

# Chapter 2

## Department of the Environment Tire Stewardship Program

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# Department of the Environment Tire Stewardship Program

## Background

**2.1** The fire at the tire dump in Hagersville, Ontario, in February 1990 drew attention to the environmental hazards of waste tires. It was immediately evident that when stored in large quantity, they present a potential catastrophic fire hazard. In addition to the fire hazard, water that collects in the tires is a breeding ground for insects and when tires are buried whole, the frost action brings them back to the surface creating problems for landfill management. The cost for managing a used tire in a responsible manner (i.e. recovering and recycling it) usually exceeds the value of the recyclable material. As a consequence, used tires ended up at dumps and landfills, or were stockpiled by someone in the hope that they would someday become profitable. Burying them, either shredded or whole, took up space and shortened the life expectancy of the landfill. Used tires do not degrade.

**2.2** In 1992 the Province provided funding through the Environmental Trust Fund to the Fredericton Region Solid Waste Commission for the purchase of a transportable tire shredder. The shredder was available to other solid waste commissions on a cost recovery basis. While the shredder appeared to resolve the immediate environmental risks, it did not resolve the larger issue of long term environmental management of used tires. The Department of the Environment (DOE) viewed this as an interim step to resolve immediate hazards. In addition tire shredding is a step that is required for most forms of used tire recycling. Consequently, the tire shredder was consistent with a more comprehensive tire management strategy.

**2.3** The need for a tire-recycling program was also highlighted in the 1993 Atlantic Provinces Special Wastes (APSW) Committee report. The Atlantic Provinces Ministers of the Environment established this Committee. The Committee chair was a DOE employee. The Committee targeted tires as a special waste that demanded appropriate management. It also recognized that the management of tires would not be assumed by the private sector without economic incentives, since the cost of

collecting and recycling exceeds the value of the recyclable material in used tires.

**2.4** The basic premise put forward for managing used tires was “stewardship”. The Committee believed the industry that produces the tires should assume responsibility for managing them throughout their lifecycle. The cost for managing the used tire becomes “internalized” (i.e. the cost for waste management gets treated in the same manner as the cost for raw materials, labour and capital that go into making the tire). Costs are borne by industry which in turn passes them on to the consumer of the tires. Internalizing costs results in the user paying for the full cost of the product.

**2.5** Several other industry sectors have recognized their responsibility for stewardship of their products and have started to act on that recognition. Chemical producers were some of the first, and more recently grocery product manufacturers have begun to take responsibility for their packaging. The Beverage Container Act is an example of industry stewardship functioning in this Province. Stewardship embodies the broadly accepted “polluter pays” principle.

**2.6** The APSW Committee developed a proposal based on industry stewardship and invited industry stakeholders to participate in the development of the program. In November 1994 the Committee issued a call for expression of interest for managing scrap tires in the Atlantic region. From the response, it was determined that a processor/recycler could be found. However, after a number of months New Brunswick decided regional co-operation was moving rather slowly. DOE decided to focus on a provincial initiative.

**2.7** To ensure appropriate management, the Committee recommended a co-ordinated recycling program based on the stewardship model. The New Brunswick Tire Stewardship Board (The Board) was established to administer the tire stewardship program in New Brunswick, effective 1 October 1996.

**2.8** The New Brunswick Tire Stewardship Board is a not-for-profit organization and its principal business activity is overseeing the collection and recycling of used tires on behalf of the Minister of the Environment for the Province of New Brunswick. New Brunswick was the sixth province in Canada to introduce a tire stewardship program.

**2.9** The primary objective of the program, as stated by DOE, is to ensure that scrap tires generated in the Province are disposed of in a manner that does not negatively impact on the environment. A secondary objective is that the management of scrap tires generates economic activity by optimizing the resource value of the material in the tires.

***Tires included in the program***

**2.10** The program covers all new passenger car tires, light and medium truck (road transport) tires as well as tires for motorcycles, recreational vehicles, trailers and agricultural equipment. The tires for all of these vehicles are covered whether they were sold as original equipment when the vehicle was new or as replacement tires.

**2.11** The vast majority of the tires attract a \$3.00 levy at the time of sale.<sup>1</sup> This levy is broken down in three distinct portions. The Board retains \$0.50 to cover the costs of administering the program. Of the remaining \$2.50, the Board remits \$1.25 to the recycler for each scrap tire collected. An additional \$1.25 per tire is payable to the recycler once the products containing the recycled material are sold.

***Operation of the Board***

**2.12** The Board's Mission Statement is as follows:

*The Mission is to administer with quality and care, a recycling program for tires in accordance with the Clean Environment Act.*

**2.13** The Board is charged with operating the program on a revenue neutral basis year to year. It must collect enough revenue from the levy to cover the costs to manage tires sold after 1 October 1996, and to pay for the administration of the program. In addition, the Board has the intention to deal with at least a portion of the tires that were in stockpiles at the commencement of the program, as financial resources permit.

**2.14** Among the Board's ongoing operational responsibilities are the identification and registration of tire retailers, suppliers and manufacturers, and the monitoring of new tire sales figures. The Board sees itself as working in partnership with the contracted tire recycler to ensure an efficient and successful program.

**2.15** In a more strategic sense, the Board sees itself with a role in supporting the production of value-added products made from recycled scrap tires and in the stimulation of the economy through job creation. The Board wants to remain accountable to its stakeholders while educating them about the programs delivered. Stakeholders are broadly defined as the public, retailers, industry, consumer groups and the government.

***Used tire recycler***

**2.16** The Tire Recycling Atlantic Canada Corporation (TRACC) was chosen by a competitive tender to recycle the used tires in the Province. TRACC's contract is with the Board and expires on 31 December 2001. TRACC's mandate in New Brunswick is to operate all the components of scrap tire management: collection and storage; shredding; crumbing; and finally, manufacturing value-added products. In addition, TRACC has its own internal mission, which is to maximize employment

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1. Tires with a rim size greater than 17 inches and less than 24.5 inches have a \$9.00 levy added at the time of sale.

opportunities in the Minto area. As of 31 March 1999, the employment level in Minto was approximately 50 full-time positions. Additionally, there are approximately 10-12 truckers employed throughout the Province in the tire collection phase.

## Scope

**2.17** Our scope included both the planning for and implementation of the Tire Stewardship Program, and the operation of the program up to 31 March 1999. In addition to extensive documentation review, we conducted interviews with several employees of DOE, with the staff and the Chairman of the Board, and with several employees of the Fire Marshall's Office. We also toured the TRACC plant and interviewed the CEO.

**2.18** In carrying out our work, we developed the following three audit objectives:

- to determine if the Tire Stewardship Program was established in a well planned, timely and co-ordinated fashion in accordance with DOE's strategic direction;
- to determine if DOE is overseeing the management of the Tire Stewardship Program in accordance with the legislation and regulation; and
- to determine if DOE and any other appropriate government agencies are ensuring the public is adequately protected from danger of tire fires and that appropriate contingency plans are in place to deal with the related disaster issues.

## Results in Brief

**2.19** The Tire Stewardship Program was established in a well planned, timely and co-ordinated fashion in accordance with DOE's strategic direction.

**2.20** We noted that at least two significant private tire stockpiles remain in the Province. We recommended DOE and the Board develop a timed action plan to clean up all remaining tire stockpiles.

**2.21** We noted there is no contingency plan in place to ensure the public is adequately protected from the danger of tire fires. We recommended DOE require that a "Contingency Plan" be added to the requirements to operate the scrap tire storage yard.

**2.22** The Board's liability for accrued processing fees continues to grow. And it seems to represent a much higher number of tires than are actually on site. We recommended the Board initiate a study to analyze issues surrounding the growing liability for accrued processing fees.

**2.23** Although both DOE and the Fire Marshall appear to have responsibilities for monitoring and inspection of the TRACC facility, there is no memorandum of understanding or other such

co-ordinating mechanism between these two government organizations. Our interest is in ensuring that inspections are co-ordinated and that all key responsibility areas are addressed. Therefore, we made recommendations on the need for DOE and the Fire Marshall to improve the planning and co-ordination of inspections.

**2.24 The Board's Management Plan and Annual Report are not in compliance with the regulations.**

## Objective #1 – Planning and Implementation

**2.25** Our first objective was to “*determine if the Tire Stewardship Program was established in a well planned, timely and co-ordinated fashion in accordance with DOE's strategic direction.*”

**2.26** We had three audit criteria under this objective. The first examined various aspects of the decision-making process employed by DOE. It reads:

*The decision-making process should include the following steps:*

- *identify the key issues for consideration;*
- *determine the departmental and government strategic directions with regard to these issues;*
- *develop a proposed solution by selection from reasonable alternatives;*
- *appropriately document and authorize the decision; and*
- *prepare an implementation plan.*

### Planning

**2.27** Overall we found DOE strong in the planning process that led to the creation of the Board and the Tire Stewardship Program. We were pleased that the process appeared to be well documented, helping us to make our assessment. In our Background, we mentioned that DOE identified the need for tire recycling as early as 1992. The APSW Committee, which was chaired by a DOE employee, identified four possible wastes for inter-provincial initiatives: used batteries, biomedical waste, used oil and used tires. The APSW Committee decided to concentrate on used tires proposing a regional approach.

**2.28** The Committee decided there were used tires everywhere that required recycling. They also determined a long-term management plan was required for product stewardship.

**2.29** The DOE Strategic Plan dated 16 September 1991 had the following strategic objective:

*To ensure that Provincial regulations and policies require that proponents assume full lifecycle responsibility for the environmental impacts of their actions.*

**2.30** In 1992 the Premiers' Round Table on the Environment and the Economy prepared a "Plan for Action" with 38 recommendations directed towards sustainable development. The Province has continued to monitor its progress on the 38 recommendations showing the Plan's strategic importance. One recommendation discussed the concept of life cycle management noting "there should be responsibility for products and packaging from cradle to grave – and back to cradle through recycling." This idea certainly fits the approach DOE adopted concerning the Board. In 1993 the Policy and Priorities Committee of Cabinet also authorized DOE to initiate consultation with industry on a long-term management strategy based on product stewardship. This strategy of industry stewardship is also consistent with the *Beverage Container Act* (BCA) waste management principles. We reported on the BCA in our 1994 Report.

**2.31** We were pleased to see that DOE developed a proposed solution by selecting from reasonable alternatives. An August 1994 document reviewed existing programs and developed four design questions from alternative models of scrap tire economic instruments. DOE developed a program using the information in the August 1994 document.

**2.32** We reviewed a summary of the minutes of the various meetings of the APSW Committee. These minutes are a chronological history of events that led up to the final Memorandum to Cabinet. In addition, we reviewed a detailed planning document prepared by DOE in the Spring of 1996. By examining the documentation that led up to the Memorandum, and the subsequent regulation which established the Board and the Tire Stewardship Program, it is clear that the decision was appropriately documented and authorized. DOE told us they went to Cabinet four or five times before a program was approved.

**2.33** Our discussion in the previous paragraphs shows DOE had systematically prepared for the implementation of the Board and its mandate. There was also a selection process DOE and the Department of Economic Development, Tourism and Culture used to determine the successful recycler/processor. This selection process was finalized by a contract with TRACC.

**2.34** In our opinion DOE met the first criterion. DOE exhibited a thorough and well documented planning process.

### ***Implementation***

**2.35** Our second criterion said "*Implementation should occur on a timely and co-ordinated basis in accordance with the approved plan.*"

**2.36** To a large extent, we believe this occurred, although there have been some concerns about delays in the processing. We have discussed the process that led up to the submission to the Policy and Priorities Committee of Cabinet. This process culminated in the governing authority called the *New Brunswick Regulation 96-82* under *The Clean Environment Act*.

**2.37** TRACC started collecting the used tires within the time frame provided in the legislation and regulation. However, the recycler was penalized under the contract in March 1997 for a delay in recycling the used tires. It was April of 1998 before any significant amount of recycling took place. Overall, recycling was slow compared to the original intention of the Board.

**2.38** Because of this delay in recycling, we believe this criterion was only partially met by DOE.

### **Evaluation**

**2.39** With any major new program, we believe that after an appropriate period of time following implementation, the results should be evaluated and necessary changes should be made to the program. This principle then became our third criterion.

**2.40** We are convinced there has been ongoing discussion and observation of this program. However, it is too early for a formal program evaluation so we are not making a conclusion on the third criterion at this time. As at 31 March 1999, this program had been in operation approximately two and one half years.

**2.41** We do note, however, that DOE made some minor changes to Regulation 96-82 in March 1999. In addition, the TRACC contract was re-assigned from DOE to the Board in March 1998. Very early in the operation of the Board, the need to change compliance from the Canadian Council of Ministers of the Environment guidelines to the National Fire Code of Canada guidelines was recognized. These factors speak to ongoing monitoring of the program and a willingness to change and improve the program as required.

**2.42** During our work, we observed a significant issue that should probably be included in a formal review of the program. That issue is what to do about stockpiles of tires that developed prior to the program commencing on 1 October 1996. DOE informed us that the Board has completed a clean up of all tires stockpiled at the regional landfills. Also a number of old village dumps were cleared of tires. However, we noted that one private stockpile of over 100,000 tires still exists in the Province. In addition another stockpile estimated at 6,000 tires is being monitored by DOE.

### **Recommendation**

**2.43** We recommended DOE and the Board develop a timed action plan to clean up all remaining tire stockpiles.



**Departmental response**

**2.44** *The Minister will request that the Board develop a plan in cooperation with the Department to address the removal of the remaining scrap tire stockpiles. The plan, with an implementation schedule, will be developed by January 3, 2000.*

**Objective #2 - DOE's Oversight Role**

**2.45** Our second objective relates to the ongoing oversight role of DOE for the Tire Stewardship Program. It reads as follows:

*To determine if DOE is overseeing the management of Tire Stewardship Program in accordance with the Legislation and Regulation.*

**2.46** We developed six criteria to assist us under this objective. They relate to key aspects of the regulation which are:

- the need for a management plan;
- the need to monitor progress against the plan;
- registration and inspection;
- monitoring the after-market;
- reporting on effectiveness; and
- analyzing the fee structure.

**Management plan required**

**2.47** Section 12(1) of the regulation states:

*The Board shall, before January 1, 1997, and before the first day of January in every second year following that date*

*(a) adopt a management plan in the form, and containing the information, required by the Minister for the implementation of the Board's responsibilities under the Act and this Regulation for the two year period beginning on the first day of the fiscal year following its adoption, and*

*(b) submit the management plan to the Minister for approval*

**2.48** Our related criterion read that “*DOE should ensure that the Stewardship Board has an appropriate management plan in place.*”

**2.49** The Board's original Business Management Plan (Plan) was dated 27 March 1997. This Plan was an excellent starting point for our audit. According to the regulations, another plan was due on 1 January 1999. We were assured that the Board was working on this second plan. However, it had not been completed by the time our fieldwork finished, at approximately the end of May 1999. Therefore, we concluded the criterion was partially met.

**Recommendation**

**2.50** We recommended DOE ensure the Board finalizes and submits the Plan as soon as possible.

**Departmental response**

**2.51** *The Management Plan is expected within [the first week of October].*

**Monitoring the plan**

**2.52** The second criterion is directly related to the first. Once an appropriate management plan is in place, it is important that DOE have mechanisms to ensure that the plan is carried out. Based on this perspective, we developed the following criterion:

*DOE should ensure the Stewardship Board regularly monitors results of TRACC in comparison to the Management Plan and reports the results to DOE.*

**2.53** Our discussions with the Board indicated there is regular phone contact between the Board and DOE. The same contact exists between the Board and TRACC. Part of this contact between the Board and TRACC would involve interpretation of certain clauses of the contract. TRACC submits to the Board and to DOE a weekly list of the tire stockpile activity. We noted items in the Board minutes that also indicated regular monitoring of TRACC. The Chairman of the Board is an employee of DOE further contributing to effective communication. Overall, there are several indicators of regular monitoring of TRACC and communication with DOE.

**2.54** DOE noted to us that the annual report of the Board is intended to play a significant role in the reporting of results in comparison to the management plan. As the program matures, DOE expects the annual report and the management plan to be the keys to any oversight role it might have. We have commented in more detail on both the management plan and the annual report in other sections of this chapter.

**2.55** In our review of documentation at the Board, it was evident that staff did not routinely document the phone calls and visits to the TRACC site. Given this, it is impossible for us to verify the actual extent of the monitoring of TRACC's results in comparison to the management plan. We concluded that the criterion was only partially met.

**2.56** We have discussed this issue with DOE and have noted it may be prudent for the Board to improve its documentation as part of its standard systems and practices. This would help DOE in more formal monitoring of section 13 of Regulation 96-82. This states that: "*The Board shall ensure that an original or amended management plan, as approved by the Minister, is implemented in accordance with its intent.*"

**Recommendation**

**2.57** **We therefore recommended that DOE explore the possibility of requiring the Board to provide more documentation of the monitoring function.**

**Departmental response**

**2.58** *The Department is represented on the Board and its member is regularly appraised by the Board staff of the results of the monitoring of the contract between the Board and TRACC. The Department is satisfied*

*that the Board is fulfilling its mandate as it relates to TRACC but will appraise the Board of your recommendation and will urge the Board to maintain adequate documentation of its monitoring.*

### **Registration and inspection**

**2.59** Two key sections of the Regulation in terms of the Board's responsibilities are sections 16 and 26. In order to emphasize the requirements of these sections, our next criterion states:

*DOE should ensure the Stewardship Board has a system in place to register all suppliers as required by section 16 of the Regulation and to conduct appropriate inspections under section 26 of the Regulation.*

**2.60** In our opinion this criterion has been met. We present our findings separately for each of the two sections.

### **Registration Under Section 16**

**2.61** There is a system in place to register suppliers. Tire wholesalers are instructed by the Board only to sell tires to retailers who possess a valid supplier registration number. A toll free telephone number exists to allow wholesalers and retailers to contact the Board for registration verification and other matters.

**2.62** The Board has told us it engages independent auditors to verify certain procedures conducted by wholesalers. There are approximately sixty wholesalers in the Province and at 31 March 1999, seven had been audited on behalf of the Board. We were told the auditors are required to verify compliance with certain sections of Regulation 96-82. As an additional procedure the auditors are instructed to verify that wholesalers are recording the retailer's registration number. The Board indicated it relies on these audits for part of the assurance that retailers have valid registration numbers. However the Board does not have any terms of reference with the auditors describing the required verification and compliance procedures. We believe it would be prudent for the Board to develop standard terms of reference for these audits.

**2.63** Although we have no direct reporting relationship to the Board, we have spoken to the Chairman concerning our findings. He has agreed that the observations are relevant and has noted an openness towards bringing the matters to the attention of the full Board. Given that the Chairman has been appointed by the Minister, we made the following recommendations.

### **Recommendations**

**2.64** We recommended the Chairman advise the Board on the importance of preparing written terms of reference for audit engagements for the purpose of verifying compliance with selected aspects of Regulation 96-82.

**2.65** We further recommended that an engagement letter be obtained for each of these audits. The engagement letter should

**indicate the Board's reliance on the audit to ensure all suppliers hold valid registrations.**

***Departmental response to both recommendations***

***Inspections Under Section 26***

**2.66** *The chairman has so advised the Board and staff of the Board. The recommended actions will be undertaken.*

**2.67** Section 26(1) of the Regulation states:

*In order to ascertain whether the provisions of the Act and this Regulation have been complied with, a person who is an inspector designated under the Act or an agent designated under section 25, at any reasonable time and upon presentation of proof of identification on a form provided by the Minister or the Board, as the case may be, may*

*(a) enter the land or premises and conduct an inspection of the land, premises or personal property where or with which any person distributes, supplies, packages, labels, uses, stores, collects, transports, recycles, processes, disposes of or otherwise handles tires, and*

*(b) conduct an inspection of any record required to be maintained or kept under this Regulation.*

**2.68** DOE told us that Section 26 is deliberately broad in order to cover a wide variety of compliance issues under the Act and Regulation. The main activity to date has been the verification of registration under Section 16 as discussed above.

***Monitoring the after-market***

**2.69** One of the key goals of the whole program is to develop recycled products from the used tires. The fee payment structure directly supports this in that the "second" \$1.25 is paid to the recycler only after the recycled products have been sold.

**2.70** Because of this goal, and the importance of financial control over the payment of the second \$1.25, we developed our fourth criterion for this objective. That is:

*DOE should ensure the Stewardship Board monitors the after-market for the material resulting from the management of used tires to ensure the materials are being appropriately recycled.*

**2.71** With regard to monitoring the after-market when these tires are processed, the Board said that TRACC submits a monthly invoice for processed Passenger Tire Equivalents (PTEs) (i.e. for recycling the rubber). The Board performs verification procedures on each monthly invoice. In addition, the Board randomly chooses invoices for sales of the recycled product and confirms by phone with the purchaser that a certain product was purchased from TRACC at a certain price. We

noted the stockpile of used tires in TRACC's storage yard has not increased in approximately one year, confirming that something is being done with the daily intake of used tires.

**2.72** Currently, it appears that DOE relies mainly on verbal reports from the Board to ensure the Board monitors the after-market for recycled materials. Again, since the Chairman of the Board is a senior DOE employee, this informal reporting appears to provide a sufficient means for DOE to ensure the Board monitors the after-market of materials. In other words, this criterion was met by DOE.

**2.73** Notwithstanding our conclusion, we see room for improvement in this area. We believe the Board could possibly engage their financial statement auditors to obtain additional assurance on the conversion of the rubber to an after-market use. This assurance could be communicated to DOE to satisfy the Department that the recycling aims were being accomplished.

### ***Reporting on effectiveness***

**2.74** Section 13 of the Auditor General Act directs our Office in terms of our reporting responsibilities to the Legislative Assembly. Among the specific areas we are directed to report on are instances where "procedures have not been established to measure and report on the effectiveness of programs, where, in the opinion of the Auditor General, the procedures could appropriately and reasonably be used."

**2.75** Or alternatively, we must also report where "procedures established to measure and report on the effectiveness of programs were not, in the opinion of the Auditor General, satisfactory."

**2.76** Because of this perspective, we developed the following criterion:

*DOE should report on the effectiveness of the tire recycling initiatives to the Legislative Assembly. One possible method could be through tabling the Stewardship Board's Annual Report and annual financial statements.*

**2.77** We are pleased to report that Section 14 of Regulation 96-82 recognizes the importance of accountability and reporting on program effectiveness. It requires annual public reporting on a variety of performance areas. The section reads as follows:

*(1) As soon as is practicable after the end of each fiscal year of the Board, and in any event not later than ninety days after the end of each fiscal year, the Board shall provide the Minister with a copy of its audited financial statement for that fiscal year, and with an annual report in which are set out, respecting that fiscal year,*

- (a) *the number of tires supplied by all holders of a supplier registration,*
  - (b) *the amount of fees remitted to the Board, including, separately, the amount of interest on outstanding fees and the amount of penalties,*
  - (c) *the number of scrap tires collected,*
  - (d) *the number of scrap tires processed,*
  - (e) *the cost of the collection and processing,*
  - (f) *the results of any inspections conducted on suppliers or others under this Regulation,*
  - (g) *a description of all enforcement activities,*
  - (h) *a description of other related activities of the Board,*
  - (i) *a description of emerging trends in the field of scrap tire management, and*
  - (j) *any other information required by the Minister.*
- (2) *The Minister shall submit the audited financial statement and the annual report to the Legislature each year.*

**2.78** The Board's December 1997 Annual Report and financial statements were filed with the Clerk of the Legislative Assembly in July 1998. This was approximately three months late. The Annual Report is fairly comprehensive and provides a significant amount of information on the Board and the program. The report and the accompanying financial statements provide information on a number of the items set out in section 14(1) including the amount of fees remitted to the Board and the number of scrap tires collected.

**2.79** In a number of cases, however, it appears the report did not meet the requirements of section 14(1). Information was either not available or not easily located for a number of the following requirements:

- (a) *the number of tires supplied by all holders of a supplier registration,*
- (d) *the number of scrap tires processed,*
- (e) *the cost of the collection and processing,*
- (g) *a description of all enforcement activities,*
- (h) *a description of other related activities of the Board,*
- (i) *a description of emerging trends in the field of scrap tire management,*

(j) any other information required by the Minister.

**2.80** Regarding requirement (d), there was a brief statement that

*.... TRACC has experienced some tire processing delays. In fact, the shredding and crumbing of tires has reached production levels in 1997; however, rubber mats and similar products were only produced in small trial runs towards the end of the year.*

**2.81** We believe it would have been useful to provide actual statistics on numbers processed. A similar statement could be made for areas such as “the cost of processing” and “a description of all enforcement activities.”

**2.82** The preparation of the 1998 Annual Report was not completed at the end of our fieldwork (approximately the end of May 1999). We had some discussion on Section 14 with DOE and were informed the Board may consider including in its next Annual Report a summary by province of the used tire collection and recycling activity. This could be seen as providing “a description of emerging trends in the field of scrap tire management.”

**2.83** In our opinion, this criterion is only partially met as a result of the unfiled 1998 Annual Report, the late report in 1997 and the elements of 14(1) that have not yet been reported on.

**2.84** One thing the report preparers might consider including would be a table or checklist which listed the requirements of Section 14 along with cross-references as to how the report satisfied each of them.

#### *Recommendation*

**2.85** We recommended DOE ensure the Annual Report of the Board for 1998 and future years follows the provisions of Section 14 of the Regulation.

#### *Departmental response*

**2.86** *The Department has reviewed the Auditor General’s views respecting what constitutes fulfilment of the requirements of Section 14 of the Regulation, agrees with them, and has passed the Auditor General’s recommendations on to the Board.*

#### *Analyzing the fee structure*

**2.87** Several sections of the Regulation deal with the fee and the financial affairs of the Board. One of our criteria relates directly to the fee structure. That is:

*DOE should have procedures in place to periodically analyze the fee structure to ensure it contributes appropriately towards the waste management goal.*

**2.88** Overall, it is too early to evaluate this criterion. The Board has not operated long enough to properly assess the fee structure. However,

we still have some observations. Indeed, these observations will help the reader understand why we are unable to conclude.

**2.89** There has been some ongoing concern regarding the HST status of the fee charged by TRACC. The Board and its auditors are actively working on the HST requirements with Revenue Canada. The outcome of this HST work could reflect on the existing fee.

**2.90** A second area of concern is the growing liability on the financial statements of the Board. This liability is known as “accrued processing fees.” Accrued processing fees represent the amount to be paid when products containing the recycled material are sold. An effective recycling program would see the balance remaining constant or, ideally, decreasing. This liability has grown from \$246,778 at 31 December 1996 to \$1,709,299 at 31 December 1998.

**2.91** Our concern is that the \$1,709,299 equates to approximately 1.4 million passenger tire equivalents<sup>1</sup> (PTEs). Even though there is not an accurate inventory of the PTEs in the storage yard at TRACC, it is not 1.4 million PTEs. One estimate we were given as at 31 December 1998 was approximately 750,000 PTEs. The question arises, what has happened to the other 600,000 to 700,000 PTEs picked up but not in the storage yard? Another related question we have is why has the financial statement liability continued to grow even though the number of tires has remained fairly constant since mid-1998?

**2.92** We were provided with several possible explanations for the variance. For example TRACC, with approval of DOE, shredded approximately 175,000 PTEs to be used as a private water filter. TRACC was not reimbursed the second “one-half” of the levy for this project, resulting in a permanent variance for purposes of the calculation. We have not verified the explanations offered but have noted both the recycler and the Board have an interest in the matter.

### *Recommendation*

**2.93** We recommended the Board initiate a study to analyze the issues surrounding the growing liability for accrued processing fees.

### *Departmental response*

**2.94** *The Department has been aware of the discrepancy identified by the Auditor General and has been working with the Board to clarify the issue. [Our understanding is that the Board has initiated a study to analyze the issues surrounding the growing liability for accrued processing fees.]*

### **Objective #3 Protection of the Public**

**2.95** We began the chapter with a brief reference to the tire fire in Hagersville, Ontario in 1990. More recently we have seen a tire fire at a recycling facility in our neighbouring province of Nova Scotia. Our

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1.  $(\$1,709,299 \div \$1.25 \text{ per PTE})$



third objective was developed with thoughts of the potential danger involved:

*To determine if DOE and any other appropriate government agencies are ensuring the public is adequately protected from danger of tire fires and that appropriate contingency plans are in place to deal with the related disaster issues.*

**2.96** For all practical purposes we have restricted the meaning of the phrase “any other appropriate government agencies” to the Office of the Fire Marshall. The Fire Marshall is an employee of the Department of Municipalities and Housing.

**2.97** We had three criteria under this objective. The first dealt directly with how DOE and other agencies address the risk of a tire fire. This is:

*DOE and any other appropriate government agencies should ensure that TRACC has an appropriate risk management plan in place to deal with the potential threat of a tire fire.*

**2.98** Our reporting for this criterion begins with an examination of the original industrial approval granted by DOE.

**2.99** DOE issued a Certificate of Approval to Construct and Operate a scrap tire yard to TRACC on 25 September 1996. The Certificate of Approval referred to a Document “A”. Contained in that Document “A” was a reference to a Contingency Plan for the Operation of a Tire Storage Yard and Manufacturing Plant (the Plan). We received a copy of the Plan which was identified as “Draft”. All indications point to this Plan being a requirement of the Certificate of Approval to Construct and Operate.

**2.100** The Plan was prepared by TRACC and outlined the standards that TRACC followed to develop a safe tire storage facility and manufacturing plant at Minto, New Brunswick.

**2.101** The Plan incorporated procedures to follow in case an environmental emergency occurred, especially a tire fire. It also outlined support services that TRACC had incorporated into the Plan through consultation and direct support from various provincial and federal government agencies.

**2.102** The Plan outlined comprehensive procedures, that TRACC would undertake, to cope with environmental emergencies such as fire, outdoor storage of fuel, on site water containment resulting from a fire and on site storage of fire retarding chemicals.

**2.103** Overall, the Plan appeared quite comprehensive. It called for a yearly review and appeared to contain numerous benchmarks to use in

measuring performance. However, it appears this Plan remained in a Draft form only. In fact a subsequent Approval to Operate issued by DOE to TRACC on the 10 October 1998 does not mention the Plan.

**2.104** As a result of our audit work, we believe there is no official contingency plan in place to adequately protect the public from the danger of tire fires. We have asked TRACC that question and were referred back to DOE. We also inquired of these issues at the Fire Marshall's Office who also referred us back to DOE.

**2.105** Without a comprehensive contingency plan in place, a number of questions remain unanswered. For instance, some basic questions related to the involvement of the Minto Fire Department would be:

- does the Fire Department have a physical layout of the tire piles in the yard;
- does the Fire Department have a key to the main gate;
- has the Fire Department had a recent call to TRACC to determine response time;
- has the Fire Department participated in a fire drill at TRACC;
- does the Fire Department have enough Class A foam offsite to fight a tire fire if TRACC's onsite foam is inaccessible as a result of the fire; and
- does the Fire Department believe the public is adequately protected from the danger of a tire fire?

**2.106** We consider these are the types of questions a Contingency Plan needs to address. Although we are not experts in fire protection and related matters, the idea of making the Contingency Plan part of the approval certainly seemed to have validity. We have discussed this issue at some length with DOE and the Fire Marshall. Because of our concerns, we have concluded the criterion was not met.

### *Recommendations*

**2.107** We recommended that DOE include a contingency plan (similar to the above mentioned draft) as a requirement to operate the scrap tire storage yard.

**2.108** Since the Fire Marshall has special expertise in fire prevention and fire fighting matters, we further recommended that DOE and the Fire Marshall co-operate in assessing the appropriateness of the contingency plan.

### *Departmental response*

**2.109** *The Department agrees with the Auditor General that there is a value in having a documented plan for dealing with potential environmental emergencies at the TRACC tire storage yard. In light of the proximity of the building to the tire storage yard and the possibility that a fire in the plant could spread to the yard, the plan should also*

address fire prevention and response in the building itself. The Department will work with the Fire Marshall to define the pertinent characteristics of such a plan and will require TRACC to propose a plan. When the plan is submitted, the Department will forward the plan to the Fire Marshall for review and approval and it will become part of the Approval to Operate under the Water Quality regulation. The Department will require that TRACC review the plan annually to ensure that it remains up-to-date and that TRACC document that the review took place.

**2.110** For those issues related to fire prevention and response, and environmental consequences of a fire, the Department will work with the Fire Marshall, TRACC, EMO and the Village of Minto to collectively ensure the safety of the workers, the residents of Minto and the environment. One component of the plan required by the Department will be contingency planning to address the environmental consequences of a fire, e.g. managing the run-off of water and foam used to suppress a fire and managing the by-products of combustion.

**2.111** As noted in the Audit Report, contingency planning can cover a broad range of issues. Some of the contingency measures are more appropriately addressed outside a DOE required plan. Issues related to evacuation, evacuation routes, etc. are best dealt with by the municipality. Some of the issues in the draft Contingency Plan dealt with normal workplace operation and would not be appropriate in a plan required by the Department, e.g. adequate drinking water supply for workers, the wearing of hard hats and ear protectors, etc.

### **Inspections of TRACC Co-ordination required**

**2.112** Our other two criteria related to the planning, co-ordinating, conducting and reporting of inspections of the TRACC facility. These two criteria are as follows:

*DOE and any other appropriate government agencies should have an established and co-ordinated plan to inspect TRACC's facility in accordance with the Industrial Approvals and the CCME\National Fire Code guidelines.*

*Inspections by DOE and any other appropriate government agencies should be carried out on a scheduled basis, with appropriate reporting and corrective action taking place as required.*

**2.113** Since these criteria are so closely related, we are reporting on them together.

**2.114** In our opinion there is no single department or agency co-ordinating the various inspections. Inspections are occurring but there is no "established and co-ordinated plan." We have also concluded that there is not a scheduled co-ordination of the conduct of inspections and the reporting of the corresponding results.

**2.115** There is evidence of numerous visits to the TRACC facility by both the Department of Environment and the Fire Marshall. It appears that each department or agency had certain compliance considerations in mind, sometimes overlapping, when conducting these visits. We have also noted a certain amount of sharing of information between DOE and the Fire Marshall.

**2.116** DOE's Industrial Approvals Section monitors the TRACC facility. Our understanding is that it is responsible for monitoring only the air emissions and possible ground water run off. The Industrial Approvals Section has responsibility for environmental protection by setting the conditions and standards of approvals and licenses to be issued to industrial and commercial operations. The Certificate of Approval to Construct and Operate mentioned previously was issued by the Industrial Approvals Section.

**2.117** It appears that the Office of the Fire Marshall has taken the lead in inspecting and monitoring TRACC's compliance with National Fire Code Guidelines. Our understanding is the Fire Marshall became involved at the facility following a request from TRACC. This has resulted in numerous visits to the TRACC site.

**2.118** The Fire Marshall has issued at least three Order documents to TRACC. The Order documents identified certain compliance problems and gave a future date to satisfy compliance. Non-compliance with these orders over a period in excess of one year resulted in a court action against TRACC on 5 May 1999. Two areas of non-compliance addressed excessive height of tire piles and excessive width (area) of the piles. As a result of this excess, the tire yard at TRACC has exceeded capacity by approximately 320,000 tires. TRACC has until early January 2000 to comply with the court order. One can certainly say the court action of 5 May 1999 dramatically illustrates the Fire Marshall's willingness to take corrective action.

**2.119** We began this section with our conclusion that there is no established and co-ordinated inspection plan. In addition, there is no formal co-ordination of the conduct of inspections and related reporting. We are not necessarily concluding that the co-ordination issue has led to deficiencies in the inspection coverage itself. But we suggest that improvements can be made so that nothing "slips through the cracks."

**2.120** One suggestion we received during our work was a possible need for a Memorandum of Understanding (MOU) between DOE and the Fire Marshall's Office. Given that DOE created the Board, perhaps DOE should take the lead. We believe DOE should clarify in the Regulation or with a MOU, who is responsible for what type of inspections.

**Recommendations**

**2.121** We recommended that DOE and the Fire Marshall develop a comprehensive plan that identifies who will inspect TRACC for the various legislated and contractual requirements.

**2.122** Further, we recommended that DOE and the Fire Marshall work together to co-ordinate the scheduling, reporting and corrective action of all inspections of TRACC as required.

**Departmental response**

**2.123** *The Department will work with the Fire Marshall to co-ordinate inspections to ensure compliance with regulatory requirements that relate to fire prevention and response and environmental safety. Contractual requirements of the company and other regulatory requirements not related to environmental matters do not fall in the purview of the Department. The level of risk is in direct proportion to the number of tires stored on site, as the tire storage piles are reduced the risk will decline. When there is the potential for a significant risk to the environment caused by the storage of a large number of tires, the DOE will inspect the facility at least twice a year. The Fire Marshall will inspect the site in relation to fire safety issues at the DOE's request upon renewal of the approval and at other times when the number of tires stored on site is significant.*

**2.124** *It has come to the attention of the Department that an independent fire safety review of the facility has been performed on an annual basis. The Department will work with TRACC and the Fire Marshall to ensure that the audit meets the needs of all parties and that the report is distributed.*