



## **Waste Management Strategy Plan 2025**

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## Foreword

The topic of Waste Management has become an especially important topic over the last decade and is becoming even more prevalent with the changes in recycling programs, costs associated with landfill closures and decommissionings and the cost associated with shipping waste.

Provincial data has shown an increase in waste production, waste diversion and recycling initiatives, but some of these programs have plateaued over the last decade.

To that extent multiple municipalities are developing waste management strategies to assist in meeting local environmental initiatives, strategic plan objectives, prolonging the life spans of current landfill sites and developing revenue streams for future waste management costs.

In 2014 the Township had a Comprehensive Waste Management Plan prepared, this Plan was accepted by Council as part of Billings Township Bylaw 2014-13. This Plan identified initiatives that the Township could incorporate as part of a waste diversion strategies i.e.

- a) Waste reduction and reuse strategies.
- b) Waste diversion initiatives.
- c) Public education.
- d) Landfill depot enhancement.

Since then, the Township of Billings and its' residents have demonstrated that they are committed to doing their part when it comes to recycling, promoting green programs and working to keep control of greenhouse gasses, however, increases in waste generation from an increasing population, changing population demographics and an increase in tourism numbers, means the waste management system is experiencing more pressures than it previously had.

To assist in relieving some of the pressures, the township is implementing a waste management strategy that will promote waste diversion, prolong the life of the township landfill site and develop revenue streams for future landfill costs. This waste management strategy will be implemented in series of phases that will allow for the staff and the residents to adjust to implemented changes.

- Phase 1-will evaluate the current state of the Townships waste management system and how it operates.
- Phase 2-will create guiding principles, develop waste management program changes and the development of program goals.
- Phase 3-consolidate collected data, evaluate the program changes and develop possible program improvements.
- Phase 4- Develop a food and organic materials home recycling program.
- Phase 5- Develop a long-term after-landfill-closure strategy.
- Phase 6- Develop strategies for processing waste and recyclables i.e. compactors, shredders, balers

## **Phase 1**

### **Landfill Depot Site Evaluation**

#### **Landfill Site**

- 1) Billings landfill was originally issued a Certificate of Approval (CofA) #A550501 on August 9, 1971
- 2) the Township landfill site had its Certificate of Approval (CofA) reissued in 1980.
- 3) The CofA has been updated 3 times, November 1994, February 2002 and April 2015.
- 4) A Comprehensive Waste Management was approved by the Township Council in May 2014.
- 5) Ground water test wells for leachate monitoring were installed in June 1993, December 2010 and June of 2018.
- 6) The site has had 3 cycles of triennial ground water testing performed, 2016-2018, 2019-2021 and 2022-2024.
- 7) A topographical site survey was performed in 2017 by Talbot Surveys.
- 8) A waste fill plan was performed in 2019 by Pinchin Engineering
- 9) An application for a site expansion was submitted in 2022.
- 10) A topographical site survey was performed in 2024.

#### **Site Operation**

- 1) The Township of Billings operates the landfill depot.
- 2) The site is manned by a single attendant on a limited seasonal schedule of being open to receive waste and recyclables.
- 3) Waste and recyclables are brought to the site by users (residents) and deposited into a rear compactor unit, identified recycling bins or in designated areas.
- 4) Clean wood is burnt by the landfill attendant in a separate burn area.
- 5) Waste cover is applied by the Township PW department as per MOE guidelines.

#### **Waste Measuring/Monitoring**

- 1) Onsite data collection logs monitor the number of site visits, bylaw compliance, the number of recyclers, brush recycling, tipping fee charges and estimated volume of waste being deposited into the landfill.
- 2) GFL collection data measures the monthly/annual tonnage of collected fibre materials and plastic/metal co-mingle. (This is program ended December 31, 2024)
- 3) CMO transition data. (This program began January 1, 2025)

#### **Landfill Depot Intake**

The Billings Township landfill depot is open for 20 hours per week during the summer schedule and 16 hours per week during the winter schedule.

Statistical data *estimates* that there are 1024 monthly visits to the landfill depot and that recyclables are deposited 63.60% of the time.

While the statistical average of landfill visits is 1024 monthly, this average is affected by the visit number increases during months of May through October due to the return of seasonal residents and the increased number of tourists visiting the township.

## **Solid Waste**

Statistical data *estimates* that there was 4-year monthly average of 224.79 cubic yards and 4-year annual average of 1837.50 cubic yards of solid waste being deposited at the landfill depot.

## **Recyclables**

The Township of Billings has been utilizing the services of GFL Inc. to haul and process the recyclables deposited at the landfill depot. GFL provides annual “*estimated*” reports that contain the total weights in kilograms and tonnes for the materials deposited at the Billings Township landfill depot. These reports provide the volume data for the fibre (cardboard, paper) and the volume data for comingle (plastics, aluminum).

Statistical review of the reports from 2020 to 2024 identified the following:

- 1) Average yearly intake of fibre materials was 39, 969 kilograms. (39.96 tonnes)
- 2) Average yearly intake of comingle materials was 24, 569 kilograms. (24.56 tonnes)
- 3) Average yearly intake of all recyclable materials was 64.52 tonnes.

*Estimated* data for the period from 2020 to 2024 indicates that the annual tonnage volume of recyclable materials has increased by approximately 10%.

It should be noted that the system of recycling in the province has changed from the “Blue Box” program to the Circular Materials (CM) program. Whereas in previous years, the township had program contracted GFL to haul and process recyclables from the Landfill Depot, Circular Materials is now responsible for contracting the hauling and processing of recyclable materials from the Landfill Depot.

The township is currently in a “transition” year contract with CM while the final details of the new recycling program are being implemented.

## **Legislative Guidelines**

Waste management in Ontario is currently governed by:

- 1) The Environmental Protection Act, R.S.O. 1990 (EPA). The EPA and its regulations address waste collection and processing in general and include, among other things, mandatory diversion requirements (often referred to as the ‘3Rs Regulations’). This Act is supported by Ontario Regulations 347 and 323/22
- 2) Waste Free Ontario Act 2016 was passed by the Legislative Assembly of Ontario June 1, 2016, and received Royal Assent on June 9, 2016. Once proclaimed, the Waste-Free Ontario Act, 2016 will enact two Acts: The Resource Recovery and Circular Economy Act, 2016
- 3) The Resource Recovery and Circular Economy Act, 2016. The Act establishes an overarching provincial interest in resource recovery and waste reduction and enables the government to issue policy statements to support that interest.
- 4) The Waste Diversion Transition Act, 2016. The Act allow the products and packaging managed under existing waste diversion programs to be smoothly transitioned to the new producer responsibility framework, without disrupting current access to existing recycling services.

## **Internal Guidelines**

- 1) Township Waste Management Bylaw
- 2) Landfill Depot Operational Procedure
- 3) Waste Management Strategy Plan

## **Site Finances**

- 1) Site operation costs (fuel, maintenance, wages) are covered in the township operational budget.
- 2) CM recycling agreement.

## **Phase 2**

In this phase guiding principles will be developed to provide the ideological basis for the township waste management program, as well as establishing program goals/objectives and timelines.

### **Guiding Principles/Statement**

- 1) Together, as a Township, we will reduce the amount of waste we generate, reuse what we can, and recycle and recover the remaining resources to reinvest back into the economy.
- 2) We will embrace a waste management system that is user-friendly, with programs and facilities that balance the needs of the community and the environment with long term financial sustainability.
- 3) Together, we will ensure a safe, clean, beautiful and healthy township for the future.

### **Program Goals/Objectives**

- 1) Develop and enact a Waste Management Bylaw
- 2) Develop a Waste Management Operational Procedure and supporting documents that:
  - a) Are in alignment with the Township CEEP and Strategic Plan. (see appendix #1)
  - b) Aligns with the identified Acts, the Aligns Regulations and the Township Landfill Depot Certificate of A. (see appendix # 2)
  - c) Supports local waste management initiatives.
- 3) Perform annual waste audits to identify materials being deposited into the Landfill.
- 4) Develop and implement a public education program to inform Township residents of their duties and responsibilities regarding the township Waste Management Operational Procedures.
- 5) Develop a township program for the composting of food and organic materials.
- 6) Develop and implement a public education program to inform Township residents of their duties and responsibilities regarding the Township Waste Management Program for composting food and organic materials waste.
- 7) Implement a process of monitoring waste materials entering the landfill site.
- 8) Designate a second employee at the landfill to assist in waste compliance identification and other general duties.
- 9) Implement a user bag tag system.
- 10) Implement a user identification system.
- 11) Review and revise the landfill depot tipping fee schedule.
- 12) Install new signage at the landfill.
- 13) Determine landfill depot improvements (layout, structures, storage)
- 14) Revise the Landfill daily log documents.
- 15) Develop long term waste management objectives.
- 16) Re-establish the Township Climate Action (Waste Management) Committee

## **Phase 3**

Consolidate and review collected data and evaluate program changes, develop program improvements and provide written reports to Council  
(Bi-annually)

**Phase 4**

Develop a composting strategy for food and organic waste materials.

**Phase 5**

Develop a long-term after-landfill-closure strategy.

**Phase 6**

Investigate possible strategies for processing waste i.e. 3<sup>rd</sup> party processing, compactors, shredders, balers.

## **Appendix #1**

### **Township Strategic Plan (Excerpts)**

#### **Protect and enhance our natural assets**

- Be good stewards of our streams, lakes, waterfalls and other natural assets.
- Continue to work with community partners to protect and expand our trail systems and open spaces.
- Prepare for, mitigate and adapt to changes in the natural environment.

#### **Ensure that current and future township assets are managed to be sustainable to meet our long-term needs**

- Refine the Asset Management Plan to facilitate the preparation of capital and operating budgets.
- Determine strategic direction for existing facilities and other infrastructure.
- Prioritize infrastructure projects based on critical needs, aging systems, potential environmental risks, and community needs.
- Proactively prepare and plan projects and continue to identify and apply for additional funding opportunities

### **Community Energy and Emissions Plan (CEEP) (Excerpts)**

#### **Waste Reduction**

Reduce by 50%, below 2018 levels before 2030.

Reduce overall consumption by promoting circular economy concepts and increase waste diversion through recycling rate increases and home composting program.

#### **Potential Community Benefits**

Reducing leachate and methane gas coming from the landfill helps ensure long-term access to safe drinking water sources in the community.

Converting brush into chip waste will assist with composting this waste, increase soil quality in our environment and reducing GHG emissions.

Sharing of tools and other items, as well as other circular economy events, helps promote interaction in the community and facilitate positive relationships

Additional community events like a composting program or circular economy activities facilitate data collection relating to GHG emissions.

Sharing of tools and other items helps save money for households but providing a low-cost alternative to investing in these items themselves

Maintaining a clean environment such as the Kagawong River helps maintain the tourist industry for our community as the river and the falls a prime destination for tourists.

Methane gas collection at the landfill can be used as an energy source, reducing municipal energy usage, and saving money.



Increasing household composting can reduce the need for purchasing commercial fertilizers for home gardens, saving money.

Having no power sources at the landfill now presents opportunity for innovative applications of renewable energy, waste to energy technologies and gas capture systems.

## **Appendix #2**

### **Acts and Regulations Applicable to Waste Management**

#### **2.1 Environmental Protection Act**

In Ontario, landfilling sites and other waste management activities are subject to Part V of the Environmental Protection Act and the regulations made under the Act. The basic legislative framework for waste management is defined in Part V and the regulatory requirements for the design and operation of waste disposal sites are included in Regulation 347. For new or expanding landfilling sites, these regulatory requirements are superseded by Regulation 232/98.

Section 27 of the Act requires that an Environmental Compliance Approval be obtained from the Ministry of the Environment for the establishment, operation, alteration or enlargement of a landfilling site. To obtain approval for a new or expanding landfilling site, a detailed assessment of the site as required by Regulation 232/98 must be carried out to identify any potential effects on the environment and to show how these potential effects can be satisfactorily addressed. The basis for this assessment and the requirements for site design and operation are given in Regulation 232/98. The Environmental Compliance Approval process takes the landfill standards and refines them as necessary to reflect the particular setting and conditions at each landfill. The resulting Environmental Compliance Approval will define how large the site is to be, the types of waste to be accepted, and any necessary conditions for design and operation. The approval will also describe how the site is to be closed and the measures to be taken following closure to ensure the site is properly maintained and monitored for the long-term protection of the environment.

#### **2.2 Regulation 347**

Regulation 347 is the general waste management regulation under Part V of the Environmental Protection Act. Regulation 347 provides definitions of waste management terms, defines different classes of waste, and provides standards for the design and operation of landfilling sites (other than new or expanding landfilling sites now covered by Regulation 232/98) and other waste management facilities. For existing and small municipal waste landfilling sites (i.e. sites less than -- or equal to -- 40,000 cubic metres), the existing requirements given in Section 11 of Regulation 347 remain in effect. Additional or more detailed requirements for waste sites and systems are addressed as appropriate through the Environmental Compliance Approval process.

Regulation 347 also defines when waste is considered hazardous or non-hazardous. Hazardous waste is defined by listing some specific wastes as being hazardous, and by identifying certain hazardous waste characteristics and tests. Non-hazardous waste is called “municipal” waste in Regulation 347. The new landfill standards in Regulation 232/98 only apply to sites accepting “municipal” waste.

#### **2.3 Other Acts and Approvals**

The focus of this Guideline is on the regulatory and approval requirements under Part V of the Environmental Protection Act. Landfilling sites, however, may also be subject to approval under the Environmental Assessment Act. Many landfill proposals, particularly larger sites may require approval under the Environmental Assessment Act. Under the Environmental Assessment Act, a broader view of the environment is taken and issues beyond the effects on the natural environment must be addressed. For a municipally owned landfilling site, Regulation 334 pursuant to the Environmental

Assessment Act (EAA) identifies when a proposal is subject to EAA approval. For private sector landfills, proposals are made subject to EAA requirements by being individually designated through regulation. Typically, sites larger than 40,000 cubic metres are designated, however, this may not always be the case. Once a landfill is subject to EAA approval, the decision to hold a public hearing and give approval for the undertaking rests with the Ministry. Regulation 101/07 under the Environmental Assessment Act also needs to be considered. This regulation defines what waste projects are subject to the EAA p

### Appendix #3 GFL Recycling Reports

**2020**

Date	Fibre (Kg)	Comingle (Kg)
January	222	1,717
February	369	971
March	865	1,725
April	125	2,021
May	300	1,405
June	905	2,467
July	765	2,787
August	266	2,153
September	763	2,716
October	640	3,044
November	912	1,210
December	950	1,830
Total Kgs	37,802	24,046
Tonnes	37.80	24.05

**Total Tonnes 61.85**

**2021**

Date	Fibre (Kg)	Comingle (Kg)
January	317	1,152
February	606	1,049
March	387	982
April	890	1,789
May	055	2,224
June	236	2,241
July	272	3,298
August	784	2,418
September	932	2,883
October	945	2,224
November	877	1,679
December	543	2,659
Total Kgs	36,884	24,598
Tonnes	36.84	24.60

**Total Tonnes: 61.44**

**2022**

Date	Fibre (Kg)	Comingle (Kg)
January	774	1,941
February	724	1,826
March	546	2,085
April	537	2,615
May	430	2,307
June	223	2,338
July	805	2,261
August	873	2,361
September	533	2,292
October	179	2,092
November	424	1,730
December	052	1,309
Total Kgs	39,110	25,207
Tonnes	39.11	25.21

**Total Tonnes: 64.30**

**2023**

Date	Fibre (Kg)	Comingle (Kg)
January	517	1,544
February	977	1,184
March	032	2,088
April	199	1,974
May	320	2,392
June	221	2,669
July	400	2,254
August	488	2,855
September	222	1,859
October	703	1,838
November	980	2,236
December	272	1,285
Total Kgs	44,784	24,178
Tonnes	44.78	24.18

**Total Tonnes: 68.96****2024**

Date	Fibre (Kg)	Comingle (Kg)
January	348	1,531
February	523	1,393
March	104	1,368
April	930	1,579
May	380	2,481
June	387	2,174
July	533	2,904
August	493	2,837
September	443	2,322
October	148	2,310
November	995	2,068
December	024	1,771
Total Kgs	41,267	24,818
Tonnes	41.27	24.82

**Total Tonnes: 66.08**

GFL statistical information is based on GFL estimates.

**Billings Township Landfill Depot**  
**Monthly Logbook Data**

**2020**

Month	Visits	Recycle	%	Cubic Yds.
January	528	401	75.94	160
February	481	364	75.67	160
March	436	252	57.79	80
April	715	252	35.24	NA
May	602	329	54.65	NA
June	1315	755	57.41	NA
July	1227	1079	87.93	360
August	1424	1006	70.64	300
September	1069	800	74.83	345
October	1014	732	72.18	275
November	992	786	79.23	310
December	699	594	84.97	NA
Totals (Monthly Average)	10,502 875	7,350	68.87	1,990 248.75

**2021**

Month	Visits	Recycle	%	Cubic Yds.
January	1161	584	50.30	270
February	571	490	85.81	115
March	691	568	82.17	200
April	1123	633	56.36	300
May	1536	861	56.55	340
June	1138	781	68.62	390
July	1426	923	64.72	400
August	1573	785	49.90	300
September	1568	1264	80.61	410
October	1077	753	69.91	280
November	748	563	75.26	320
December	333	250	75.07	NA
Totals (Monthly Average)	12,945 1,078	8,419	67.94	3,325 (277.08)

\*Some data was incomplete.

**2023**

Month	Visits	Recycle	%	Cubic Yds.
January	623	564	90.52	190
February	479	377	78.70	120
March	1336	498	37.27	150
April	1285	637	49.57	160
May	920	527	57.28	240
June	1482	987	66.59	270
July	1973	1064	53.92	180
August	1585	1195	75.39	260
September	1213	675	55.64	210
October	1386	620	44.73	190
November	1183	863	72.95	190
December	1122	534	47.59	210
Totals (Monthly Avg.)	14604 (1,217)	8,532 (711)	58.42	2,370 (197.5)

**2024**

Month	Visits	Recycle	%	Cubic Yds.
January	658	500	75.98	150
February	720	478	66.38	110
March	700	463	66.14	130
April	836	523	62.55	150
May	1049	657	62.57	240
June	1333	887	66.54	170
July*	506	290	57.31	240
August	1621	1033	63.72	270
September	1227	795	64.79	260
October	1157	669	57.82	200
November	769	512	66.57	180
December	568	363	63.90	150
<b>Totals</b>	11,144	7,170	59.19	2,110
<b>Monthly Avg.</b>	928	597		175.83

**\*Landfill Logs for the first 3 weeks of July were accidentally destroyed.**

Note: The estimated statistical information presented in the monthly logbook data are numbers prepared from handwritten reports from the landfill attendant that may/may not be 100% accurate as data is collected while other duties are being performed.