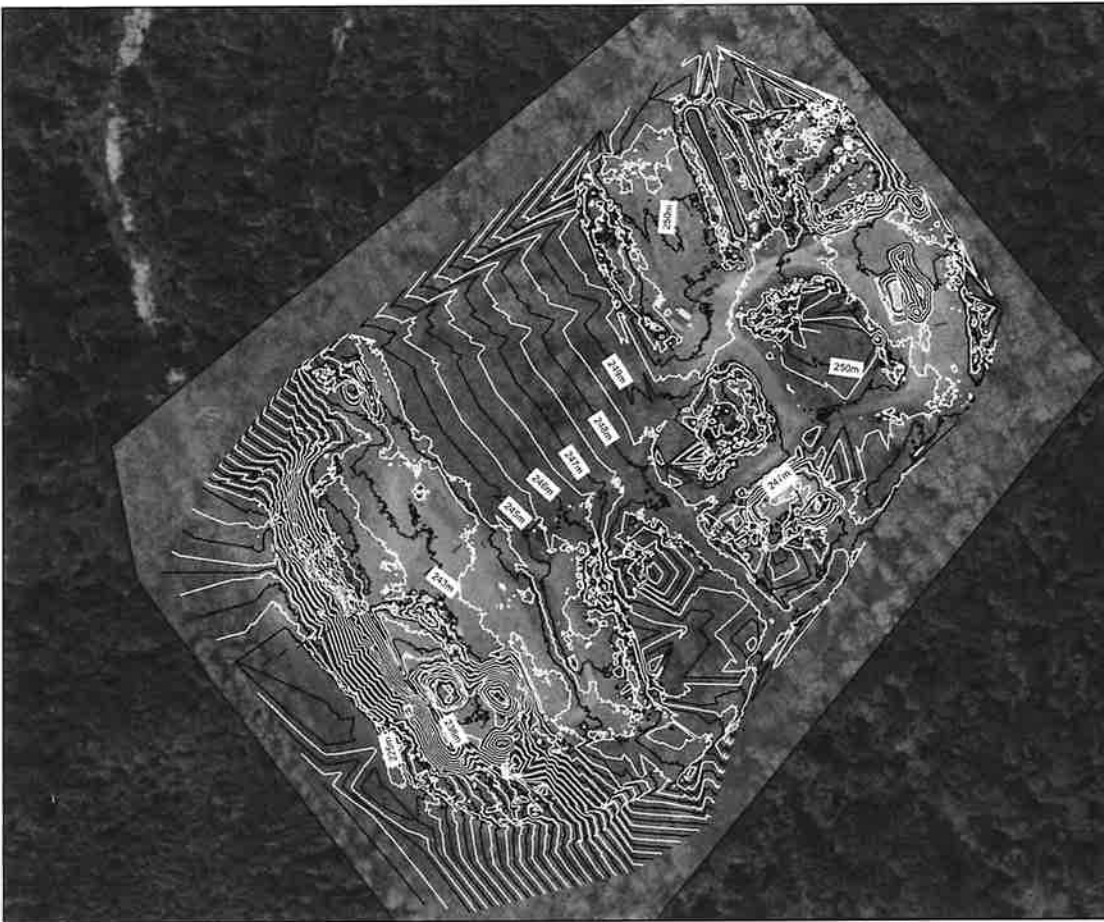
THE CORPORATION OF THE
VILLAGE OF HILTON BEACH

HILTON BEACH, ONTARIO

SITE LAYOUT

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MAJOR CONTOURS (1 0m)
MINOR CONTOURS (0 5m)

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HILTON BEACH LANDFILL
DESIGN AND OPERATIONS PLAN

THE CORPORATION OF THE
VILLAGE OF HILTON BEACH

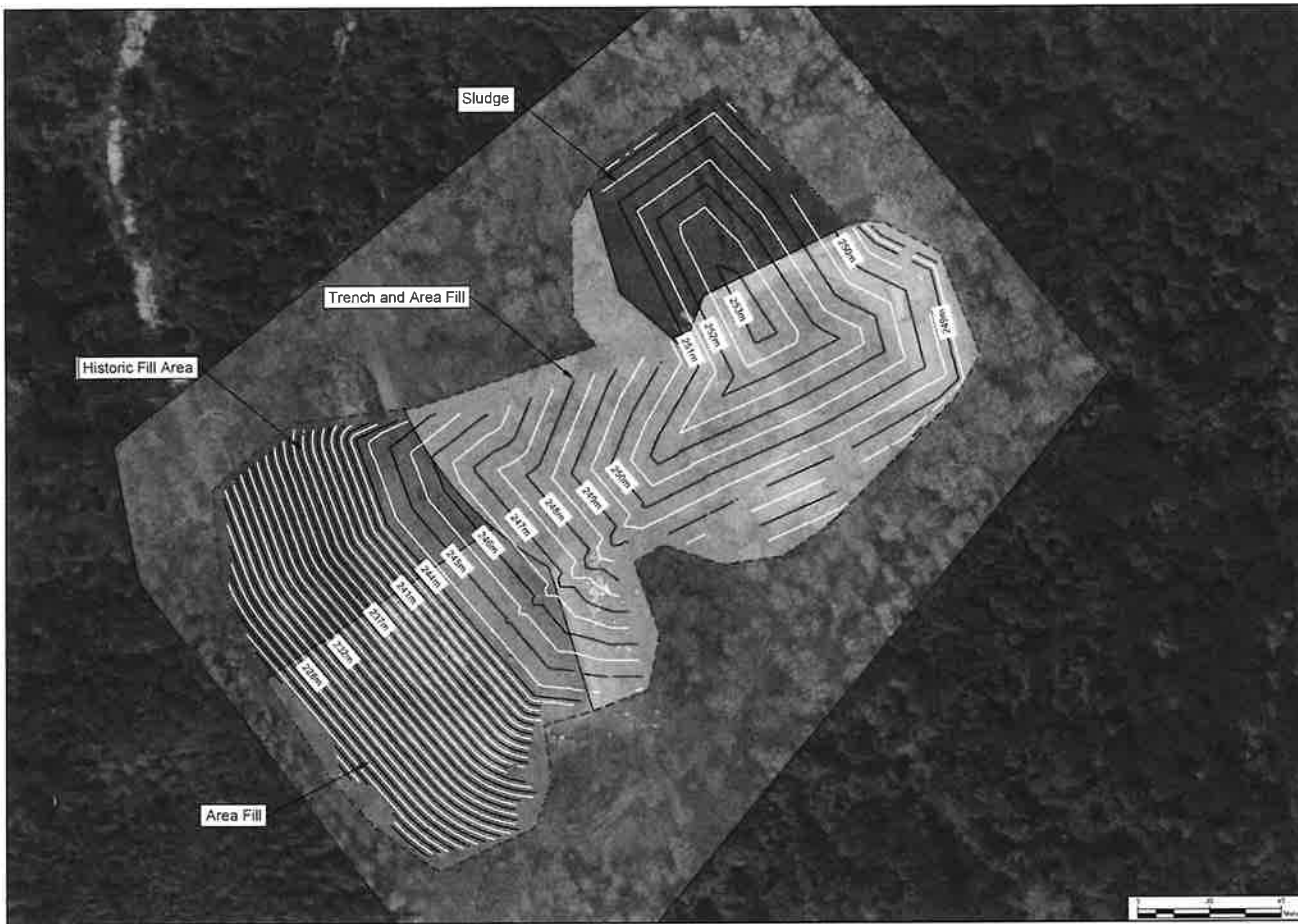
HILTON BEACH, ONTARIO

EXISTING TOPOGRAPHIC
CONTOURS

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--- FINAL FOOT PRINT BOUNDARY

--- MAJOR CONTOURS (1 3M)

--- MINOR CONTOURS (3 3M)

 SLUDGE / NO WASTE DEPOSITION

 COMBO (TRENCH AND AMP A FILL)

 AREA FILL

 HISTORIC FILL AREA

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HILTON BEACH LANDFILL
DESIGN AND OPERATIONS PLAN

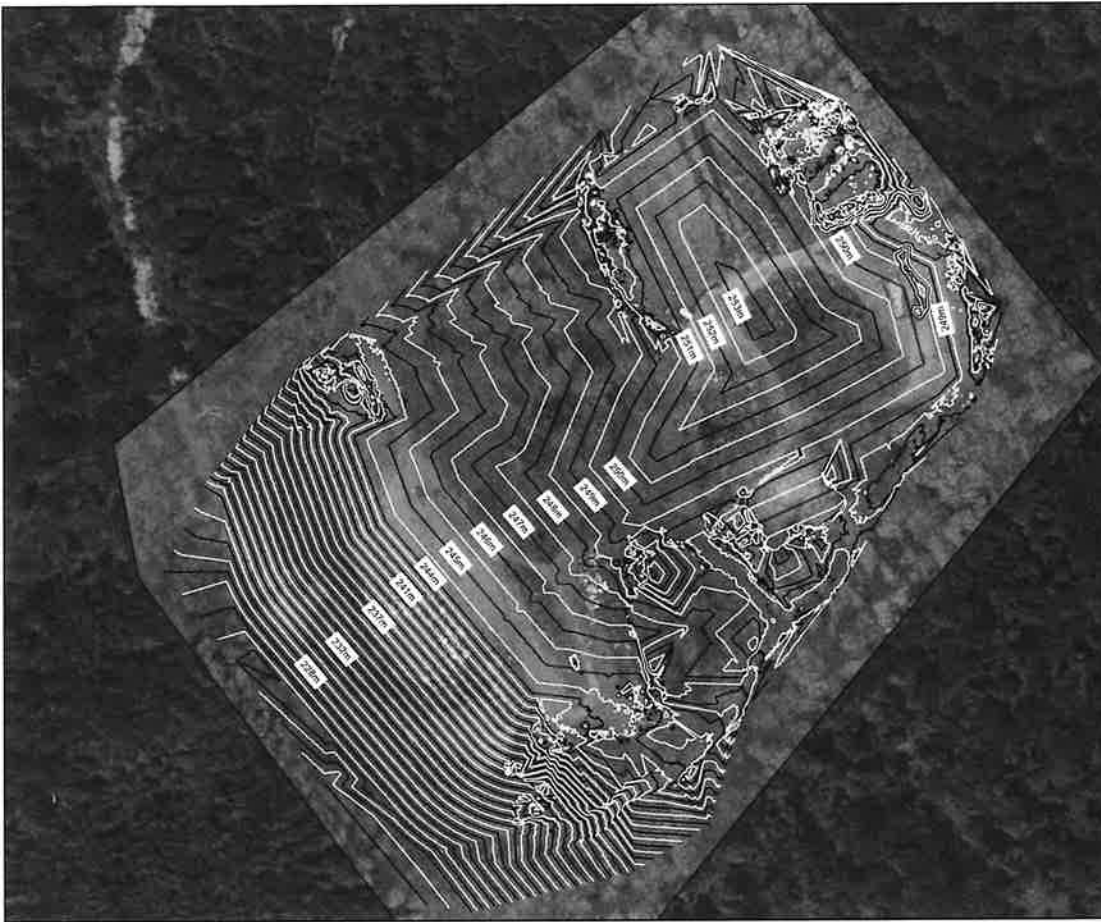
THE CORPORATION OF THE
VILLAGE OF HILTON BEACH

HILTON BEACH, ONTARIO

WASTE DISPOSAL AREAS

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MAJOR CONTOURS (10M)
MINOR CONTOURS (5M)

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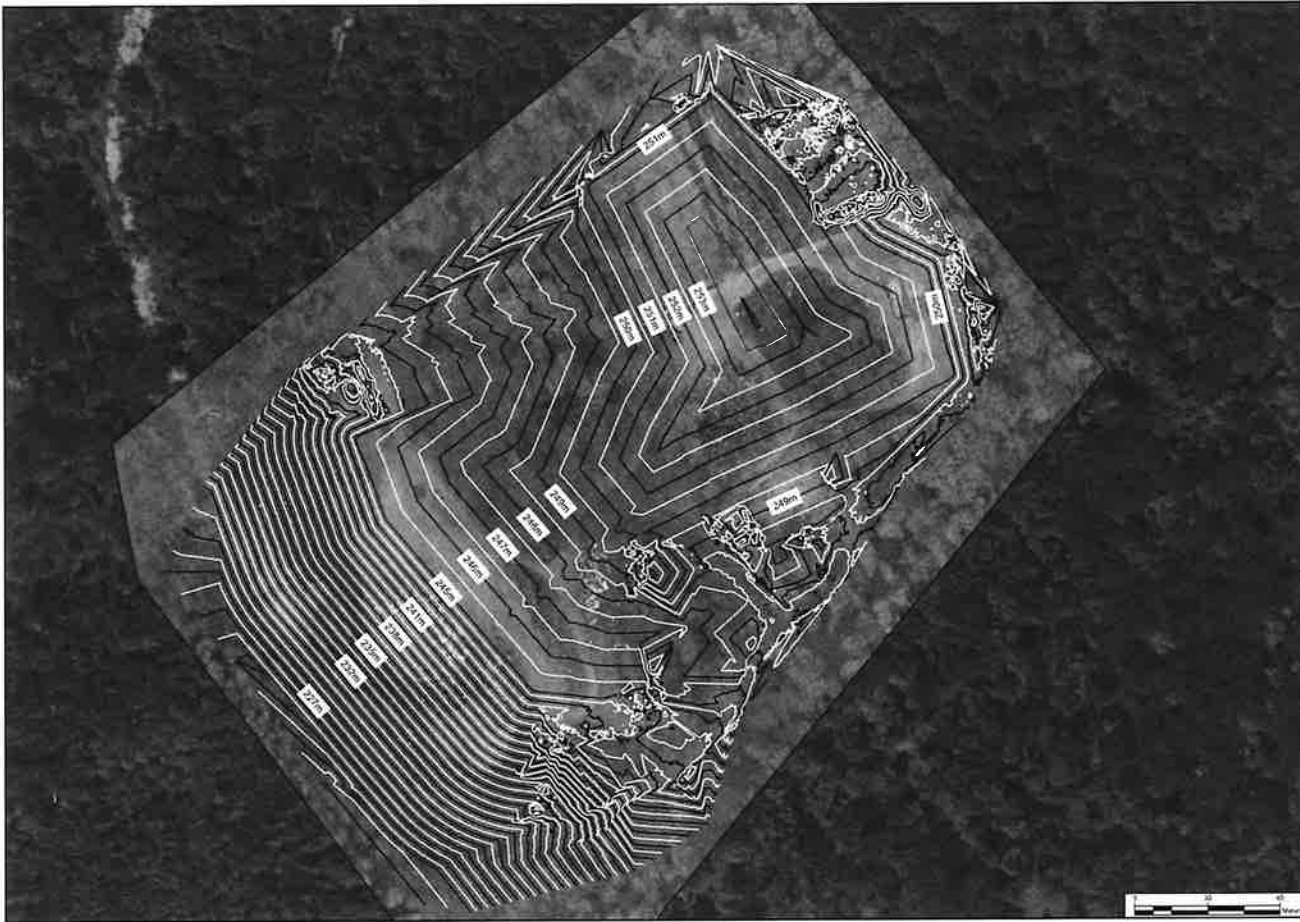
HILTON BEACH LANDFILL
DESIGN AND OPERATIONS PLAN

THE CORPORATION OF THE
VILLAGE OF HILTON BEACH

HILTON BEACH, ONTARIO

PROPOSED FINAL WASTE
CONTOURS

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MAJOR CONTOURS (1.5m)
MINOR CONTOURS (0.5m)

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INTERPRETATION



HILTON BEACH LANDFILL
DESIGN AND OPERATIONS PLAN

THE CORPORATION OF THE
VILLAGE OF HILTON BEACH

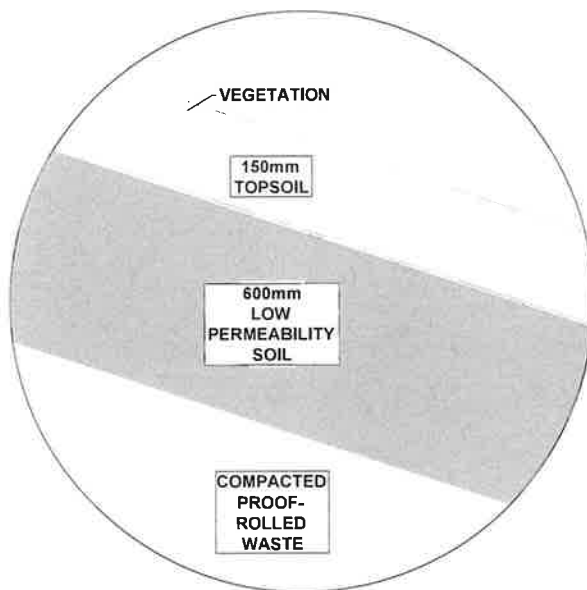
HILTON BEACH, ONTARIO

PROPOSED FINAL COVER
CONTOURS

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DETAIL TRADITIONAL SOIL COVER
OPTION 1

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HILTON BEACH LANDFILL
DESIGN AND OPERATIONS PLAN

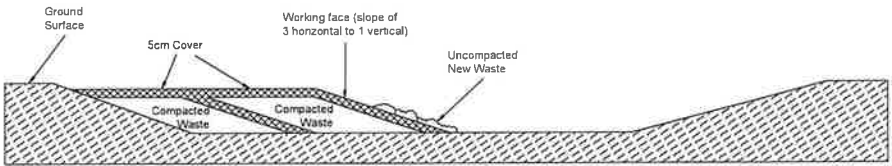
THE CORPORATION OF THE
VILLAGE OF HILTON BEACH

HILTON BEACH, ONTARIO

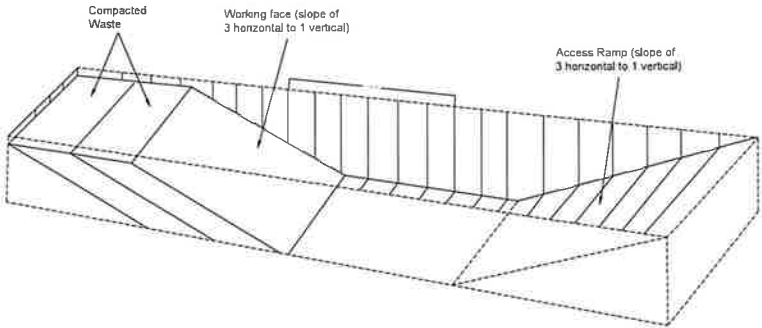
FINAL COVER DETAILS

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Trench Example - Side Profile



Trench Example - 3-Dimensional Profile



Note: Cover to be applied to all exposed waste surfaces, as shown in the side profile, above

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INTERPRETATION

PINCHIN

HILTON BEACH LANDFILL
DESIGN AND OPERATIONS PLAN

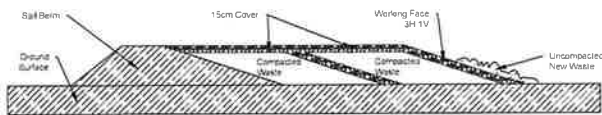
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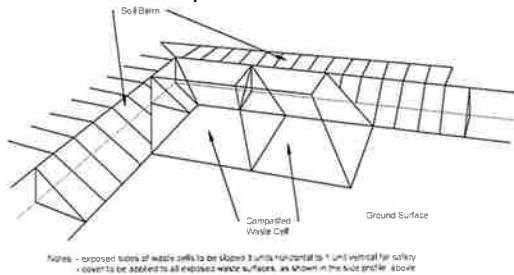
TRENCH FILL PROFILES

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Area Fill Example - Side Profile



Area Fill Example - 3-D Dimensional Profile



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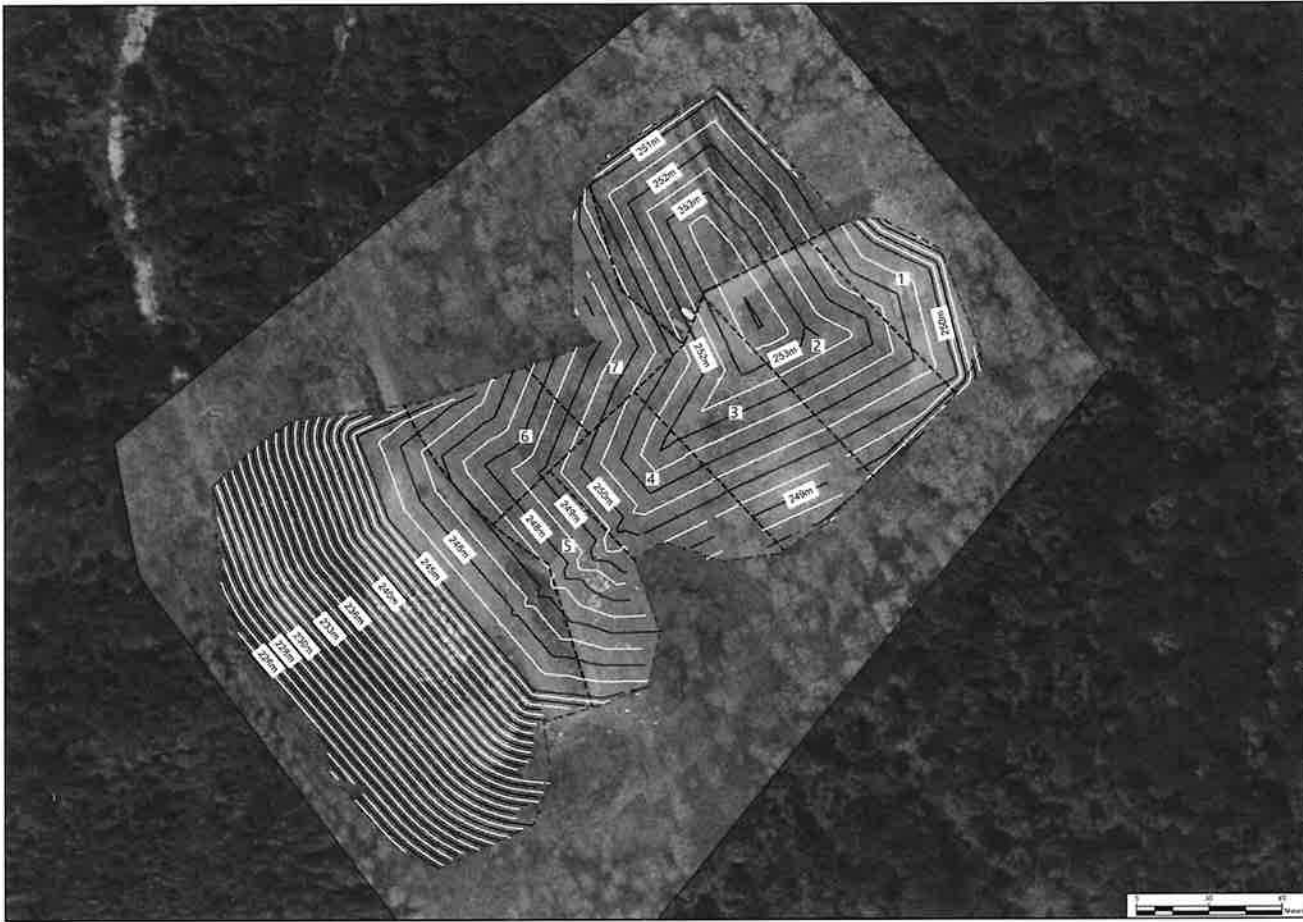
HILTON BEACH LANDFILL
DESIGN AND OPERATIONS PLAN

THE CORPORATION OF THE
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AREA FILL PROFILES

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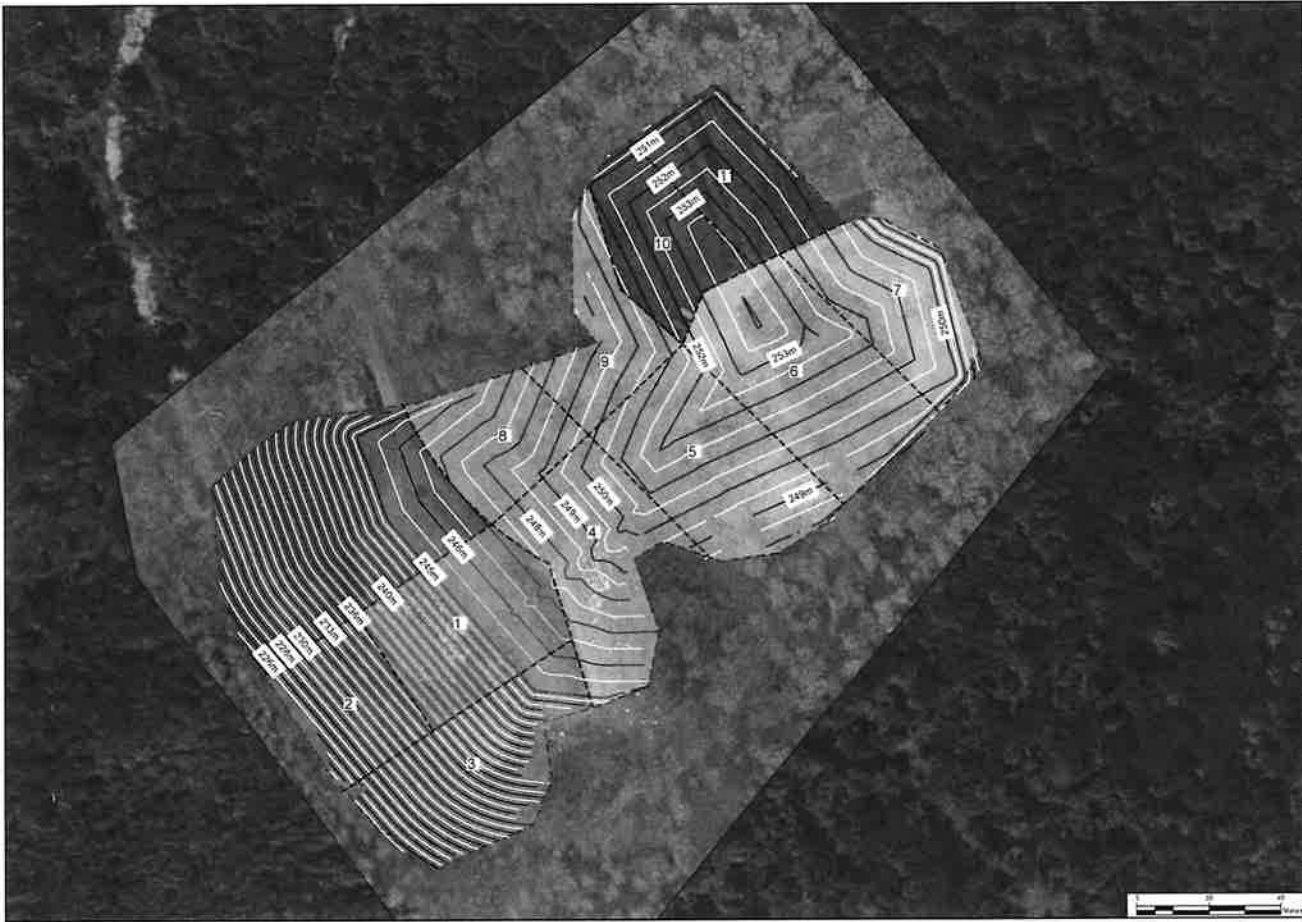
HILTON BEACH LANDFILL
DESIGN AND OPERATIONS PLAN

THE CORPORATION OF THE
VILLAGE OF HILTON BEACH

HILTON BEACH, ONTARIO

PROPOSED SITE DEVELOPMENT
PLAN - BELOW GRADE WASTE
DEPOSITION

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OCTOBER 2022	10A



FINAL FOOTPRINT BOUNDARY
MAJOR CONTOURS (1.5M)
MINOR CONTOURS (0.5M)
SLUDGE AREA FILL
CONWID (TRENCH AND AREA FILL)
AREA FILL
HISTORIC FILL AREA

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HILTON BEACH LANDFILL
DESIGN AND OPERATIONS PLAN

THE CORPORATION OF THE
VILLAGE OF HILTON BEACH

HILTON BEACH, ONTARIO

PROPOSED SITE DEVELOPMENT
PLAN - ABOVE GRADE WASTE
DEPOSITION

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OCTOBER 2022	108

APPENDIX II
Environmental Compliance Approval

AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER A560901

Issue Date: March 2, 2022

The Corporation of the Village of Hilton Beach
Post Office Box, No. 25
Hilton Beach, Ontario
P0R 1G0

Site Location: Hilton Beach Landfill Site
Lot 3, 4, Concession 15
Hilton Township, District Of Algoma

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 a 44.5 hectare landfill site for the disposal of domestic and commercial wastes and a waste transfer station, as follows:

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

I DEFINITION OF TERMS

- a) "Approval" or "ECA" means this Environmental Compliance Approval and any attached Schedules to it, including the application and supporting documentation listed in the attached Schedule "A";
- b) "CAZ" or "Contaminant Attenuation Zone" means land adjacent to a landfilling site that is used for the attenuation of contaminants from the landfilling site to levels that will not have an unacceptable impact beyond the boundary of the zone.
- c) "Director" means any Ministry employee appointed by the Minister pursuant to Part II.1 of the EPA;
- d) "District Manager" means the District Manager of the Sault Ste. Marie District Office of the Ministry;
- e) "EPA" or "Act" means the Environmental Protection Act, R.S.O. 1990, c. E.19, as amended;
- f) "Ministry" or "MECP" means the Ontario Ministry of the Environment, Conservation and Parks , formerly known as the Ontario Ministry of the Environment or Ontario Ministry of the Environment and Climate Change or MOE or MOECC;

- g) "NMA" means Nutrient Management Act, 2002, S.O. 2002, c. 4, as amended;
- h) "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;
- i) "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 Village of Hilton Beach;
- j) "OWRA" means the Ontario Water Resources Act, R.S.O. 1990, c. O.40, as amended;
- k) "PA" means the Pesticides Act, R.S.O. 1990, c. P-11, as amended;
- l) "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;
- m) "Reasonable Use Guideline" means the Ministry Guideline B-7 entitled "Incorporation of the Reasonable Use Concept into MOE Groundwater Management Activities, dated April 1994, as amended;
- n) "Regulation 347" or "Reg. 347" means Regulation 347, R.R.O. 1990, made under the EPA, as amended;
- o) "SDWA" means Safe Drinking Water Act, 2002, S.O. 2002, c. 32, as amended;
- p) "Site" means the entire property including the 44.5 ha landfill area, located at Lot 3, 4, Concession 15 Hilton Township, District Of Algoma;
- q) "Municipality" means The Corporation of the Village of Hilton Beach;
- r) "Transfer Station" refers to part of the Site that shall be used for the temporary storage of wastes prior to the removal of the wastes to a final disposal site.
- s) "Guideline C-7" means the Guideline C-7: burning at landfill sites, Ontario Ministry of the Environment, April 1994.

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

TERMS AND CONDITIONS

II GENERAL PROVISIONS

Compliance

2.1 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.

- 2.2 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

- 2.3 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

- 2.4 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.
- 2.5 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.
- 2.6 Where there is a conflict between any two documents listed in Schedule "A", the document bearing the most recent date shall take precedence.
- 2.7 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

- 2.8 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

- 2.9 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.
- 2.10 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

- 2.11 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.
- 2.12 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.
- 2.13 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 of a Requirement (Certificate of Requirement) on Title

- 2.14 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.
- 2.15
- a. If not completed previously, within 6 months of issuance of this ECA, the Owner shall submit to the Director:
 - 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. the legal abstract of the property;
 - iv. a completed Certificate of Requirement; and its supporting documents, containing a registerable description of the Site; and
 - v. 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.
 - (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 and District Manager a copy of the registered document together with a copy of the PIN Abstract confirming the registration.

Inspections by the Ministry

- 2.16 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

- 2.17
- a. Except as authorized in writing by the Director, all records required by this Approval shall be retained at the Municipal Offices 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 Approval is valid.
 - c. All monthly summary reports are to be kept at the Site and/or the Municipal Office 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.
- 2.18 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.
- 2.19 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.
- 2.20 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.

III OPERATIONS AND DESIGN

Operation

- 3.1 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.
- 3.2 The Owner shall prepare a Design and Operational Report (D&O) and submit it to the Director for approval by February 1, 2024. The D&O shall, at a minimum contain the following:
 - a. Description of the site and surrounding features;
 - b. Waste quantities and characteristics;
 - c. Areal delineation of current waste limits which should be surveyed, described and shown on a figure;
 - d. Analysis of historical landfilling area, volumes and theoretical capacity calculations for the site;
 - e. Detailed description of landfill development for the life of the landfill;
 - f. Detailed description of waste transfer site;
 - g. Description of the operation of the site for both the landfill and waste transfer site;
 - h. Description of environmental monitoring and annual reporting;
 - i. Complaint response procedure;
 - j. Site closure;
 - k. Contingency plans; and
 - l. Figures and tables to support sections of the report.
- 3.3 The Site shall be operated in accordance with the Reasonable Use Guideline.
- 3.4 The Site shall consist of the landfill and waste transfer station.

Service Area and Hours of Operations

- 3.5 Only waste that is generated within The Corporation of the Village of Hilton Beach and Hilton Township shall be accepted at the Site.
- 3.6 Operations at the Site may be conducted daily between 7:00 am and 8:00 pm. Within this timeframe the Owner has operational flexibility to establish and change the hours the Site receives waste.

Signage and Security

- 3.7 The Owner shall install and maintain a sign at the main entrance/exit to the Site on which, at a minimum, is legibly displayed the following information:
 - a. the name of the Site and Owner;
 - b. the number of the ECA;
 - c. the operating hours of the Site;
 - d. the type of wastes that are approved for receipt at the Site;
 - e. the telephone number to which complaints may be directed;
 - f. a twenty-four (24) hour emergency telephone number (if different from above); and

g. a warning against dumping outside the Site.

- 3.8 No waste shall be received, landfilled or removed from the Site unless a Trained Personnel is present and supervises the operations during operating hours. The Site shall be closed when a Trained Personnel is not present to supervise landfilling or waste transfer.
- 3.9 The Site shall be operated and maintained in a 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.

Approved Waste Types for Landfill and Transfer

- 3.10 The Owner may only accept the following categories of Municipal (non-hazardous) solid waste to be landfilled at the Site:
- Domestic Waste, and
 - Industrial, Commercial and Institutional (IC&I) Wastes.
- 3.11 The Owner may only accept the following categories of waste to be stored and transferred at the Site:
- Recyclable Materials which includes: Glass, Cans and Plastics; Cardboard and Paper; and
 - Scrap Metal and White Goods.
- 3.12
- The Owner shall ensure all incoming loads are inspected by a Trained Personnel to ensure only waste approved under this ECA are received at this Site;
 - If any incoming waste load is known to, or is discovered to, contain unapproved waste, that load shall not be accepted at the Site; and
 - If any unapproved waste is discovered on-Site, that waste shall be immediately disposed of in accordance with the EPA and Reg. 347.
- 3.13
- This Site is permitted to accept a maximum of 550 cubic metres per year (m^3 /year) of sewage biosolids from the Townships of Macdonald, Meredith, Aberdeen Additional, and the Incorporated Village of Hilton Beach.
 - Total volume of sewage biosolids received at the Site shall not exceed:
 - 350 cubic metres per year (m^3 /year) from the Townships of Macdonald, Meredith and Aberdeen Additional; and
 - 200 cubic metres per year (m^3 /year) from the Incorporated Village of Hilton Beach.
- 3.14 Asbestos waste may be accepted at the Site provided that the waste is accepted, handled and disposed of as per Regulation 347.

Waste Limit and Storage

- 3.15 The amount of waste that the Site may accept within the landfill areas shall be determined and described in the D&O outlined in Condition 3.2.
- 3.16 The waste to be stored and transferred at the Site must adhere to the following maximum amounts and storage timeframes:

- a. The recyclable materials shall be removed from the Site as required or at least once a year.
 - b. White Goods and Scrap Metal shall be stockpiled at the Site and removed from the Site as required or at least once a year.
- 3.17 The Owner/Operator shall remove the refrigerant as defined in O. Reg. 463/10 in accordance with the following:
- a. All White Goods containing refrigerants which have not been tagged by a licensed technician to verify that the equipment no longer contains refrigerants, shall be stored separately from other White Goods in an upright position; and
 - b. White Goods containing refrigerants received at the Site shall be shipped off-Site in order to have the refrigerants removed by a licensed technician in accordance with O. Reg. 463/10; or
 - c. The refrigerant shall be removed at the Site by a licensed technician, in accordance with O. Reg. 463/10, prior to shipping White Goods off-Site.
- 3.18 Locations of non-landfill wastes (stockpiles, containers, and bins) are allowed to be moved around the Site from time to time to allow for the development of the landfill. Any changes to the Site layout must be included as a figure in the annual report.
- 3.19 Municipal Hazardous and Special Wastes (MHSW) may be accepted at the Site on days that the Owner is hosting special MHSW disposal days. These events may occur at the Owner's discretion throughout the year. A licensed contractor shall be used to collect and transfer the MHSW on these days.

Landfill Cell Cover

- 3.20 The entire working face shall be covered with minimal thickness of cover material of 150 mm every month, when the weather permits. The District Manager may modify the frequency if they believe that the coverage is not providing adequate control.
- 3.21 In areas where landfilling is temporarily discontinued for a minimum period of 3 months, an intermediate cover of a minimum of 300 mm shall be applied.

Nuisance Control

- 3.22 The Owner shall operate and maintain the Site such that the dust, odours, vectors, vermin, birds, litter, noise and traffic do not create a nuisance.
- 3.23 The Owner shall conduct regular inspections and clean-up of the landfill for litter.

Burning of Clean Wood and Brush Waste

- 3.24 Burning of clean wood and brush waste at the Site is permitted under the direct supervision of the Trained Personnel and/or Municipality staff as long as it is conducted during daylight hours in a segregated portion of the Site and in compliance with Ministry Guideline C-7.

Daily Inspections

- 3.25 An inspection of the Site shall be conducted each day of operation to ensure that:
- a. the Site is secure;
 - b. that the operation of the Site is not causing any nuisances;
 - c. that the operation of the Site is not causing any adverse effects on the environment; and
 - d. that the site is being operated in compliance with this ECA.
- Any deficiencies discovered as a result of the inspection shall be remedied as soon as reasonably possible, including temporarily ceasing operations at the Site if needed.

Record Keeping

- 3.26 The Owner shall maintain a daily record, on each day of operation, either electronically or in a log book which shall include the following information:
- a. the type, date and time of arrival, source, and quantity of all waste received at the Site;
 - b. the date, type, quantity and destination of all waste transferred from the Site;
 - c. a record of any waste refusals which shall include: amounts, reasons for refusal and actions taken; and
 - d. a record of the daily inspections required by Condition 3.25.

Employees and Training

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

Complaints Procedure

- 3.28 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 all 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, at the Office of the Municipality, a copy of the 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.

IV MONITORING

- 4.1 The Owner shall have a qualified professional assess the Site to determine if a groundwater and/or surface water monitoring program and an off-site groundwater and surface water mitigation plan are required for the Site. If a monitoring program and/or mitigation plan are required, then the Owner shall submit it to the Director for approval by February 1, 2024.

V CLOSURE PLAN

- 5.1 At least two (2) years prior to the anticipated date of closure of the landfill at the 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, at a minimum, the following:
- a. a plan showing Site appearance after closure;
 - b. a description of the proposed end use of the Site;
 - c. a descriptions 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, where needed; 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, where needed;
 - 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.
- 5.2 The Site shall be closed in accordance with the closure plan as approved by the Director.

VI ANNUAL REPORT

- 6.1 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, in electronic format, by March 31 of each year, and shall cover the 12 month period of the preceding year, starting with March 31, 2023.
- 6.2 The Annual Report shall include the following:
- a. the results and an interpretive analysis of the results of all groundwater and surface water monitoring, including an assessment of the need to amend the monitoring programs;
 - b. site plans showing areas of landfilling operation and transfer station layout during the reporting period; areas of intended operation during the next reporting period; and the progress of any final cover or vegetative cover;
 - c. calculations of the volume of waste and 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 any complaints received and the responses made;
- f. a summary of type and quantity of all wastes received and transferred from the Site and the destination;
- 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; and
- i. a report on the status of all monitoring wells and a statement as to compliance with Ontario Regulation 903.

The following items are added to the Schedule "A":

Schedule "A"

1. Application for a waste disposal site and supporting information form dated June, 1972.
2. Letter and its attachment from Gloria Fischer, Clerk - Treasurer, Incorporated Village of Hilton Beach to Frank Tesolin, MOE, dated September 25, 2000, Re: Application.
3. Letter and its attachment from Gloria Fischer, Clerk - Treasurer, Incorporated Village of Hilton Beach to Mohsen Keyvani, MOE, dated February 26, 2001, Re: CofA Application 4456-4QHMG7.

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

The reason for Condition 1 is to define the specific meaning of terms and simplify the wording of conditions within this ECA.

The reason for Conditions 2(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.

The reasons for Condition 2(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.

The reasons for Condition 2(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.

The reasons for Condition 2(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.

The reason for Condition 2(13) is to ensure that the successor is aware of its legal responsibilities.

The reasons for Condition 2(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 the Approval to any person who will acquire an interest in the property as a result of the dealing.

The reason for Condition 2(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.

Condition 2 (20) has been included in order to clarify what information may be subject to the Freedom of Information Act.

The reasons for Conditions 3 and 4 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.

The reasons for Conditions 3 and 4 are also 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.

The reason for Condition 3.6 is to specify the hours of operation for the landfill Site.

The reasons for Conditions 3.8 through 3.9 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.

The reasons for Conditions 3.10 through 3.19 are 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 or transferred from the Site, based on the Owner's application and supporting documentation.

The reasons for Conditions 3.20 through 3.21 are to ensure that daily and intermediate cover is used to control potential nuisance effects, to facilitate vehicle access on the site, and to ensure an acceptable site appearance is maintained.

The reasons for Conditions 3.25 and 3.26 are to ensure that detailed records of Site inspections are recorded and maintained for inspection and information purposes.

The reason for Condition 3.28 is to ensure that any complaints regarding landfill operations at this Site are responded to in a timely and efficient manner.

The reason for Condition 4.1 is to demonstrate that the landfill site is performing as designed and the impacts on the natural environment are acceptable. Regular monitoring allows for the analysis of trends over time and ensures that there is an early warning of potential problems so that any necessary remedial/contingency action can be taken.

The reason for Condition 5 is 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.

The reason for Condition 6 is to ensure that regular review of site development, operations and monitoring data is documented and any possible improvements to site design, operations or monitoring programs are identified. An annual report is an important tool used in reviewing site activities and for determining the effectiveness of site design.

Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). A560901 issued on September 7, 1983

In accordance with Section 139 of the *Environmental Protection Act*, you may by written notice served upon me and the Ontario Land 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 ("the Notice") shall state:

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

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

The Notice should also include:

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

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

This Notice must be served upon:

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


and

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

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

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

DATED AT TORONTO this 2nd day of March, 2022


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

CM/

c: Area Manager, MECP Sault Ste. Marie

c: District Manager, MECP Sudbury

The Corporation of the Village of Hilton Beach, The Corporation of the Village of Hilton Beach

APPENDIX III
Photographic Log



Photo 1 – Landfill entrance, access road and gate.



Photo 2 – Entrance signage.





Photo 5 – Active area fill.



Photo 6 – Wood storage area.



Photo 7 – Recycling depot.



Photo 8 – Sludge drying trenches.

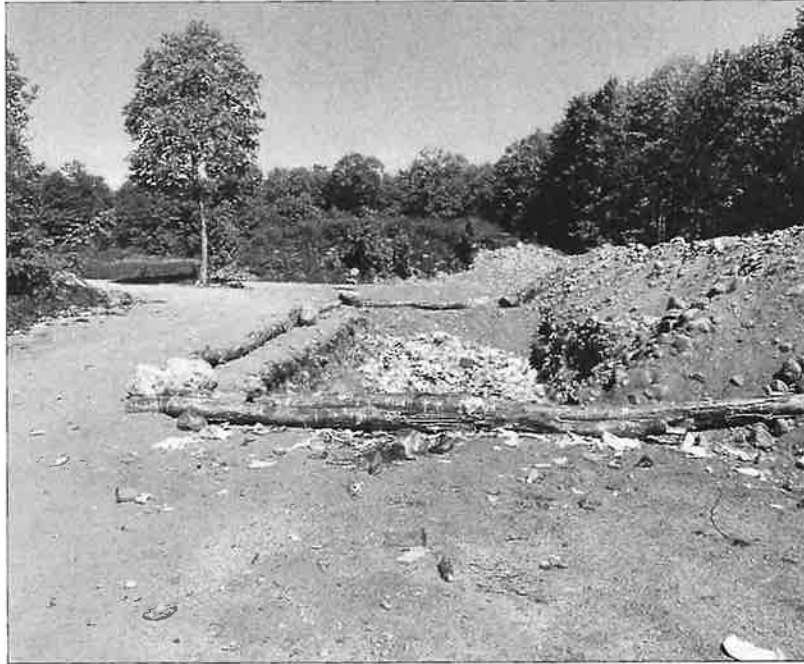


Photo 9 – Active trench.



Photo 10 – Metals and white goods storage area.



Photo 11 – Tires storage area.