



## **TOWN OF LAURENTIAN HILLS**

### **WASTE DIVERSION**

#### **BAGGS ROAD LANDFILL BACKGROUND INFORMATION**

In 1994 the North Renfrew Waste Management Board was formed to find a new combined landfill site for the Townships of Rolph, Buchanan, Wylie and McKay; The Town of Deep River and the Village of Chalk River.

Land owned by Atomic Energy Canada Limited accessed by Baggs Road was identified as the preferred site location. Part of the process to get approval for the landfill included archaeological investigations to determine the impact upon archaeological or heritage resources; a site plan of the topography; surface water drainage was examined; the small creek was examined by an aquatic biologist for aquatic species or habitat; geological and hydrogeology studies; ground water assessments; public consultations; and a Design and Operations report to support the Board's application for a certificate of approval was prepared by Gartner Lee Limited in 1997. The total estimated costs were 2.6 million dollars. July of 2002 the Baggs's Road landfill started receiving waste from the Town of Laurentian Hills and the Town of Deep River. The Town of Laurentian Hills closed the Buchanan landfill and the Town of Deep River ceased to use the Miller Road landfill for solid waste.

The Town of Deep River and Laurentian Hills have a joint agreement establishing a joint Board of Management to oversee the operation, management and administration of the site in accordance with Conditions of Approval as set out by the Ministry of Environment, now called the Ministry of Environment and Climate Control.

The original life expectancy of the landfill was estimated to be 25 years (2027). Construction and Demolition (C&D) waste accounted for a large portion of the volumes of solid waste at the landfill. The Town of Deep River applied for an amendment to the C of A for the Miller Road landfill to allow the site to accept C&D waste and in 2004 all C&D waste was diverted from the Baggs's Road site to the Miller Road landfill. The Miller Road site is operated by the Town of Deep River and it was agreed that they would set and collect the tipping fees.

The diversion of C&D waste has played a role in prolonging the life of the Baggs's Road landfill. Diversion programs have been put into place at the landfill for electronic waste, household hazardous waste, metals, bulky waste (mattresses and stuffed couches and chairs), tires and rolled carpets. The Landfill Board's Bi-annual report for 2014-2015 submitted to the Ministry of Environment show that the bulky material pile grinding and shredding has an estimated volume reduction of 65% for these items.

Over the past several years various groups, committees, department managers, Council's, the Landfill Board, the Site Liaison Committee and residents have expressed concerns about waste management and our landfill. To date there has not been a consensus on how to move forward and the landfill continues to receive materials that should be part of the recycling pick up program.

Despite all the initiatives and programs implemented to help divert solid waste, periodic audits conducted on the garbage bags from the curb side pick up program show that the bags contain 50% recyclable materials.

## OBJECTIVE

The Baggs Road landfill is jointly owned by both municipalities and the management and liabilities are shared by both Towns. Working together with our partner by diverting recyclable materials is the first step in implementing a program to help prolong the life cycle of the landfill.

## WHERE ARE WE TODAY

The Town assisted by reports provided by the Landfill Board Waste Site Coordinator and information on garbage and recycling volumes submits a report Waste Diversion Ontario on the Town's annual volumes of diversions. Information on container volumes and total diversion volumes (all programs) over the last five years is listed below:

Containers (tonnes)		Town's Total Diversion from the landfill (tonnes)	
2015	64	2015	512
2014	68	2014	808
2013	60	2013	862
2012	60	2012	1113
2011	57	2011	1036

Landfill / Recycling Costs for the Town of Laurentian Hills are:

	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
<b>*Landfill Operations</b>	114,152.00	107,213.00	127,566.00	136,310.00	133,070.00
<b>Garbage Pickup</b>	88,470.30	89,752.44	89,752.44	89,752.44	89,755.00
<b>Recycle Pickup</b>	67,784.68	74,434.04	72,804.45	52,936.98	48,000.00
<b>Buchanan Closure</b>	4,243.85	6,183.47	4,288.41	6,019.57	6,100.00
<b>**Bass Lake Closure</b>	1,882.77	3,618.70		7,649.50	
<b>Total</b>	<b>\$276,533.60</b>	<b>\$281,201.65</b>	<b>\$294,411.30</b>	<b>\$292,668.49</b>	<b>\$276,925.00</b>

\* The landfill operations cost represents 48% of the NRLOB annual budget. The Town of Deep River is responsible for the remaining 52%.

\*\*Bass Lake is now monitored and reported on every two years.

As of January 2016 the estimated capacity of the landfill is 19 years. Estimated Post Closure Costs for the landfill are outlined in a report received by the landfill board from Jp2g dated January 19, 2016 (attachment).

An inquiry with the Environmental Assessment Branch with the Ministry of Environment and Climate Control confirmed that they have not approved a new landfill site since 1999.

Once the site reaches its capacity the only option the Towns may have available is to transport the garbage elsewhere. Those costs will have a direct impact on property taxes.

Transportation costs are an unknown at this point in time. Unknown variables make it difficult to estimate costs. Who will accept the garbage, how far will it have to be transported, how often will it need to be transported, what, if any, are the costs to support the site becoming a transfer site, studies that may be required by the MEOCC for an approvals etc.

A bag limit, bag tag and audit program is a small step towards achieving greater diversion from the landfill.

The Baggs Road landfill is jointly owned by both municipalities and the management and liabilities are shared by both Town's. Working together to maximize the life of the landfill while improving our waste management and environmental impact will be mutually beneficial to both communities.

The Town has a weekly curb side pick up program that has no restrictions on the amount of bags allowed to be picked up. The Town's Contractor has provided Council with information on the pick up program and has advised that there are properties that have up to 13 bags left out for pick up every week.

Reducing the number of bags allowed to be picked up curb side should promote recycling, result in less recyclable materials going into the landfill, have a positive impact on the environment and extend the life of the landfill.

Residents will be able to pay for extra bags if they are required. The tags will be available at the Municipal office or they will have the ability to pay directly at the landfill where tipping fees are currently collected.

It is recommended that a two (2) bag limit per household per pick up, bag tags with a \$2.00 (2) user fee and an audit program be established and evaluated at the end of a twelve (12) month period.

### **Bag Limit**

It is recommended that a two (2) bag per week limit program be implemented for the household curb side pick up program. This will encourage people to reduce, reuse and recycle.

Residents are not restricted to the amount of recycling for the acceptable recycling materials that they are allowed to put curb side.

The expected outcome is an increase in the diversion of recyclable materials from the landfill prolonging the life expectancy of the landfill.

### **Bag Tags**

It is recommended that a bag tag program with a user pay fee of \$2.00 per bag be put in place. The tags will allow residents to put additional garbage curb side if required. A tag must be affixed to each additional bag above the limit or it will not be picked up curb side.

It is also recommended that the two free bags currently allowed at the landfill be eliminated and a user pay fee of \$2.00 per bag also be applied and collected. This will maintain consistency with the bag limit program.

Each Municipality would be responsible for designing and printing of their own bag tags.

This will identify where the bags are coming from and makes the collection and disbursements of tipping fee revenues collected at the landfill accurate for each Town.

### **Audit program**

It is recommended that a twelve (12) month audit program be put in place to measure the outcomes and to determine the success of the bag limit program.

To measure the results and have consistence reporting the audit program for both Towns should be the same. It is recommended that four bags per month be audited. The contents will be sorted by materials in each bag and the relevant information recorded. Quarterly audit reports will be submitted to the Council.

Staff will track illegal dumping and report this on the quarterly audit reports. Past practice of attempting to identify whose garbage was left behind and contacting the OPP will continue.

For information on attached is the CIF curbside waste audits for small communities.

**Estimated costs** - if the Town provides and mails 104 bag tags directly to all residential and commercial properties the cost is approximately \$6,000.00. \$6,000.00 for tags that will go directly into the landfill.

The cost for bag tags alone is \$792 plus taxes for 5,000. This cost would be offset by the user fee for the tags.

The Town will work with the Contractor and provide him with stickers to put on the garbage bags that are not picked up with an explanation as to why the bags were left behind (over the limit). The stickers will be produced in house and the cost is less than \$100.00. We currently produce and provide explanation stickers to the Contractor for the recycling program.

The curb side audit program and our annual reporting on diversion volumes to WDO now called Resource Productivity and Recovery Authority (RPRA) will measure the success of the program. This information will assist Council to evaluate the program and make necessary changes for continued improvement to waste diversion.