2.14 Used Tire Recycling Program

Introduction

The Multi-Material Stewardship Board (MMSB), which was established in 1996, is an agent of the Crown and responsible for the development, implementation, and management of waste diversion programs in Newfoundland and Labrador. In April 2002, MMSB, on Government's direction, implemented a Used Tire Recycling Program which currently operates under the authority of the *Waste Management Regulations, 2003* of the *Environment Protection Act*. Under these *Regulations*, used tires are no longer permitted to be disposed of in landfills throughout the Province. The goal of the Used Tire Recycling Program is to collect and process used tires in the Province.

Under the *Regulations* all tire suppliers in the Province are required to be registered and to collect a levy depending on tire size ($3 per tire for each tire equal to or less than 43.18 centimetres and $9 per tire for tires more than 43.18 centimetres and less than 63 centimetres). These amounts are collected to cover the cost of implementing, operating, and administering a program for the collection, transportation, recycling, processing, disposal and handling of used tires.

In June 2004, MMSB and the contractor who was operating the Used Tire Recycling Program terminated the contract. As a result, MMSB assumed direct responsibility for the Program and implemented a contingency plan for the collection and storage of used tires until alternate arrangements are made. Under the plan, there are 36 temporary tire drop-off sites located throughout the Province including 28 Department of Transportation and Works depots, 5 Municipal Waste Disposals Sites and 3 private sites. Individuals may drop off their used tires at either of these sites, while retailers may either use the MMSB's mobile collection service for collection of used tires or drop off their used tires directly at one of the sites. Two of the 36 drop-off sites which are located in Labrador are also considered as temporary storage sites. In addition to the 36 drop-off sites, there is a storage yard in Placentia and another at Bull Arm. Used tires collected at the 34 sites used for drop off purposes only are transported by MMSB to the storage yard in Placentia. Figure 1 shows the location of the 36 drop-off sites and the Placentia and Bull Arm Site storage yards.

2.14 Used Tire Recycling Program

Figure 1

Multi-Materials Stewardship Board
Used Tire Recycling Program
Location of Drop-off Sites and Storage Yards



2.14 Used Tire Recycling Program

Since the implementation of the Used Tire Recycling Program on 1 April 2002, to 31 October 2004, 1,045,910 tires had been sold by retailers and the related levy remitted to MMSB. During the same period, 743,481 used tires had been collected from various collection sites in the Province while 336,304 used tires had been processed. At 31 October 2004, there were approximately 387,000 used tires stored at four storage sites in the Province including 110,000 used tires located at Bull Arm. These 110,000 tires have been in storage there since 2002. There are also 85,661 tires and 321,660 passenger tire equivalents in processed material stored and owned by a former MMSB contractor at the contractor's site in Stephenville.



Tires stored in Placentia

Figure 2 provides information on revenues and expenditures of the Used Tire Recycling Program for the years ended 31 March 2003 and 31 March 2004, along with projections for 31 March 2005, while Figure 3 provides information on tires that were sold by retailers and the related levy remitted to MMSB, tires collected, and tires processed for the same period.

2.14 Used Tire Recycling Program

Figure 2

Used Tire Recycling Program
Financial Information
Years Ended 31 March

	2003 (Audited)	2004 (Audited)	2005		
			To 31 October 2004 (unaudited)	Projected 1 November 2004 to 31 March 2005 (Note 1) (unaudited)	Total 2005 (unaudited)
Revenue					
Tire Remittances	1,263,795	1,442,907	678,099	617,112	1,295,211
Performance Deposit Forfeited	-	-	-	75,000	75,000
Total Revenue	**1,263,795**	**1,442,907**	**678,099**	**692,112**	**1,370,211**
Expenditures					
Collection and transportation	409,950	508,438	492,275	397,403	889,678
Storage	10,364	-	209,378	210,000	419,378
Processing	-	555,701	7,678	-	7,678
Disposal of tires stored in Labrador	-	-	-	313,000	313,000
Administration	189,136	202,341	169,926	121,375	291,301
Total Expenditures	**609,450**	**1,266,480**	**879,257**	**1,041,778**	**1,921,035**
Net Income	**654,345**	**176,427**	**(201,158)**	**(349,666)**	**(550,824)**
Surplus(Deficit), Beginning of Year	**-**	**654,345**	**830,772**	**629,614**	**830,772**
Surplus(Deficit), End of Year	**654,345**	**830,772**	**629,614**	**279,948**	**279,948**

Source: MMSB audited financial statements (2003 and 2004) and projected by MMSB (2005)
Note 1: A tender has recently been called for the collection of used tires in the Province. The results of this tender will affect the projected costs to March 2005.

2.14 Used Tire Recycling Program

Figure 3

Used Tire Recycling Program
Number of Tires Sold, Collected and Processed
Years Ended 31 March

	1 April 2002 to 31 March 2003	1 April 2003 to 31 March 2004	1 April 2004 to 31 October 2004	Total to 31 October 2004	1 November 2004 to 31 March 2005 (Projected)	31 March 2005 (Projected)
Tires Sold (Note 1)	398,016	439,923	207,971	1,045,910	194,000	1,239,910
Tires Collected	194,087	300,668	248,726	743,481	189,922	933,403
Tires Processed	-	332,017	4,287	336,304	-	336,304

Source: MMSB
Note 1: Tires sold includes only those tires for which the collected levy has been remitted to the MMSB.

On 8 November 2004, MMSB called tenders for the collection of used tires and at the same time announced its intent to issue a "call for proposals" for used tire processing/recycling.

In my 2002 Annual Report to the House of Assembly, I disclosed my concerns with the tendering process relating to the awarding of a contract in November 2002 for the collection, storage, transportation, processing, and disposal of used tires in the Province.

Scope and Objectives

In November 2004, we completed an update review of the Used Tire Recycling Program. Our objective was to review compliance with the November 2002 contract and to determine the status of the Used Tire Recycling Program.

Conclusions

The Used Tire Recycling Program since its inception in April 2002 could not be considered a success as it has not met its goal of collecting and processing used tires in the Province. For example, collection sites were not established in all areas of the Province, not all tires were collected from retailers and other sites, not all collected tires were processed, and not all processed tires were marketed and sold.

2.14 Used Tire Recycling Program

As at 31 October 2004, there are approximately 1.3 million passenger tire equivalents stored in five locations throughout the Province (including 461,965 in passenger tire equivalents stored and owned by a former MMSB contractor at the contractor's site in Stephenville).

This situation could result in considerable environmental damage if the tires became ignited. While MMSB officials indicated that the tires located at the Placentia storage yard are stored in accordance with guidelines established by the Department of Environment and Conservation and the Fire Commissioner's Office, those stored at Bull Arm and at the former contractor's site at Stephenville are not.

In November 2002, the MMSB entered into a 5 year used tire recovery contract for the collection, storage, processing and disposing of used tires with an option to renew for a further 3 years. The MMSB became aware of non-compliance issues very early in the contract, and after considering proposals from the contractor to address the deficiencies, both parties agreed to terminate the contract on 7 June 2004 (i.e. 19 months into the contract). The contractor was paid $1.2 million during the 19 months the contract was in effect.

As at 7 June 2004 when the MMSB assumed direct responsibility for the Used Tire Recycling Program, there were approximately 1,015,000 passenger tire equivalents stored at Transportation and Works depots, Municipal Waste Disposal Sites, contractor's collection sites, retailers, Bull Arm, and at the contractor's site in Stephenville (stored and owned by the contractor). MMSB has indicated that the cost of tire recycling has increased as a result of their assuming direct responsibility for the Program. Between 7 June 2004 and 31 October 2004, MMSB collected over 212,000 used tires (551,000 passenger tire equivalents) from Transportation and Works depots, Municipal Waste Disposal Sites, contractor's collection sites, and retailers throughout the Province and stored these tires in designated storage yards.

The cost of collecting and storing these approximately 212,000 used tires was $672,500 or $3.17 per tire consisting of $441,200 or $2.08 per tire in collection costs and $231,300 or $1.09 per tire for storage. While the mix of tires is normally split 92% small tires and 8% large tires, MMSB officials indicated that the 212,000 tires collected are comprised of 60% small and 40% large. As a result, the fee that would have been paid to the former contractor to collect these tires would be $2.70 per tire. While MMSB's collection cost of $2.08 per tire is less than the $2.70 that would have been paid to the former contractor, the interim cost of $1.09 per tire to store the tires means that the overall cost of $3.17 per tire is greater than the $2.70.

In addition to the 1.3 million passenger tire equivalents stored at 31 October 2004, an additional 220,000 (290,400 passenger tire equivalents) in newly generated used tires are expected to be collected from retailers and individuals from 1 November 2004 to 31 March 2005. Although the MMSB has not finalized how it will address processing and disposing of all these tires, it has announced its intention to issue a "call for proposals".

Findings and Recommendations

In my Office's 2002 Annual Report to the House of Assembly, I disclosed my concerns with the tendering process relating to the awarding of a contract for the collection, storage, transportation, processing, and disposal of used tires in the Province. I noted that an Evaluation Committee of the MMSB had significant concerns and advised the Minister not to accept the proposal. However, on 8 November 2002 the Minister and Cabinet directed the MMSB to enter into a contract with the only bidder.

Compliance with the November 2002 Contract

On 8 November 2002, the MMSB entered into a 5 year used tire recovery contract for the collection, storage, processing and disposing of used tires with an option to renew for a further 3 years. The MMSB became aware of non-compliance issues very early in the contract. In the fall of 2003, the MMSB was approached by the contractor with a proposal to assign the contract to a new operator. While this proposal received favorable consideration by the MMSB, the proposed new operator informed the MMSB in late March 2004 that it was no longer interested in an assignment of the contract.

On 15 April 2004, the contractor subsequently filed a new tire collection and recycling plan with the MMSB that addressed the previous deficiencies; however, satisfactory progress was not made in implementing the plan in a timely manner. The contract was therefore terminated on 7 June 2004 (i.e. 19 months into the contract). The contractor was paid $1.2 million during the 19 months the contract was in effect.

Our review indicated the contractor did not comply with the contract as follows:

1. Storage

The contractor was required to:

- Establish collection sites in all areas of the Province within thirty (30) days or within any other time frame to which MMSB agreed.

Documentation on file indicated that the contractor never did establish collection sites in all areas of the Province. The contractor established only 16 sites which MMSB did not consider to be sufficient to effectively meet the demands of the Used Tire Recovery System.

- Obtain approval from MMSB for all sub-contracted processing, storage and collection of used tires.

  There were no agreements submitted for MMSB's approval for the 8 storage and collection sites sub-contracted by the contractor.

- Provide notice to each municipality of all collection sites in that municipality and to provide notice to each registered tire supplier of the closest collection site.

  Documentation on file indicated that the contractor did not provide the required notice to municipalities and registered tire suppliers.

- Supply to the MMSB within 14 days of the execution of the agreement and on an annual basis a document containing a list of collection sites in the Province, together with a written description of the contractor's plan to provide for the collection of used tires in the Province for the next 12 months. Such a plan was to include frequency of collection and any other information the MMSB considered necessary.

  The contactor did not provide the MMSB with a plan for the first year of the contract and the plan provided for the second year was considered by MMSB to be inadequate. Although another plan was provided in April 2004, both the contractor and the MMSB soon realized that this plan could not be executed. Consequently, in June 2004, both parties agreed to terminate the contract.

2. Collection and Transportation

The contractor was required to:

- Collect used tires from each collection site for no charge a minimum of once a year or at such times as determined by the MMSB.

Because the contractor did not establish collection sites in all areas of the Province, tires could not be adequately collected.

- Ensure that any Green Depot (recycling facility) used for storing used tires did not contain more than 50 used tires at any one time, unless there was an on-site trailer to store the tires.

  Documentation on file indicated that some of the Green Depots stored more than the maximum 50 used tires without a trailer being present. In fact, St. John's and Mount Pearl cancelled tire storage permits for Green Depots due to the excessive numbers stored.

3. Processing

The contractor was required to process, in the Province, all used tires which have been returned to the contractor for disposal, utilize all four components of the tire (rubber, carbon, steel, and fluff), market and sell used tires collected and processed by the contractor, and make the processed product available to users in the Province on reasonable terms.

With the exception of some shred (rubber about 4 inches long) being shipped to a mainland processor, there was no evidence that any other tire components had been marketed and sold.

4. Disposal

The contractor was required to dispose of any residue or waste materials connected with the disposal of used tires. In addition, the contractor was responsible for costs associated with any such disposal.

Documentation on file indicated that the contractor did not dispose of all residue or waste materials connected with the disposal of used tires. A total of 460,000 pounds of baled steel, 200,000 pounds of loose steel and 10,000 pounds of fluff (all by-products of the processing procedure) continue to be stored at the Stephenville site.

Current Status

On 7 June 2004, the MMSB entered into an agreement to terminate its November 2002 contract for the collection, storage, transportation, processing, and disposal of used tires in the Province. At this point, it assumed direct operational responsibility for the Used Tire Recycling Program until alternate arrangements are made.

Figure 4 provides information on the number of tires plus passenger tire equivalents as at 7 June 2004 when the contract was terminated.

Figure 4

Used Tire Recycling Program
Information on Tires by Location
7 June 2004

Location	Tires and Passenger Tire Equivalents (PTEs)
Transportation and Works Depots	30,000 tires (78,000 PTEs)
Municipal waste disposal sites	32,000 tires (83,200 PTEs)
Contractors collection sites	18,000 tires (46,800 PTEs)
Retailers	40,000 tires (56,000 PTEs)
Goose Bay and Labrador City	65,000 tires (91,000 PTEs)
Bull Arm	110,000 tires(198,000 PTEs)
Stephenville (Note 1)	85,661 tires (140,305 PTEs) + 321,660 PTEs in processed material
Total	**1,014,965 PTEs**

Source: MMSB
Note 1: The contractor is responsible for the Stephenville Site

Upon termination of the contract, the MMSB implemented a contingency plan for the collection and storage of used tires. The plan established 36 temporary tire drop-off sites throughout the Province where retailers and individuals could deposit used tires with the MMSB providing mobile collection services to those retailers unable or unwilling to deliver used tires to these sites. Between 7 June 2004 and 31 October 2004, over 212,000 used tires (551,000 passenger tire equivalents) were collected from Transportation and Works depots, Municipal Waste Disposal Sites, contractor's collection sites and retailers throughout the Province and stored in designated storage yards. The cost of collecting and storing these approximately 212,000 used tires was $672,500 or $3.17 per tire, consisting of $441,200 or $2.08 per tire in collection costs and $231,300 or $1.09 per tire for storage.

While industry standards for used tires suggest a 92% and 8% split between small and large tires, MMSB officials indicated that the 212,000 tires collected are comprised of 60% small and 40% large. Under the 2002 contract, the fee that would have been paid to collect and transport each tire using the 92%/8% mix of used tires would have been $1.74; however, the fee for the 60%/40% mix of used tires would have been $2.70 per tire.

In this case, there would have been no fee paid for storage as the contractor was responsible for all storage prior to processing.

When the contract was terminated in June 2004, the MMSB became responsible for storage. Officials have indicated that the storage costs of $1.09 per tire include some one time expenditures for site clearing and firefighting equipment which is adding to the per unit costs; however, the continued storage of tires means that, on an interim basis, MMSB is incurring higher costs per tire than that incurred under the 2002 contract.

MMSB's collection costs of $2.08 per tire are less than the $2.70 that would have been paid to the contractor for the 60%/40% mix of used tires. However, the interim costs of $1.09 per tire to store the tires means that the overall costs of $3.17 per tire are greater than under the 2002 contract.

The MMSB contracted for two storage yards on the island to hold tires until a long term solution for the tires is found. One yard in Placentia was contracted in June 2004 and the MMSB estimates that the costs for storage, stacking, security and fire safety to 31 March 2005 will total approximately $323,000 ($140,000 rental, $106,000 stacking, $42,000 for security and $35,000 for additional fire safety measures). As at 31 October 2004 there were approximately 212,000 tires stored in Placentia. It was estimated that 40% of the tires stored at Placentia are of the larger size and taking this into account the number of PTEs (passenger tire equivalents) on site at Placentia is 551,000.

The second yard was in Marystown and was used from June 2004 to the end of September 2004 and cost a total of $3,100 to hold onto the tires until a permanent disposal solution has been found. However, the MMSB was informed by the Fire Commissioner's Office in August 2004 that the site was no longer an acceptable storage yard and all 12,227 tires had to be removed. The cost to move tires from the Marystown yard to Placentia was $15,039. After the removal of these tires, the operator will continue to collect tires and store them in a secure tractor trailer which will be removed once full at a cost of $0.65 per tire.

There are also two temporary storage sites in Labrador located in Labrador City/Wabush (Municipal Waste Disposal Site) and Happy Valley/Goose Bay (private site). A contractor has agreed to collect and store all tires in Happy Valley/Goose Bay. The contactor agreed to a rate of $6,000 per month as a flat fee for an initial two month period beginning 29 July 2004 and $4,000 per month thereafter for the ongoing collection and storage of all used tires in Happy Valley/Goose Bay. The MMSB has entered into a contract with a Quebec based recycler to permanently dispose of all these tires. The estimated cost of transferring the approximately 65,000 tires will be $205,000. In addition, there are another 300 special use tires, each

weighing approximately 1,000 kilograms, which are not covered under the Used Tire Recycling Program. The MMSB also intends to permanently dispose of these tires to the Quebec recycler at an estimated cost of $108,000.

Figure 5 provides information on the number of whole tires plus passenger tire equivalents as at 31 October 2004.

Figure 5

Used Tire Recycling Program
Information on Tires by Location
31 October 2004

Location	Whole Tires	Passenger Tire Equivalents	Passenger Tire Equivalents in Processed material	Total Passenger Tire Equivalents
Goose Bay and Labrador City	65,000	91,000	N/A	91,000
Bull Arm	110,000	198,000	N/A	198,000
Stephenville (Note 1)	85,661	140,305	321,660	461,965
Placentia	212,000	551,000	N/A	551,000
Total	**472,661**	**980,305**	**321,660**	**1,301,965**

Source: MMSB
Note 1: The contractor is responsible for the Stephenville Site

As the Figure shows, there are a significant number of tires in storage at 31 October 2004 and MMSB estimates that an additional 220,000 tires (290,400 passenger tire equivalents) will be collected by 31 March 2005.

MMSB officials have indicated that in the future the collection and transportation work and the processing work will be tendered separately. Having collection and transportation work and the processing work completed under separate contracts represent a complete departure from MMSB's original approach to the Used Tire Recycling Program of having one contractor perform all functions.

A tender was called on 8 November 2004 for the collection and transportation of used tires, with the tender closing on 30 November 2004. To date, there has been no tender for the processing and disposal of used tires. As a result, tires continue to accumulate at MMSB's storage yard in Placentia and at the two temporary sites in Labrador. Once the tires currently stored in Labrador are disposed of, MMSB will not be allowing tires to accumulate at these sites.

A performance deposit of $75,000 along with accrued interest was forfeited to the MMSB by the contractor. Any balance remaining after payment of all amounts required to be made by the MMSB as a result of the termination, is to be paid back to the contractor. Our review also disclosed an ongoing disagreement between the MMSB and the contractor over the payment for used tires processed. The invoice discrepancy was valued at $34,734. This disputed amount has not been paid by MMSB. The number of tires counted by the MMSB representatives and the number of tires invoiced by the contractor amounted to an overstatement of 23,138 tires by the contractor. The termination agreement allowed the contractor to continue its claim regarding the disputed tires and to refer the dispute to binding arbitration. As of the date of our review, the contractor had not referred the dispute to arbitration.

Compensation Settlement

As reported in my 2002 Annual Report, the MMSB had given a local processor a letter of intent on 31 May 2002 to use its collection and processing services after the first used tire contract was terminated and until a permanent processor was ready to take over. As a result of the second contract being awarded, the letter of intent with the local contractor to collect and process used tires on an interim basis was cancelled. This interim contractor claimed a lost profit from the MMSB of $600,000. In February 2003, the MMSB reached a compensation settlement with this contractor totalling $179,400.

Environmental Issue

Storing significant quantities of tires in one location could result in considerable environmental damage if the tires became ignited. While MMSB officials indicated that the tires located at the Placentia storage yard are stored in accordance with guidelines established by the Department of Environment and Conservation and the Fire Commissioner's Office, those stored at Bull Arm and at the former contractor's site at Stephenville are not. It was also indicated that, while the Bull Arm site is secure and remote, the used tires are not stored in accordance with guidelines established by the Department of Environment and Conservation and the Fire Commissioner's Office. As

for the tires located at the former contractor's site in Stephenville, the Department of Environment and Conservation has issued a Ministerial order under the *Environmental Protection Act* directing the contractor to comply with Provincial and municipal requirements for the safe and secure storage of used tires on its property.

Recommendations

MMSB should:

- *Develop and implement plans to address all components of the Used Tire Recycling Program; and*

- *Finalize how it will address processing and disposal of tires currently stored at various storage sites.*

MMSB's Response

The MMSB concurs with the Auditor General's recommendations and notes that a new long term plan for the used tire recycling program was announced by the Minister of Environment and Conservation and the MMSB on November 8, 2004. That plan is presently being implemented, commencing with the establishment of permanent infrastructure for the collection of used tires throughout the province which should be in place in January 2005. A "call for proposals" for the processing and recycling of the used tires currently stockpiled and those generated on an ongoing basis will be issued in early 2005, with a view to having a sustainable and effective "made in Newfoundland and Labrador" solution to this aspect of the used tire recycling program in place in the spring of 2005.

In the interim, the MMSB has assumed responsibility, on behalf of the Minister of Environment and Conservation, for the proper management of the stockpile of used tires at the former processing plant of Newfoundland Envirotire Shreds Incorporated in Stephenville, and will continue to manage and secure its own stockpiles of used tires at Placentia and Bull Arm in an appropriate manner.