Chapter 4 Department of Environment and Local Government Solid Waste Commissions

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Department of Environment and Local Government Solid Waste Commissions

Introduction

Environmental and Other Impacts of Solid Waste 4.1 Solid waste commissions provide a service that is used by every taxpayer in New Brunswick and is critical to the environment of the Province. Improper disposal of solid waste contributes to soil and water contamination, and the accumulation of greenhouse gases in the atmosphere. Proper treatment of solid waste, including diversion of materials where appropriate, can minimize these negative environmental impacts.

New Brunswick Solid Waste Commissions



Legend			
T	Transfer Station		
L	Landfill		
D	Direct Ship		

Solid Waste Commissions

4.2 When regionalization was implemented, six regional solid waste commissions decided to open sanitary landfills. Regional commissions were heavily involved in deciding where landfills would be located within their region. The Province was also involved in determining the number and regional locations of these landfills. COGERNO, Nepisiguit-Chaleur, Fredericton, South-West, Fundy, and Westmorland-Albert all operate landfills. The other six commissions entered into agreements to transfer solid waste from their regions to landfills operated by adjacent commissions. Five of the six other commissions established transfer stations. (i.e. central collection facilities used to facilitate the efficient transfer of solid waste to the appropriate landfill.) The sixth, Northumberland, direct ships its solid waste to a landfill.

- **4.3** Operation of a solid waste commission typically includes:
 - operating a landfill or transfer station(s);
 - collecting/sorting/diverting certain materials including recyclables, reusable items, and household hazardous wastes (e.g. paint, batteries, etc.);
 - conducting on-site composting, and/or facilitating backyard composting by residents;
 - operating gas management systems; and
 - educating the public about solid waste.
- 4.4 Appendix I provides more detail about individual solid waste commissions, their operations, and the communities they serve. Pertinent provincial legislation and Department of Environment and Local Government involvement with provincial solid waste matters is discussed in Appendix II. Appendix III provides information about two key provincial solid waste stakeholders, Recycle NB and the NB Solid Waste Association.

Why We Completed this Review

4.5 In December 2009, our Office received a letter from the Minister of Environment, Rick Miles, which included the following request:

We understand you are currently reviewing the Water and Wastewater Commissions. We feel an undertaking of the Regional Solid Waste Commissions (RSWC) would be timely. ... The

department would welcome recommendations from your office.

- **4.6** We subsequently decided to proceed with a review of regional solid waste commissions given:
 - the request by the Minister of Environment;
 - the importance of the services provided to New Brunswick citizens by solid waste commissions;
 - the potential impacts of solid waste on the provincial environment;
 - the significant findings we made as a result of our review of provincial water and wastewater commissions, and in particular the Greater Moncton Sewerage Commission, as included in our 2011 Report; and
 - it would serve as a follow up to the Solid Waste Management Program section included in our 1994 Report.

Objective

4.7 The objective of our review was:

To assess the adequacy of the governance and oversight structures and processes for New Brunswick solid waste commissions.

Conclusion

4.8 We have concluded that at the time of our review, in general, governance and oversight structures and processes for New Brunswick solid waste commissions were adequate, and functioning as documented in provincial legislation.

Results in Brief Governance

- 4.9 The Regional Service Delivery Act was passed on 13 June 2012. It will be administered by the Department of Environment and Local Government (the Department). Effective 1 January 2013, twelve regional service commissions will be created in the Province under that legislation. Also, on that date existing solid waste commission boards will be dissolved and replaced by regional service commission boards. A replacement for the current Solid Waste Commission Regulation will be developed in 2013.
- **4.10** We are generally pleased with the quality of governance that has been provided by the various commission boards around the Province, and by Department of Environment and Local Government administrative oversight of regional solid waste commissions.

4.11 Section 3(3) of the current Solid Waste Commission Regulation, under the *Clean Environment Act*, gives a veto to large municipalities within a particular region relating to certain board approvals. This has caused difficulties for certain commissions when electing executive members to their boards. It also creates the risk of an impasse in approving an annual budget or needed borrowing. This issue will have to be addressed in drafting the new regulation under the *Regional Service Delivery Act*.

- 4.12 Several commissions and other stakeholders indicated that the Department of Environment and Local Government has been very slow in filling vacant board positions representing local service districts. It is our understanding that these appointments, where possible, will be made by representatives of local service districts rather than the Minister of Environment and Local Government under the new *Regional Service Delivery Act*. However, the Minister may still be called upon to appoint some board representatives in regions where there are not enough local service district advisory committees in place.
- 4.13 We identified a number of good governance practices in our review of provincial solid waste commissions. However, we did note that solid waste commissions typically do not maintain the type of governance documentation recommended by the provincial *Appointment Policy* document. In addition, a number of the solid waste commissions indicated that they do not provide formal orientation sessions for new board members

Commission Tipping Fees

4.14 Tipping fees (charges typically dollars per ton, to dump waste at a landfill transfer station) vary significantly between the twelve regional solid waste commissions. This is as a result of different costs to establish regional facilities, differences in the extent of diversion and waste treatment programs offered, the level of commission borrowings, and other factors. Those commissions with relatively lower fees may have more flexibility to add additional programs or enhance existing ones.

Arrangements Between Transfer Stations and Landfill Commissions

- 4.15 Service and related financial arrangements between transfer station and landfill commissions are governed by signed service agreements. Landfill commissions typically charge their full tipping fees to the transfer station commissions that use their landfills. However, regional tipping fees charged by landfill commissions are intended to recover direct costs of operating their landfill and associated administration costs, along with the costs of regional diversion and education programs, and other regional costs unrelated to landfill operations. Many transfer station commissions operate diversion and education programs within their own regions. By paying full landfill commission tipping fees, non-landfill commissions are contributing to the diversion and education programs run by landfill commissions and receiving no benefit. Given the legislative requirement that provincial solid waste commissions operate on a non-profit basis, we believe it is inappropriate for landfill commissions to make a profit through transfer agreements with other provincial solid waste commissions.
- **4.16** Transfer Station Commissions do not always transfer their solid waste to the nearest landfill. This may result in higher than necessary costs being incurred by those commissions.

Commission Websites

4.17 The Internet now serves as a primary source of information for many New Brunswick residents. For that reason, we believe that it is important that all commissions provide complete and up-to-date accountability information on their websites. (i.e. Annual reports, financial statements, lists of current board members, comparison of actual diversion of solid waste against plans, and other pertinent information) However, we concluded from our review that this accountability information is not presented on most commission websites.

Observations on Operations Reporting, and Financial Management

- **4.18** Other observations we made during our review included:
 - All twelve commission budgets were balanced, as required, for 2011;
 - All twelve commissions appeared to be acting within their legislative mandates;
 - Financial and operational reporting provided by the

- twelve commissions appeared to be in compliance with legislative requirements;
- We identified no unusual financial statement items during our review of commission financial statements;
- Post-closure reserves established by the six landfill commissions were generally fully funded; and
- Other reserves established by individual commissions (i.e. for Operations, Capital, and/or Generation Facilities) appeared to be reasonable.

Other Findings

- **4.19** We identified a number of areas related to solid waste in which we believe the Department has an important role to play in improving provincial environmental performance. These areas include:
 - Extended Producer Responsibility (EPR) Programs;
 - Diversion of Solid Waste:
 - Illegal Dumping;
 - Monitoring of Construction and Demolition Debris (C&D) disposal sites; and
 - Public Education.

Extended Producer Responsibility Programs

- **4.20** Extended Producer Responsibility (EPR) programs result in the diversion of specific types of solid waste before it goes to solid waste commissions by requiring original producers, or first importers, to accept it back and cover costs associated with its recycling, reuse, or disposal. Departmental representatives, commissions, and stakeholders agree that EPR programs have the most potential to reduce the amount of solid waste going to landfills in the future.
- **4.21** Recycle NB, a provincial agency, currently administers two programs for the Province, the Tire Stewardship Program and the Paint Stewardship Program. The Paint Stewardship Program is the first and only legislated EPR program in New Brunswick.
- 4.22 However, legislated EPR programs proposed by the Department covering used oil, glycol, and e-waste have not yet been approved by government or implemented. The Department also indicated that additional EPR programs, for example covering packaging and printed material, could have a large impact in reducing the amount of solid waste going to provincial landfills.

Diversion of Solid Waste

- **4.23** There has not been a provincial solid waste diversion plan (a process to divert waste from landfills) in place since the last one expired in 2005.
- 4.24 The Department has been working towards a reduction of 50% of 1988 landfill volumes. However, Departmental figures show the Province has never reached that level, and after reaching 43.7% diversion in 2002 had fallen back to 36.0% by 2009. The overall per capita diversion rate in New Brunswick is the highest among Canadian provinces, but this appears to result primarily from strong non-residential diversion of organic waste. Residential recycling is weak in comparison with national averages. Canadians on average recycle 131 kilograms of solid waste per person each year, while New Brunswickers recycle only 83 kilograms according to 2008 Statistics Canada figures.
- 4.25 The Department has typically allowed regional solid waste commissions to make their own decisions as to the diversion programs they will offer. Commissions are expected to self-fund these programs. The additional costs have a direct effect on regional tipping fees, and ultimately municipal property tax rates. Consequently, budgets including such programs are unlikely to be approved by local municipalities, unless there is strong public support for a particular diversion program within a region, or it is supported through provincial standards and/or funding. Provincial financial support for regional diversion programs is currently limited to short-term funding available from the Environmental Trust Fund.

Illegal Dumping

4.26 The Department, solid waste commissions, and stakeholders all agree that illegal dumping is a significant problem in the Province. The New Brunswick Solid Waste Association, through its illegal dumping hotline, recorded approximately 1,000 reported cases of illegal dumping between 2007 and mid 2011. The *Clean Environment Act* does provide for significant fines, and the Department has a compliance and enforcement policy in place which provides for escalating steps to be taken to enforce the Act. The Department focuses on ensuring illegal dumpsites are cleaned up, and has issued four recent

Orders, involving three illegal dumpsites, to responsible parties and/or landowners to that end. Two of these resulted in prosecutions, guilty pleas, and fines being issued. Departmental representatives indicated that it can be difficult to obtain sufficient evidence to successfully prosecute illegal dumpers under the *Clean Environment Act*. However, both prosecutions noted above were of illegal dumpers, not landowners.

Monitoring of Construction and Demolition Debris Disposal Sites 4.27 The Department has permitted the establishment of approximately ten private construction and demolition debris (C&D) disposal sites at various locations around the Province. Permitting such dumpsites appears to contradict the original goal of regionalizing solid waste treatment in the Province. However, the Department indicated that it is done as a convenience to industry, and particularly to reduce the risk that illegal dumping of construction and demolition materials will occur. These dump sites are not required to capture leachate or greenhouse gases. Therefore any dumping of unapproved materials (i.e. violation of their Certificate of Approval to Operate) at those sites could have negative environmental consequences (e.g. on nearby groundwater).

Public Education

4.28 Both the Department and solid waste commissions have recognized the value of educating the public about the importance of effective solid waste management, and related programs available in New Brunswick. The Department has relied heavily on individual commissions to educate the public in their respective regions. Commissions appear to have taken this role seriously, offering various educational programs. However, the extent of education programs offered by individual commissions will necessarily relate to the willingness of their regional municipalities and local service districts to continue to fund such programs through tipping fees. There may also be some areas where it is more effective and/or efficient to educate the public through province-wide initiatives.

Recommendations

4.29 Our recommendations are found in Exhibit 4.1.

Exhibit 4.1 - Summary of Recommendations

Recommendations	Department's Response	Target Date for Implementation
4.49 We recommend the Department of Environment and Local Government include a dispute resolution mechanism in the planned Solid Waste Commissions Regulation under the Regional Service Delivery Act to address situations where a commission board has been unable to obtain the two-thirds majority needed to approve an annual budget, commission borrowing, or the election of board officers.	The Department has taken the position that the Boards of the new Regional Service Commissions will have the responsibility for dispute resolution in their overall management mandate. The new Regional Service Delivery Act includes a double two-thirds majority (two-thirds of the Board members present who represent at least two-thirds of the total population represented by all the members present) for decisions regarding the approval of the annual budget, Commission borrowing and the setting of fees. The double two-thirds requirement will not apply to the election of Board officers for the Regional Service Commission. It is important to note that in extreme circumstances, the new legislation does provide a means whereby the Lieutenant Governor in Council could appoint a trustee if, in the opinion of the Minister of Environment and Local Government, a Regional Service Commission Board [RSC] was not functioning effectively, the RSC Board failed to fulfill its responsibilities under the Act and regulations or where it was in the public interest.	The Regional Service Delivery Act received Royal Assent in June 2012 and the Regional Service Commissions will be in place as of January 1, 2013
4.51 We recommend the Province, through the Minister of Environment and Local Government, ensure future appointments of local service district representatives to the new Regional Delivery Commission boards are made within three months of a vacancy occurring.	The Department agrees that appointments to Regional Service Commission Boards should be made in a timely manner. The new Local Service District [LSD] Representation Regulation specifies that representatives of the Local Service Districts on the Regional Service Commission Boards are to be selected by and from among the Chairpersons of the LSD Advisory Committees within the regions. In addition, this regulation allows for the election of a new LSD Board member representative by the existing LSD Advisory Committee Chairpersons in cases where a current member is no longer able to serve in this capacity. As well, the Minister shall only become involved in the appointment process in instances where there are not enough LSD Chairpersons available or interested to serve on the Board. In instances where an LSD member is not able to fulfill his or her duties as a Board member, a previously selected alternate will be able to replace him or her on a temporary basis.	The Local Service District Representation Regulation (Regulation 2012-90) is now in effect.

Exhibit 4.1 - Summary of Recommendations (continued)

Recommendations	Department's Response	Target Date for Implementation
 4.58 We recommend each new Regional Delivery Commission adopt the following good governance practices: document the roles and responsibilities of their board, individual board members, and board executive members; document and approve terms of reference for each of their board committees; provide all new board members with orientation sessions; document a code of conduct for board, management and staff; and create a governance committee of the board to oversee the development and implementation of good governance practices. 	The Department agrees that good governance practices are essential for the new Regional Service Commissions. Improved governance provisions enacted for water and waste water commissions per the AG recommendations have been mirrored in the Regional Service Delivery Act. Each Regional Service Commission will be required, by legislation, to adopt a procedural by-law aimed at establishing, from the outset, good governance and operational practices. To this end, the Department has developed a template procedural by-law that the Regional Service Commissions may use and adapt for their respective organizations. The procedural by-laws will address such matters as board member responsibilities (and for Board Executive members), committee structure and responsibilities, meeting protocols and rules of conduct and various other matters relating to the operational and governance requirements of the Regional Service Commissions. In terms of orientations for new Board members, the Department will be working with the Regional Service Commissions and their staffs to develop and provide various training and information resources. Furthermore, the Department will encourage the Commissions to ensure that new Board members are provided with orientation materials and information to help them adjust to their new roles and responsibilities. As for the matter of establishing a governance committee of the Board to oversee the development and implementation of good governance practices, it is our view that this function is best handled at the Board level rather than it being delegated to a particular Committee. Having said this, the Regional Service Commissions will have the flexibility to establish committees as they feel appropriate for their circumstances. The Department will encourage the Regional Service Commissions to actively work with one another in the sharing of best practices, which could include the development of such resources as a code of conduct, among others.	Interim Boards are now in the process of establishing procedural by- laws and they are expected to be in effect in January 2013.

Exhibit 4.1 - Summary of Recommendations (continued)

Recommendations	Department's Response	Target Date for Implementation
 4.65 We recommend all commissions provide up-to-date accountability information on their websites including, as a minimum, the following: audited financial statements; annual reports; current commission tipping fees; and the names of board members indicating which local government they represent. 	To ensure a high degree of accountability and transparency from the Regional Service Commissions, the Department is proposing to require, via the General Regulation, that the following be included in their Annual Reports: Audited financial statements Progress on all common services Identification of and reporting on all voluntary services provided Reporting on any services provided outside of the regional service commission boundary Identifying all communities receiving land use planning services from the commission Total number of commission Board meetings held each year and Board attendance Performance measures that have been established by the Board and report on progress in relation to those measures Board member expenses Board member per diems The Department is also proposing that the General Regulation require the Regional Service Commissions to post on their web sites their annual reports, solid waste tipping fees, other fees and Board member names.	The Regional Service Delivery Act - General Regulation is expected to be in place in January 2013.

Exhibit 4.1 - Summary of Recommendations (continued)

Recommendations	Department's Response	Target Date for Implementation
4.79 We recommend commissions negotiating solid waste transfer agreements in future consider:	The Department agrees that all Regional Service Commissions should become fully aware of all fees and costs when negotiating and signing contracts.	On-going
 what direct and administrative costs are being incurred by landfill commissions in providing service to transfer station commissions; and how these costs may be most fairly allocated in establishing landfill tipping fees under the agreement. 		
4.80 We recommend Transfer Station Commissions investigate the potential for cost savings by shipping their solid waste to alternative provincial landfills, prior to renewing their existing transfer agreements.	The Department agrees that Regional Service Commissions should always explore cost saving measures in their oversight for management of solid waste in their respective regions.	On-going
4.99 We recommend the Department finalize and request government approval for additions to the Designated Materials Regulation covering used oil, glycol, and ewaste.	The Department agrees and wishes to report that as of October 31, 2012 the Designated Materials Regulation has been amended to include used oil and glycol. Departmental efforts are ongoing to include e-waste and tires, including highway and off the road tires.	2012-13

Exhibit 4.1 - Summary of Recommendations (continued)

Recommendations	Department's Response	Target Date for Implementation
4.100 We also recommend the Department design and implement additional extended producer responsibility programs to further reduce the volume of solid waste going to New Brunswick landfills.	The Department agrees and is currently exploring additional products that may be able to be designated under the Designated Materials Regulation.	On-going
4.122 We recommend the Department ensure challenging diversion goals are set for regional commissions. The Department should also monitor commission performance and ensure the degree of success by individual commissions in achieving their diversion goals is publicly reported. One option may be for commissions to report their diversion performance on their websites.	The Department supports continuous improvement on waste diversion. The Department has received 5 year waste diversion plans and will be working with and monitoring the Regional Service Commissions efforts to strive for increased waste diversion. The Department agrees with the OAG recommendation that the commissions report their diversion performance on their websites.	On-going
4.123 We also recommend the Department support the delivery of enhanced diversion programs by regional solid waste commissions to help them meet their diversion goals.	The Department agrees to support the Regional Service Commissions in their efforts to deliver programs that enhance waste diversion.	On-going
4.135 Given the environmental risks and financial costs associated with illegal dumping, we recommend the Department develop a standardized compliance and enforcement approach to better manage illegal dumping in the Province.	The Department agrees and is currently examining approaches to a new enforcement and compliance standard regarding illegal dumping.	2013

Exhibit 4.1 - Summary of Recommendations (continued)

Recommendations	Department's Response	Target Date for Implementation
4.139 We recommend the Department ensure all construction and demolition debris disposal sites in the Province are physically inspected periodically to ensure they are accepting only materials specified in their Departmental certificate of approval to operate and identify and address other environmental concerns. Frequency of inspections of individual sites should be based upon a Departmental evaluation of the risk of non-compliance at individual disposal sites.	The Department agrees. The Department has an established compliance inspection audit policy that identifies a percentage of approvals/operations that are physically visited and inspected on an annual basis. Additionally, any sites that are identified as an immediate potential concern are inspected following the Department's Compliance and Enforcement Policy.	On-going
4.145 We recommend the Department develop and implement a plan, in agreement with individual commissions, covering ongoing government involvement in educating the public about solid waste matters. That involvement should focus on areas of province-wide concern.	The Department agrees and will continue to support the Regional Service Commissions and other stakeholders to educate the public with regards to solid waste matters.	On-going

History of New Brunswick solid waste processing

4.30 In 1998, New Brunswick became the first Canadian province to have closed all of its old dumpsites and moved to a system of regional sanitary landfills. The website of the Fundy Region Solid Waste Commission provides an excellent summary of this change. It also indicates that the regional approach was primarily introduced as a means of improving provincial environmental performance. Excerpts from the website follow:

During the late 1970's and early 1980's, many solid waste dumping sites in New Brunswick were reaching capacity. Over 300 dumps were scattered across the province, operated by the New Brunswick Department of Transportation, municipal government, or private owners. ... The search for new disposal sites was a lengthy and tedious process. Residents of areas adjacent to proposed sites attended public meetings in great numbers to express concerns ... As a result of the public outcry, the province became committed to finding a new direction for solid waste management in New Brunswick. ... A five-member task force ... conducted seven public consultation programs throughout the province ... three broader principles were offered as overriding concerns, which were intended to guide the future development of all components within New Brunswick's comprehensive waste management program. ...

- Public safety and environmental protection must be the primary considerations, at all times, in the planning and operation of all waste management programs.
- Effective public consultation and involvement in planning and implementation of new waste management systems in the Province are absolute prerequisites for success. To secure confidence, the public must have an opportunity to play a meaningful role in decision-making and overseeing the future operation of the system to ensure that public health and environment concerns receive

maximum consideration.

• All governmental agencies in the Province must comply, and be seen to comply, with the New Brunswick Government's Environmental Acts and Regulations. ...

The residents of New Brunswick expressed the need to promote the establishment of environmentally acceptable and cost effective waste management systems, concentrating available resources in several large-scale regional projects rather than smaller sites. Under the Province's new approach, regional commissions were established and given direct responsibility for all aspects of solid waste management in their respective areas.

... All Solid Waste Commissions include representatives from each municipality, unincorporated area, and Indian band within its region. Each of the Commissions is charged with the responsibility of developing and implementing a regional solid waste program.

...The user pay approach gave each of the Commissions the financial means for both the planning and operation of a solid waste strategy.

4.31 Completion of our review included the following procedures:

- surveying all twelve solid waste commissions in the Province about their governance, financial management, and operations;
- interviewing general managers and board chairs from a representative sample of six commissions including the Fredericton Region Solid Waste Commission, the Fundy Region Solid Waste Commission, the Westmorland-Albert Solid Waste Corporation, the Northumberland Solid Waste Commission, the Valley Solid Waste Commission, and the Nepisiguit Chaleur Solid Waste Commission;
- canvassing the communities served by these six commissions to get their input/observations

Scope

- relating to the governance, accountability, and financial management of their commission;
- reviewing and analyzing annual budgets, audited financial statements, policies, and other documents provided by the commissions;
- holding discussions with representatives of the Department of Environment and Local Government, and reviewing documents they provided;
- holding a discussion with a representative of the New Brunswick Solid Waste Association; and
- completing research relating to solid waste processing in New Brunswick, the results of similar reviews and audits conducted in other jurisdictions, and various governance matters.

Upcoming Structural Changes to Regional Service Delivery

- **4.32** A Government of New Brunswick news release dated May 30, 2012 indicated the following:
 - ...we have brought forward legislation to create twelve regional service commissions... The Regional Service Delivery Act... The Legislation would:
 - divide the province into twelve regions for service delivery, including a range of required common services;
 - establish a commission for each region, which would be governed by a board of directors comprised of; the mayor of every municipality and rural community; and representatives of local service districts; and allow for and encourage communities to collaborate on additional, voluntary services.
- **4.33** Included in these new Regional Service Commissions will be the current solid waste commissions, along with regional planning commissions, and other public sector regional service providers.
- 4.34 The *Regional Service Delivery Act* was passed on 13 June 2012. Effective 1 January 2013, twelve regional service commissions will be created in the Province under that legislation. Also, on that date existing solid waste commission boards will be dissolved and replaced by regional service commission boards. The current Regulation for Solid Waste Commissions (96-11) will be repealed in 2013. At that

time, solid waste management will be covered under the new Act and an accompanying regulation that is to be developed.

4.35 We became aware of this change while completing our work, and have taken it into account in formulating the recommendations included in this report.

Detailed Findings General

- **4.36** There are a total of twelve solid waste commissions in the Province of New Brunswick. Provincial oversight of the commissions is provided by the Department of Environment and Local Government (the Department).
- 4.37 As part of our review, we canvassed regional municipalities for six of the twelve solid waste commissions to get their feedback on governance, financial management, and operations of their regional solid waste commissions. Comments were generally quite positive about governance and financial management, although some concern was expressed about the quality and extent of diversion programs offered. However, overall municipal satisfaction appeared to be quite high.
- **4.38** Exhibit 4.2 presents some general and financial information about the twelve provincial solid waste commissions. General information is as provided by the commissions during mid 2011. Financial information was taken from 2010 audited financial statements unless otherwise indicated.

 ${\it Exhibit~4.2-Solid~Waste~Commission-General~and~Financial~Information}$

Commission	Date of Incorporation	Operation	Number of Staff (est. FTEs as of Spring 2011)	Revenues (millions)	Total Assets (millions)	Reserve Fund(s) (December 31) (millions)
COGEDES*	1995	Transfer Station	5	\$3.0	\$0.4	\$0.1
COGERNO*	1995	Landfill	22	\$3.6	\$22.9	\$1.4
Fredericton Region**	1985	Landfill	41	\$5.8	\$24.6	\$2.3
Fundy Region**	1995	Landfill	34	\$8.7	\$59.4	\$1.7
Kent**	1993	Transfer Station	1	\$1.4	\$0.4	\$0.2
Kings*	1994	Transfer Station	0.5	\$0.3	\$0.2	\$0.0
Nepisiguit Chaleur*	1987	Landfill	23.5	\$4.2	\$33.8	\$1.2
Northumberland**	1995	Direct Hauling	2.5	\$1.8	\$1.5	\$0.5
Restigouche*	1995	Transfer Station	4.5	\$0.3	\$0.5	\$0.1
South-West**	1996	Landfill	21	\$3.3	\$15.4	\$2.3
Valley**	1995	Transfer Station	1	\$1.9	\$0.5	\$0.2
Westmorland- Albert*	1992	Landfill	139	\$12.2	\$42.9	\$2.9

 $FTE = Full \ time \ Employee$

Governance

4.39 Exhibit 4.3 presents general governance information relating to the twelve provincial solid waste commissions. Information was provided by the twelve commissions as of mid 2011 unless otherwise indicated.

Exhibit 4.3 – Governance Information

Commission	Number of board members	Appointment Date of Longest Serving Member	Appointment Date of Newest Member	Annual General Meeting Held?	Date Bylaws Last Updated
COGEDES	17	2002	2011	Yes	2004
COGERNO	18	2003	2011	Yes	1996
Fredericton Region	15	2001	2011	Yes	2007
Fundy Region	9	2002	2010	Yes	2010
Kent	10	2004	2009	Yes	2008
Kings	7	2010*	2011*	Yes	2005
Nepisiguit Chaleur	10	2005*	2012*	Yes	2009
Northumberland	10	2004	2010	Yes	2009
Restigouche	11	2009*	2011*	Yes	1996
South-West	13	2002	2010	Yes	2006
Valley	13	2005	2010	Yes	2000
Westmorland- Albert	18	2009*	2012*	Yes	2002
* Information provided by commission as of September/October 2012.					

^{*} Data from 2009 audited financial statements

^{**} Data from 2010 audited financial statements

- **4.40** The *Clean Environment Act* provides the following appointment process for provincial solid waste commissions.
 - 15.4(1) The membership of a regional solid waste commission shall be as follows:
 - (a) one member for each participating municipality, appointed by the municipality that the member represents;
 - (a.1) one member for each participating rural community, appointed by the rural community that the member represents;
 - (b) not more than four members representing the participating unincorporated areas, other than participating Indian reserves, appointed by the Minister; and
 - (c) not more than one member representing the participating Indian reserves, appointed jointly by the band councils of the reserves...
 - 15.4(4) A member of a regional solid waste commission may be reappointed, but no person shall serve more than three consecutive three-year terms as a member.
- 4.41 Based upon our review of lists of board members provided by the commissions, we are comfortable that this appointment process is being complied with. We would note that the current process does result in overly large boards in some cases due to the representative nature of appointments. Size varies based on the number of participating municipalities within a particular region. Municipalities who responded to our request for feedback were generally pleased with the current governance model for solid waste commissions. This included some of the same municipalities who expressed concerns about the governance system for water and wastewater commissions, as included in our 2011 Report.
- **4.42** Commission boards typically meet on a monthly basis, except during the summer months and hold annual general meetings attended by various commission stakeholders. All commissions have

bylaws in place, although we would encourage those commissions that have not revised them recently to review their bylaws in the near future to ensure they are up to date.

4.43 From our review, we identified a few concerns relating to the governance of solid waste commissions. They are covered in the sections that follow.

Board Approval of Annual Budgets, Borrowing, and Election of Executive Officers

- **4.44** Simple majority rules voting applies to most decisions made by solid waste commission boards.
- **4.45** However, Section 3(3) of the Solid Waste Commission Regulation, under the *Clean Environment Act*, provides for the following exception:

A motion made at a meeting of a regional solid waste commission to approve an annual budget for the commission, to approve the borrowing of money or to elect an executive officer shall not pass unless at least two-thirds of the members of the commission present, who represent at least two-thirds of the total population represented by all the members present, vote in favour.

- **4.46** This section effectively gives a veto over these decisions to large municipalities within a region due to the requirement for two-thirds of population to be represented by members voting to approve. Our understanding is that this section was included in recognition of the large proportion of funding provided to particular commissions by single large municipalities within their region.
- 4.47 Unfortunately, this section has resulted in difficulties for some boards, particularly in electing executive members of their boards. (e.g. Fundy Regional Solid Waste Commission was unable to elect a board vice-chair on two occasions.) There is also a risk of an impasse in approving an annual budget or needed borrowing. Consequently, some commissions indicated they would like to see this section deleted from the Regulation. However, a former Minister of Environment indicated, in response to a letter from one of the commissions, that government had no plans to make changes to the existing Regulation.

4.48 Our concern is that the existing Regulation does not seem to provide a dispute resolution mechanism in the case where an impasse is reached. Therefore, there is a risk that a commission could become unable to function, for example in a case where the board was unable to reach a consensus on a proposed budget or required borrowing. Given that a new regulatory framework will be established over the next year, pursuant to the new *Regional Service Delivery Act*, we believe that the Department should address this risk in developing that framework.

Recommendation

4.49 We recommend the Department of Environment and Local Government include a dispute resolution mechanism in the planned Solid Waste Commissions Regulation under the *Regional Service Delivery Act* to address situations where a commission board has been unable to obtain the two-thirds majority needed to approve an annual budget, commission borrowing, or the election of board officers.

Appointment of Board Members

4.50 Several commissions and other stakeholders indicated that the Department has been very slow in filling vacant board positions representing local service districts. It is our understanding that these appointments, where possible, will be made by representatives of local service districts rather than the Minister under the new Regional Service Delivery Act. However, the Minister may still be called upon to appoint some board representatives in regions where there are not enough local service district advisory committees in place.

Recommendation

4.51 We recommend the Province, through the Minister of Environment and Local Government, ensure future appointments of local service district representatives to the new Regional Service Commission boards are made within three months of a vacancy occurring.

Governance Best Practices

4.52 The government document Changing the way appointments are made – An Appointment Policy for New Brunswick Agencies, Boards and Commissions, in addition to detailing the new merit-based policy for Crown agency board appointments, also includes

reference to a number of good governance practices.

- **4.53** In particular it covers areas such as:
 - 1. The roles and responsibilities of boards, individual directors, and board chairs, and the need to document those roles and responsibilities;
 - 2. The importance of providing orientation sessions for new board appointees. The *Appointment Policy* document states,

to facilitate the transition, each new member of a board of directors should be provided with some form of orientation. At the very least, this should include a general briefing on the ABC [Agency, Board or Commission] and its operations. Ideally, it would also include the distribution of more detailed material, such as mandate letters, memoranda of understanding, terms of reference, conflict of interest guidelines, and any other information that could be useful in familiarizing recent appointees with their new duties.; and

3. The roles and responsibilities of board committees and the need to document and approve them in terms of reference documents. The *Appointment Policy* document specifically identifies the need for a governance committee that is generally responsible for,

reviewing the terms of reference for individual committees; conducting performance evaluations of the board, its committees, individual directors and the board chair; developing board position profiles and communicating their particular requirements to the government; arranging orientation for recent appointees and encouraging professional development for veteran directors; and providing oversight on issues of ethics and conflicts of interest.

4.54 We did not complete a comprehensive review of governance documentation prepared for the boards of individual commissions. However, we did note some good governance practices during our work.

- **4.55** For example, the Northumberland Solid Waste Commission has prepared a separate fourteen page Board of Directors Policy dated July 2005 that includes such important governance information as:
 - rights as a Commission Member;
 - duties as a Commission Member (including board member conduct);
 - obligation to the Minister of Environment & Local Government:
 - Conflict of Interest Restrictions;
 - travel Policy; and
 - other pertinent information.
- **4.56** The Westmorland-Albert Solid Waste Corporation also provides good information about the roles and responsibilities of its board members. Further, both COGEDES and the Fundy Region Solid Waste Commission have developed and documented terms of reference for their board committees.
- **4.57** However we did note solid waste commissions typically do not maintain the type of documentation envisaged in the provincial *Appointment Policy* document. In addition, a number of the solid waste commissions indicated they do not provide formal orientation sessions for new board members.

Recommendations

- 4.58 We recommend each new Regional Delivery Commission adopt the following good governance practices:
 - document the roles and responsibilities of their board, individual board members, and board executive members;
 - document and approve terms of reference for each of their board committees;
 - provide all new board members with orientation sessions:
 - document a code of conduct for board, management and staff; and
 - create a governance committee of the board to oversee the development and implementation of good governance practices.
- **4.59** Some of the best practices at individual provincial solid waste commissions, as noted in this section, may provide models for developing recommended

documentation.

Accountability and Reporting

- **4.60** Regulation 96-11 under the *Clean Environment Act* is the Regional Solid Waste Commissions Regulation. It provides the following requirements relating to accountability of solid waste commissions to the Province and other stakeholders.
 - 7(1) Within three months after the end of the fiscal year of a regional solid waste commission, the commission shall ensure that an annual audit, financial statements and the related auditor's report are prepared ... and shall transmit copies of the financial statements and auditor's report to the municipalities, rural communities and Indian reserves represented on the commission and to the Minister.
 - 8 Within three months after the end of its fiscal year or by such other date as the Minister may direct, each regional solid waste commission shall submit to the Minister an annual report, in which is set out a description of its activities during the previous fiscal year, in the form and to the extent directed by the Minister and otherwise in conformity with the directions of the Minister.
- **4.61** We noted that all twelve solid waste commissions had received unqualified audit opinions for the most recent financial statements available to us. We also noted that all commissions prepare annual reports. This information is forwarded, as required, to stakeholders listed in the Regulation.
- **4.62** In addition, commissions are required to provide regular reporting to the Department pursuant to their Certificates of Approval to Operate. The Department indicated that this operational reporting is received on a timely basis.
- 4.63 We also reviewed all twelve commission websites to determine if information is presented online that would allow regional residents to assess, and if desired, provide feedback on the performance of solid waste commissions. Unfortunately, we concluded from our review that the accountability information presented on commission websites needs enhancement. We noted:

- Only Fredericton Region Solid Waste Commission provides both its audited financial statements and annual report online. Fundy Region Solid Waste Commission provides audited financial statements only, and all other commissions provide neither;
- 2. Three commissions do not disclose their tipping fees online;
- 3. Three commissions do not disclose the names of commission board members or the municipalities, local service districts, or First Nation communities they represent; and
- 4. Some of the information presented appears to be out of date.
- **4.64** The Internet now serves as a primary source of information for many New Brunswick residents. For that reason, we believe that it is important that all commissions provide complete and up-to-date accountability information on their websites.

Recommendation

- 4.65 We recommend all commissions provide up-todate accountability information on their websites including, as a minimum, the following:
 - audited financial statements;
 - annual reports;
 - current commission tipping fees; and
 - the names of board members indicating which local government they represent.

Compliance With Legislated Mandate

4.66 Section 15.3(4) of the *Clean Environment Act* states:

A regional solid waste commission may
(a) construct, acquire, establish, enlarge,
control, manage, maintain and operate solid
waste collection and disposal facilities,
(b) provide a solid waste management service,
including the collection and disposal of solid
waste, to a person,

(c) make arrangements and enter into agreements with a person with respect to the management of solid waste, including the collection and disposal of solid waste, (d) operate solid waste collection and disposal facilities on behalf of a person,

- (e) acquire, hold and dispose of real or personal property,
- (f) engage and pay personnel,
- (g) subject to the provisions of this or any other Act and to the provision of regulations made under this or any other Act, finance any of its undertakings,
- (g.1) subject to the provisions of this or any other Act and to the provisions of regulations made under this or any other Act, construct, own and operate a generation facility,
- (h) assess, charge and collect fees for services,
- (i) perform any function or duty fixed by or in accordance with the regulations, and
- (j) perform any function or duty, other than those set out in this Act and those fixed by or in accordance with the regulations, that is approved by the Lieutenant-Governor in Council.
- **4.67** Also, the Act states:
 - 15.92(1) A regional solid waste commission may construct, own and operate a generation facility and may use the electricity for its own purposes or sell it to a distribution electric utility or another person, but shall not own or operate a distribution system.
- **4.68** Based upon our review, we believe that all twelve provincial solid waste commissions are acting within their legislated mandates. We identified no areas of concern in this regard.

Financial Management *Tipping Fees*

4.69 Tipping fees charged by solid waste commissions, and particularly the stability of those fees over time, is a key factor that local government stakeholders use to evaluate the performance of their solid waste commission. Exhibit 4.4 shows the basic tipping fees that were charged by the twelve solid waste commissions during 2011.

Exhibit 4.4 - Solid Waste Commission 2011 Tipping Fees

Solid Waste Commission	Tipping Fee (per metric ton) for Residential Household Waste
Landfill Commissions	
Nepisiguit Chaleur	\$42.75
Westmorland-Albert	\$56.00
COGERNO	\$57.00
Fredericton Region	\$74.00
South-West	\$74.00
Fundy Region	\$108.00
Transfer Station Commissions	
Valley (Victoria County)	\$69.20
COGEDES	\$72.74
Kent	\$81.91
Restigouche	\$88.58
Kings	\$90.77
Valley (Carleton County)	\$107.69
Direct Ship Commission	
Northumberland	\$65.75

4.70 Tipping fees vary as a result of different costs to establish a commission's facilities, differences in the extent of diversion and waste treatment programs offered (e.g. only Fundy Region and Westmorland-Albert do on-site composting), level of commission borrowings, and other factors. Operations of each of the regional commissions have evolved independently since they were established in the 1980s and 1990s. Those commissions with relatively lower fees may have more flexibility to add additional programs or enhance existing ones.

Tipping Fees Paid by Transfer Station Commissions **4.71** We noted that tipping fees charged by transfer station commissions are typically higher than those charged by the landfill commissions that process their solid waste. Exhibit 4.5 shows the two major components of tipping fees charged by non-landfill commissions.

Transfer Station Commission	Recipient Landfill Commission	Landfill Tipping Fee	Commission Expenses (Transfer Station, Recycling and Administration)	Total Tipping Fee
COGEDES	Nepisiguit-Chaleur	\$42.75	\$29.99	\$72.74
Kent	Westmorland-Albert	\$64.00	\$17.91	\$81.91
Kings	Westmorland-Albert	\$64.00	\$26.77	\$90.77
Northumberland	Nepisiguit-Chaleur	\$42.75	\$23.00	\$65.75
Restigouche	Nepisiguit-Chaleur	\$42.75	\$45.83	\$88.58
Valley (Carleton County)	South-West	\$61.02 (est.)	\$46.67 (est.)	\$107.69
Valley (Victoria County)	COGERNO	\$57.00	\$12.20	\$69.20

- 4.72 The tipping fee charged to Valley by the South-West Solid Waste Commission is lower than South-West charges within its own region. Westmorland-Albert charges Kent and Kings their commercial mixed waste tipping fee which is \$8 higher than their residential municipal waste rate. Tipping fees charged by other landfill commissions are the same as they charge for residential solid waste within their own regions.
- **4.73** Transfer station commissions provide significant revenue to landfill commissions. In fact, revenue provided by individual transfer station commissions to the landfill commission they deal with usually exceeds that provided by any of the individual municipalities serviced by the landfill commission.
- 4.74 At present, service and related financial arrangements between commissions, including landfill tipping fees, are governed by signed service agreements between involved commissions. We question whether charging full tipping fees in this situation is equitable. Regional tipping fees charged by landfill commissions are intended to recover direct costs of operating their landfill and associated administration costs, along with the costs of regional diversion and education programs, and other regional costs unrelated to landfill operations.
- **4.75** Transfer station commissions operate diversion and

education programs within their own regions. By paying full landfill commission tipping fees, non-landfill commissions are contributing to the diversion and education programs run by landfill commissions and receiving no benefit.

4.76 Section 15.7(5) of the *Clean Environment Act* states:

A regional solid waste commission shall make provision for revenues so as to produce an annually balanced budget.

4.77 Given this legislative requirement that provincial solid waste commissions operate on a non-profit basis, we believe it is inappropriate for landfill commissions to make a profit through transfer agreements with other provincial solid waste commissions.

Selection of Landfills by Transfer Station Commissions 4.78 Pursuant to our review, we learned that Transfer Station Commissions do not always transfer their solid waste to the nearest sanitary landfill. For example, the Valley Solid Waste Commissions' Carleton County transfer station is approximately one hour closer by road to the Fredericton Region Solid Waste Commission landfill than the South-West Solid Waste Commission landfill it currently uses. There may be potential savings (e.g. through lower trucking fees) if Transfer Station Commissions switched to the closest landfill options.

Recommendations

- 4.79 We recommend commissions negotiating solid waste transfer agreements in future consider:
 - what direct and administrative costs are being incurred by landfill commissions in providing service to transfer station commissions; and
 - how these costs may be most fairly allocated in establishing landfill tipping fees under the agreement.
- 4.80 We recommend Transfer Station Commissions investigate the potential for cost savings by shipping their solid waste to alternative provincial landfills, prior to renewing their existing transfer agreements.

Reserves

4.81 The solid waste commission Regulation 96-11

under the Clean Environment Act requires:

- 6.5(1) Each regional solid waste commission shall, by resolution, establish, manage and annually contribute to a special account that is designated by the commission for, and is used for no purpose other than, the payment of post-closure expenses.
- 6.5(2) The amounts required for the post-closure expenses and for the annual contribution to the special account shall be determined in accordance with the recommendations of the Public Sector Accounting Board respecting "solid waste landfill closure and post-closure liability", in the CICA public sector accounting handbook published by The Canadian Institute of Chartered Accountants.
- 6.7 Any money, including interest, within a special account shall be invested or reinvested in accordance with the Trustees Act.
- **4.82** In practice, reserves for post-closure expenses only need to be established by landfill commissions. The Regulation defines post-closure expenses as follows.

"post-closure expenses" means expenses incurred by a regional solid waste commission for all activities performed in relation to the monitoring of a sanitary landfill site and the protection of the environment after solid waste is no longer deposited at the site, including the monitoring of ground water and surface water, the monitoring and treatment of leachate, the monitoring and recovery of landfill gas, the construction and ongoing maintenance of control systems, the construction and maintenance of drainage systems, any acquisition of additional land for buffer zones, site security and final coverage.

4.83 Our review of the audited financial statements of the six landfill commissions indicated five have fully funded post-closure reserves required under CICA standards. The sixth, Nepisiguit-Chaleur, showed a shortfall in funding of \$163,198 as of 31 December 2009. The shortfall does not appear to be a major concern, given that revenues for the commission exceed \$4 million per year.

- **4.84** Under Regulation 96-11, commissions are also permitted (but not required) to establish additional reserve funds including:
 - General Operating Reserve Funds;
 - General Capital Reserve Funds;
 - Generation Facility Operating Reserve Funds; and
 - Generation Facility Capital Reserve Funds.
- 4.85 The balance of General Operating Reserve Funds is limited to 5% of the previous years' budgeted expenditures. There are no funding limits on the other three reserves. Total reserves set aside by individual commissions are shown in Exhibit 4.2, and appear to be reasonable in all cases. We also noted that South West Solid Waste Commission, has documented and approved an investment policy to govern the management of reserve funds set aside for future use. We believe other commissions should consider developing similar investment policies.

Payments to Commission Board Members 4.86 Overall travel and other board costs for the twelve commissions seem reasonable. All commissions have either a travel policy or approved board resolution in place to cover this area. We did note during our review that per diems, allowances, and other payments to board members for attendance at meetings, travel out of region, and meals vary widely from commission to commission. For example, per meeting payments to board members range from \$0 up to \$150, while mileage rates paid for travel range from 39 to 50 cents per kilometer. These variances are as a result of the Province allowing regional commissions to set their rates in the absence of any provincial standards, but would not have a significant impact on tipping fees.

Commission Transportation Subsidies Paid to Remote Municipalities 4.87 Municipalities must bear the costs of trucking solid waste to their regional landfill or transfer station. Therefore, those that are farthest away bear a higher trucking cost simply because of where their regional landfill or transfer station was originally located. This creates a cost inequity that is outside the control of individual municipalities. Two solid waste commissions, Westmorland-Albert and Restigouche, recognized this inequity in their 2011 budgets and provided for transportation subsidies to remote municipalities. In the case of Westmorland-Albert, the

allocation of payments is based upon a "zone" system, with municipalities further from the regional landfill receiving relatively larger allocations of available funding. It is our understanding that the other ten commissions provide no such payments.

- 4.88 In one of the ten regions not providing equalization at present, we were informed that the cost of transporting compostable waste to the regional landfill led an outlying municipality to discontinue trucking such waste to the regional landfill for composting. This significantly reduced the municipal property tax rate. This decision, while deemed necessary by the municipality, was not in keeping with the solid waste treatment approach of the involved commission to do onsite composting.
- **4.89** From a fairness perspective, we believe that the approach adopted by Westmorland-Albert and Restigouche is preferable. Other provincial solid waste commissions should consider whether some form of equalization would more fairly distribute solid waste disposal costs within their regions.

Budget Approval

- **4.90** The *Clean Environment Act* states:
 - 15.7(1)The members of a regional solid waste commission shall not vote on a budget for the commission or to borrow money unless the commission has given written notice of the vote and a copy of the proposed budget or borrowing to each participating municipality, to each participating rural community, to the Minister and to the band council of each participating Indian reserve at least thirty days before the vote.
- **4.91** The 2011 budgets for all twelve commissions were balanced and forwarded to regional municipalities, First Nation band councils, and the Department of Local Government for approval, as required in legislation.

Other Financial Observations

- **4.92** From our review, we are able to make the following additional observations.
 - The Department of Environment and Local Government indicated that they receive and review commission financial statements and budgets

annually;

- Regional solid waste commissions are covered by the *Public Purchasing Act* (i.e. through their inclusion in the listing of government-funded bodies in Schedule B of that Act);
- All solid waste commissions carry liability insurance; and
- We identified no items of concern pursuant to a line by line comparison of expenditures between comparable commissions.

Other Findings

- 4.93 In completing our work, we became aware of certain issues associated with the environmental impact of solid waste. The sections that follow address some areas where we believe the Department has an important role to play in improving provincial environmental performance. These areas include:
 - Extended Producer Responsibility Programs;
 - Diversion of Solid Waste;
 - Illegal Dumping;
 - Construction and Demolition Debris disposal sites; and
 - Public Education.

Extended Producer Responsibility Programs

- 4.94 Extended Producer Responsibility (EPR) programs result in the diversion of specific types of solid waste before it goes to solid waste commissions by requiring original producers (or first importers) to accept it back and cover costs associated with its recycling, reuse, or disposal. As cost must be passed on to consumers it gives producers the impetus to try to minimize these end-of-life costs so they can keep their prices down. Departmental representatives, the New Brunswick Solid Waste Association, and other stakeholders all agreed that EPR programs have the most potential to reduce the amount of solid waste going to landfills in the future.
- **4.95** In October 2009, the Canadian Council of Ministers of the Environment (CCME) released its *Canada-Wide Action Plan for Extended Producer Responsibility*. The CCME Plan identifies a number of benefits accruing from EPR programs. These include:
 - reduction of taxpayers costs associated with solid waste disposal;
 - environmental benefit of reduced volume of solid

- waste going to landfills;
- incentive for producers to consider redesigning products to reduce associated end-of-life disposal costs (e.g. by removing harmful substances that are costly to deal with at the end of a product's useful life.); and
- fairer allocation of costs by transferring entire lifecycle cost of a product to the producer (and ultimately the end consumer).
- **4.96** Recycle NB is the stewardship board tasked with administering provincial EPR and stewardship programs. It was established in May 2008, pursuant to Section 3 of the new Designated Materials Regulation under the *Clean Environment Act*, as a continuation of the New Brunswick Tire Stewardship Board. At present it administers:
 - The Tire Stewardship Program, under which tires are collected and processed by Tire Recycling Atlantic Canada Corporation (TRACC) which shreds and crumbs the rubber in the tires to manufacture various new rubber products; and
 - The Paint Stewardship Program (PSP) under which paint brand owners are responsible for collecting and managing left over unwanted paint from NB consumers. This is the first and only EPR program implemented in New Brunswick to date.
- 4.97 The 2010-11 Department of Environment annual report included discussion of proposed additional EPR programs covering used oil, glycol, and e-waste. Proposed regulations for some of these were already partially or fully drafted when that report was prepared. However, additions to the Designated Materials Regulation have not been approved by government. Therefore, EPR programs have not been created for these three types of solid waste.
- 4.98 Departmental representatives also indicated that additional EPR programs (e.g. for packaging and printing material) could have a significant impact on the quantity of solid waste generated in the Province. Based upon our review, we believe that additional EPR programs should be designed and implemented in the near future.

Recommendations

4.99 We recommend the Department finalize and request government approval for additions to the Designated Materials Regulation covering used oil, glycol, and e-waste.

4.100 We also recommend the Department design and implement additional extended producer responsibility programs to further reduce the volume of solid waste going to New Brunswick landfills.

Diversion of Solid Waste

- 4.101 In general the least costly approach to dealing with solid waste is to dispose of it in a landfill. However, diverting materials, for example through recycling or re-use, is a better option for the environment. Diversion of solid waste extends the life of landfills, and reduces the amount of leachate and greenhouse gases produced by landfilled solid waste. It can also contribute revenue to a commission.
- **4.102** At the time of our 1994 report, recommended action #6 from the government's response to the Plan for Action prepared by the Premier's Round Table on the Environment and the Economy stated:

In matters of waste reduction, the Round Table supports the target of the Canadian Council of Ministers of the Environment for a 50% reduction in the amount of waste being disposed of by the year 2000.

4.103 Our 1994 report also indicated:

[Department of Environment] DOE is committed to a 50% reduction target for New Brunswick. This will be accomplished through a variety of initiatives focused on the three "R's" of solid waste management – reduce, reuse and recycle. DOE has several initiatives underway including the Beverage Containers Act program, encouraging an industry stewardship model for dairy beverage containers, promoting composting, and encouraging recycling of newspapers and paper products.

4.104 Exhibit 4.6 shows how the actual provincial diversion percentage has changed in the years since the original 50% target was established.

Exhibit 4.6 - New Brunswick Solid Waste Generation (Commission Disposal Volumes)

Year	Solid Waste Disposal Volume (metric ton)	Diversion Percentage from 1988 base		
1988	659,582	N/A		
1998	402,345	39.0%		
1999	399,494	39.4%		
2000	388,648	41.1%		
2001	386,585	41.4%		
2002	371,489	43.7%		
2003	393,232	40.4%		
2004	415,999	36.9%		
2005	416,878	36.8%		
2006	415,327	37.0%		
2007	413,873	37.3%		
2008	450,989	31.6%		
2009	422,113	36.0%		

Note – these are provincial figures and do not include private sector solid waste disposal so are lower than Statistics Canada figures reported later in this section.

- 4.105 Provincial diversion rates generally improved from 1988 to 2002, primarily due to the shift from 300 unregulated provincial dumpsites to six regional landfills that took place during that period. Regionalization resulted in an improved ability to operate diversion programs. However, since the peak of 43.7% reached during 2002, diversion rates have trended downward as shown in Exhibit 4.6. More provincial focus is needed on this area, along with adding new EPR programs, if the initial progress shown is to continue and the 50% reduction goal is to eventually be achieved.
- **4.106** We would note that New Brunswick's overall performance relating to the diversion of solid waste away from landfills has been relatively strong in comparison with other Canadian jurisdictions, as shown in Exhibit 4.7. While New Brunswick produced the fourth highest per capita amount of solid waste in 2008, it was the Province with the highest per capita diversion rate.

Exhibit 4 7- New	Brunswick Per	formance vs	Canadian Average

	Canada (metric tons)	Canada (per capita in kilograms)	New Brunswick (metric tons)	New Brunswick (per capita in kilograms)	New Brunswick Rank (per capita)*
To Landfill	25,871,310	777	479,461	642	6th
Diverted	8,473,257	254	267,467	358	1st
Total	34,344,567	1,031	746,928	1,000	4th

Source - 2008 Statistics Canada Report

4.107 Interestingly, as shown in Exhibit 4.8, compared with Canadian averages, a much higher proportion of solid waste that ends up in landfills in New Brunswick comes from residential sources (i.e. 49% for New Brunswick versus only 33% for Canada as a whole).

Exhibit 4.8 - New Brunswick - Canada Comparison of Solid Waste Sources

	Canada (metric tons)	Canada	New Brunswick (metric tons)	New Brunswick	
Residential	8,536,891	33%	245,758	49%	
Non-Residential	17,334,419	67%	233,703	51%	
Total	25,871,310	100%	479,461	100%	

4.108 Further, Exhibit 4.9 indicates that a very high proportion of diverted materials are contributed by non-residential sources, and the bulk of diversion in New Brunswick is organic in nature. Since only two landfills in the Province do onsite composting, we assume that most diverted organic materials come from non-residential sources.

Exhibit 4.9 - New Brunswick - Canada Comparison of Diversion by Source and Material Type

	Canada (metric tonnes)	Canada (per capita diversion in kilograms)	Canada (% of total diversion)	New Brunswick (metric tonnes)	New Brunswick (per capital diversion in kilograms)	New Brunswick (% of total diversion)
Diversion Source						
Residential	4,360,505	131	51%	62,076	83	23%
Non-Residential	4,112,752	123	49%	205,391	275	77%
Total	8,473,257	254	100%	267,467	358	100%
Diverted Materials						
Organic	2,439,223	73	29%	225,081	301	84%
Other	6,034,034	181	71%	42,386	57	16%
Total	8,473,257	254	100%	267,467	358	100%

4.109 Our concern is that while the overall per capita diversion of solid waste in New Brunswick compared

^{*}Highest to lowest ranking among eight provinces that reported both landfill and diversion figures in Statistics Canada report, "Waste Management Industry survey: Business and Government Sectors 2008".

favorably with national averages, residential sources are significantly underperforming in terms of diversion. As shown in Exhibit 4.9, provincial per capita diversion from residential sources is only 83 kilograms compared with a 131 kilogram Canadian average. Even more significantly, provincial per capita diversion of nonorganic materials is 57 kilograms compared with a 181 kilogram Canadian average.

- **4.110** Residential diversion rates are primarily a function of two key factors:
 - public knowledge and support of the importance of diverting solid waste away from landfills; and
 - how convenient diversion programs are to regional residents (i.e. residents are more likely to recycle if they have a curb side collection box system than if they must drive 20 kilometres to a recycling depot).
- 4.111 The Department has typically adopted a hands-off approach and allowed regional solid waste commissions to make their own decisions as to the diversion programs they will offer. Commissions do offer various levels of diversion programs to residential customers. A few offer curbside recycling (i.e. collection box programs), especially in urban areas of their regions. Many have set up recycling depots at various central locations throughout their regions. A few offer only minimal services in this area.
- 4.112 Stakeholder feedback we received indicated that there is interest in having diversion programs enhanced. However, diversion programs typically result in additional net cost to solid waste commissions. In fact, the Ontario Office of the Auditor General, in a 2010 report relating to Non-hazardous Waste Disposal and Diversion, noted that, "on average, [Ontario] municipalities reported that the cost of diverting a tonne of blue box recyclable materials was about 40% higher than the cost of disposing a tonne of waste in a landfill."
- **4.113** Additional cost has a direct effect on regional tipping fees, and ultimately municipal property tax rates. Consequently, budgets including such programs are unlikely to be approved by local municipalities, unless there is strong public support for a particular

diversion program within a region.

- 4.114 Provincial financial support for regionally-run diversion programs is limited. Application may be made to the Environmental Trust Fund (ETF) by commissions for diversion programs. However, commissions must compete for ETF funding with other applicants. Funding is provided on a lump sum, single year basis, and the Department indicated that such funding is not intended for ongoing operations. As a typical example, in 2012 Nepisiguit-Chaleur Solid Waste Commission received a one-time grant of \$40,000 from the ETF to carry out a curbside recycling pilot project.
- **4.115** In a few regions commissions have received the public support they need to improve diversion rates. For example, Westmorland-Albert has adopted a wet/dry sorting process that allows the commission to maximize diversion. However, for many commissions it has been a struggle to improve.
- 4.116 There has not been a provincial diversion plan in place since the last one expired in 2005. The goal of that plan was the same 50% reduction in solid waste that was originally adopted by the CCME in 1989. Recent Department attempts to coordinate the development of a provincial plan resulted in resistance from the commissions, and a Departmental decision to request commissions prepare individual five year waste reduction and diversion plans for their regions. The Department provided commissions with a template of suggested inclusions for the plan.
- **4.117** However, several commissions we surveyed indicated that they would like to have more direction and support from the Province in relation to recycling. One commission stated the Province should:

[Translation] *Have more precise objectives in terms of waste reduction in landfills. Implement support programs to reach these objectives.*

4.118 Another suggested that the Province,

[Translation] *Take a firmer position concerning waste reduction and re-routing in this province.*

4.119 The Department of Environment and Local

Government website indicates that one of the primary functions of the Department is to:

Provide integrated stewardship through planning and management of land use, zoning development and waste management issues.

- **4.120** Consequently, we believe the Department does have an important leadership role to play in improving overall provincial diversion rates by:
 - developing and implementing extended producer responsibility programs as previously discussed;
 - helping to establish diversion goals to be worked towards by regional commissions;
 - monitoring, and ensuring the degree of success by individual commissions in achieving those goals is publicly reported;
 - providing financial support for the enhanced diversion programs needed to meet diversion goals (commissions indicated that they would like to have greater access to Environmental Trust Fund monies for this purpose); and
 - educating the public about the importance of supporting diversion programs.
- **4.121** Given the current diversion rates in the Province, especially in the area of residential solid waste, we believe that the Department can no longer defer to the regional commissions in this area.

Recommendations

- 4.122 We recommend the Department ensure challenging diversion goals are set for regional commissions. The Department should also monitor commission performance and ensure the degree of success by individual commissions in achieving their diversion goals is publicly reported. One option may be for commissions to report their diversion performance on their websites.
- 4.123 We also recommend the Department support the delivery of enhanced diversion programs by regional solid waste commissions to help them meet their diversion goals.

Illegal Dumping

4.124 Not all non-diverted solid waste produced by New Brunswick residents, business, and industry ends up in approved landfills. Illegal dumping may vary from pouring out a litre of motor oil in a roadside ditch, to

disposing of several truckloads of solid waste in a secluded wooded area. Whatever form it takes, the Department, solid waste commissions, commission stakeholders, and the New Brunswick Solid Waste Association (NBSWA) all agree that illegal dumping is common in the Province.

- 4.125 For three years up to 2010, the NBSWA operated an ETF-funded provincial illegal dumping hotline. It continues to operate the hotline on a limited basis. An NBSWA representative indicated that they get daily reports of illegal dumping, and had approximately 1,000 files covering separate illegal dumping incidents as of mid-2011.
- **4.126** Illegal dumping is unsightly. But more importantly it may also cause:
 - serious health problems associated with attraction of disease infected rodents;
 - environmental problems (e.g. damage to public water supplies) connected with the improper disposal of hazardous waste (e.g. motor oil); and
 - harm to local eco-systems (i.e. affecting people, animals and plants).
- 4.127 It can also result in significant clean up costs for the owner of the land where the illegal dumping took place (i.e. a municipality, business-owner, resident, or the Province of New Brunswick in the case of Crown lands). It should be noted that clean up of illegal dumpsites is outside the mandate of provincial solid waste commissions.
- **4.128** During our work, some interviewees discussed the problem of illegal dumping in the Province. They believe the key causes of illegal dumping include:
 - lack of convenient access to an approved landfill or C&D [Construction and Demolition Debris] disposal site (due to distance, hours of opening, etc.); and
 - the desire to save money (i.e. by avoiding tipping fees, and associated transportation and labour costs); combined with
 - ignorance or apathy about the environmental and other impacts of illegal dumping; and
 - a perceived lack of enforcement by the Department.

4.129 The Department acknowledged that it has a role in this area, as illegal dumping is a violation of the *Clean Environment Act*. A Departmental representative indicated the Department is working with stakeholder groups to develop consistent standards on how to address reported cases of illegal dumping.

- 4.130 However, based upon our discussions with various stakeholders, we are concerned that the Department's enforcement activities to date have not provided a sufficient deterrent to would-be illegal dumpers. One stakeholder commented they, "would like more cooperation from the Provincial Environment Department in enforcement of illegal dumping and litter laws to ensure waste is diverted to solid waste commission for proper processing." Another said that they believe that illegal dumping is not a high priority for government, and prosecution of offenders does not happen. One commission representative went so far as to say that the Department needs to make an example of someone.
- **4.131** The *Clean Environment Act* does provide for significant fines ranging from \$500 to \$50,000 for individuals, and \$1,000 to \$1,000,000 for businesses. Also, the Department has a compliance and enforcement policy which is applied to achieve compliance through escalating levels of enforcement.
- 4.132 The Department stated their first priority, when responding to a reported illegal dump site, is the protection and restoration of the environment through clean up of the dumpsite. The Department indicated that it follows up on reported illegal dumpsites and has achieved a reasonable level of compliance in having them cleaned up without the need to pursue legal action. The Department also noted that they have issued four recent ministerial orders, involving three illegal dumpsites, to responsible parties and/or to landholders who failed to comply with Departmental clean up requests. Two of these resulted in prosecutions, guilty pleas, and fines being issued.
- **4.133** Often an illegal dumper is not the owner of the land used as an illegal dump site. Departmental representatives indicated that it can be difficult to obtain sufficient evidence to successfully prosecute

illegal dumpers under the Clean Environment Act.

4.134 We were informed the Department of Natural Resources (DNR) has a well-developed enforcement capability to deal with illegal dumping on Crown Land. DNR has taken legal action against individuals for this offence.

Recommendation

4.135 Given the environmental risks and financial costs associated with illegal dumping, we recommend the Department develop a standardized compliance and enforcement approach to better manage illegal dumping in the Province.

Construction and Demolition Debris Disposal Sites

- 4.136 In addition to the six commission-operated regional landfills, the Department has also permitted the establishment of approximately ten private construction and demolition debris (C&D) disposal sites at various locations around the Province. These disposal sites must obtain a Certificate of Approval to Operate from the Department, and are only allowed to accept environmentally inert construction and demolition waste. Such waste can include materials such as wood, drywall, certain metals, cardboard, doors, windows, and wiring.
- **4.137** Permitting such disposal sites appears to contradict the original goal of regionalizing solid waste treatment in the Province. However, the Department indicated that it is done primarily as a convenience to industry, and particularly to reduce the risk that illegal dumping of construction and demolition materials will occur.
- 4.138 These disposal sites are not required to capture leachate or greenhouse gases. Therefore any dumping of unapproved materials (i.e. non-compliance with their Certificate of Approval to Operate) at those sites could have negative environmental consequences (e.g. on nearby groundwater). Departmental representatives indicated that some inspections of these sites are done by the Department's regional offices to ensure compliance with their Certificates of Approval to Operate. We did not review the extent or timing of those inspections as part of our work.

Recommendation

4.139 We recommend the Department ensure all construction and demolition debris disposal sites in

the Province are physically inspected periodically to ensure they are accepting only materials specified in their Departmental certificate of approval to operate and identify and address other environmental concerns. Frequency of inspections of individual sites should be based upon a Departmental evaluation of the risk of noncompliance at individual disposal sites.

Public Education

- **4.140** Both the Department and solid waste commissions have recognized the value of educating the public about the importance of effective solid waste management, and the programs available in New Brunswick.
- **4.141** In general we believe that responsibilities in this area should be assigned, with the agreement of the commissions, as follows:
 - The Department should be primarily responsible for ensuring New Brunswickers are provided with sufficient information about areas of province-wide concern, (e.g. explaining the consequences of illegal dumping); and
 - Individual commissions should be primarily responsible for informing the public about regional solid waste matters (e.g. describing solid waste programs offered by their commission).
- **4.142** To date, the Department has relied heavily on individual commissions to educate the public in all these areas. We did note that in 2010 the Department provided NBSWA with \$30,000 in ETF funds to put on a public education campaign about the environmental damage associated with illegal dumping, and how to report it. However, that initiative is no longer active.
- 4.143 Based upon our review, individual commissions have taken their role in educating the public seriously, and deliver various educational programs. They also provide important information about local programming on their websites. One stakeholder municipality commented, "Public Education/Public Relations is a very important and effective aspect of the success of the [commission's] operation and involves a considerable amount of funding. It has been praised for its effectiveness..."

4.144 However, as was discussed in connection with diversion programs, the extent of education programs offered by individual commissions will necessarily relate to the willingness of their regional municipalities and local service districts to continue to fund such programs through tipping fees.

Recommendation

4.145 We recommend the Department develop and implement a plan, in agreement with individual commissions, covering ongoing government involvement in educating the public about solid waste matters. That involvement should focus on areas of province-wide concern.

Appendix I: Solid Waste Commissions

- **4.146** Six commissions operate regional landfills. They are shown below in order from largest to smallest in terms of solid waste received:
 - The Westmorland-Albert Solid Waste Corporation (Berry Mills landfill in Berry Mills), servicing the Greater Moncton and Albert County areas, and accepting solid waste transferred from the Kent Solid Waste Commission, and the Kings Solid Waste Commission;
 - The Nepisiguit-Chaleur Solid Waste Commission (Red Pine landfill in Allardville), servicing Bathurst and area, and accepting solid waste transferred from the Restigouche Solid Waste Commission, COGEDES, and solid waste directly shipped by the Northumberland Solid Waste Commission;
 - The Fundy Region Solid Waste Corporation (Crane Mountain landfill in West Saint John), servicing Saint John and area;
 - The Fredericton Region Solid Waste Commission (Allison Boulevard landfill in Fredericton), servicing Fredericton and area;
 - COGERNO (Montagne de-la-Croix landfill in Riviere-Verte), servicing the North-West of the Province, and accepting solid waste transferred from the Valley Solid Waste Commission (Victoria County only); and
 - The South-West Solid Waste Commission (Hemlock Knoll landfill in Lawrence Station), servicing the Charlotte County area, and accepting solid waste from the Valley Solid Waste Commission (Carleton County only).
- 4.147 Five commissions operate transfer stations. A transfer station is a location where local collection vehicles transfer solid waste to larger vehicles (typically transport trucks) to facilitate transporting the solid waste to an out-of-region landfill. These commissions include (in order from largest to smallest in terms of solid waste collected):

- COGEDES, servicing the Acadian Peninsula;
- The Valley Solid Waste Commission, servicing Carleton and Victoria Counties;
- The Restigouche Solid Waste Commission, servicing Campbellton and area;
- The Kent Solid Waste Commission, servicing the Kent County area; and
- The Kings Solid Waste Commission, servicing Sussex and area.
- **4.148** The Northumberland Solid Waste Commission, servicing the Miramichi area, does not operate a landfill or transfer station, and directly ships all of its solid waste out of region. It typically collects more solid waste than any of the listed transfer station commissions, but less than any of the landfill commissions.
- 4.149 Provincial solid waste commissions are not permitted in legislation to accept certain types of hazardous waste including liquid waste greater than 20 litres, sludge that is less than 15% solid, liquid oily waste, commercial or industrial hazardous waste, and biomedical waste, without the consent of the Minister of Environment and Local Government. For example, the Westmorland-Albert Solid Waste Corporation recently needed ministerial approval in order to be able to accept sludge from the Greater Shediac Sewerage Commission's lagoon.
- **4.150** The primary pollutant produced by landfills is leachate, a combination of sediments and chemicals that results when water (e.g. rain or water included in certain types of solid waste) leaches down through layers of solid waste. Traditional dump sites did not deal with leachate. Sanitary landfills, however, are required to collect and treat leachate, along with surface run off, before it is released into the environment.
- **4.151** Greenhouse gases (e.g. methane) are another pollutant produced by solid waste landfills. The standard method of disposing of methane is to collect it and burn it off. However, certain landfill commissions, including Fundy, and COGERNO now use methane to produce electricity, which is either used on site or sold to power utilities. Fredericton will begin to do the same during late 2012. Other landfill commissions are

planning to move in this direction in future.

4.152 Certain solid waste commissions have unique aspects to their operations not shared with other commissions. Two do on-site composting (Fundy Region and Westmorland-Albert), one operates a wetdry collection system with full dry sorting which results in much higher labour costs but achieves a much higher diversion rate (Westmorland-Albert); and one (Fredericton Region) bales garbage prior to placing it in the landfill to reduce the amount of materials blown away from the landfill by the wind. Three of the transfer stations are privately operated (i.e. Kent, Kings, and Valley). And one (Northumberland) has its recycling program fully managed by a private operator.

Appendix II: New Brunswick Legislation and Government Involvement

- **4.153** There are a number of pieces of provincial legislation that impact upon the governance and operations of New Brunswick solid waste commissions. These include:
 - The *Clean Environment Act*;
 - The Regional Solid Waste Commissions Regulation (96-11) under the *Clean Environment Act*;
 - Designated Materials Regulation (2008-54) under the *Clean Environment Act*
 - The *Municipalities Act* (and the Garbage Collection Regulation);
 - The *Control of Municipalities Act*;
 - The Municipal Assistance Act;
 - The Municipal Capital Borrowing Act;
 - The New Brunswick Municipal Finance Corporation Act; and
 - The *Trustees Act*.
- 4.154 The first two pieces of legislation set the governance and accountability framework, and the mandate for solid waste commissions. The Designated Materials Regulation pertains to extended producer responsibility programs that may be established by the Province. The other legislation generally sets parameters around specific aspects of solid waste commission operations, financing, financial management, and financial statement reporting.
- **4.155** The Department of Environment and Local Government (the Department) is responsible for administering and enforcing all of this legislation with the exception of the *Trustees Act*. That Act is administered by the Department of Justice and Attorney General.
- **4.156** Key responsibilities assigned to the Department at present include:
 - appointing four members to each commission board representing local service districts in the region;
 - regulating the operations of solid waste commissions by issuing three to five year Certificates of Approval to Operate to solid waste

- commissions for each landfill and transfer station they operate, and monitoring their operations to ensure they are complying with the terms of those certificates;
- regulating the operations of private construction and demolition debris disposal sites and composting facilities by issuing Certificates of Approval to Operate, and monitoring to ensure compliance with terms of those certificates;
- providing funding to solid waste commissions for eligible projects through the Environmental Trust Fund:
- designating materials to be subject to provincial extended producer responsibility programs; and
- periodically coordinating and/or promoting provincial initiatives relating to diversion of solid waste away from landfills, and illegal dumping.
- 4.157 Departmental representatives indicated, consistent with the original regional planning approach adopted in the 1980s, the Department has always allowed each commission to have discretion in deciding the type and extent of services to offer residents and businesses within its own region. Commissions must also fund the services they choose to offer from their own revenue sources, primarily the tipping fees they charge users.
- **4.158** However, the Department recently asked each commission to develop a five year waste reduction and diversion plan to be submitted to the Minister of Environment and Local Government.
- **4.159** A template was provided suggesting the plan should include the current status and future plans for:
 - recycling and waste diversion programs;
 - educational and awareness programs;
 - waste diversion formula and current and projected future diversion percentages calculated using that formula;
 - other commission led initiatives or information;
 - government led initiatives; and
 - planned reporting.

Appendix III: Key Stakeholders

4.160 Aside from the municipalities, local service districts, and First Nation Communities represented on the boards of solid waste commissions, there are two other stakeholder organizations involved with solid waste in the Province. They are Recycle NB and the New Brunswick Solid Waste Association.

Recycle NB

- **4.161** Recycle NB was established in 2008, under the Designated Materials Regulation of the *Clean Environment Act*, as a successor to the New Brunswick Tire Stewardship Board.
- 4.162 The Regulation enables the government to designate materials that then become the responsibility of the manufacturer, brand owner and/or the first importer of the specified designated material. Manufacturers, brand owners and/or first importers must establish and administer a management program for each designated material. The management program may include such functions as storage, collection, transportation, recycling, processing, disposal and other handling of each designated material. Recycle NB (RNB), for its part, is responsible for overseeing the material management plans put forward by the manufacturers, brand owners and/or first importers, and the program in general.

NB Solid Waste Association

- **4.163** In addition to the tire program being overseen by RNB, a paint stewardship Extended Producer Responsibility (EPR) program is now being managed by the paint industry. RNB also oversees this program on behalf of New Brunswickers and reports on the performance of both programs to the Minister of Environment and Local Government.
- **4.164** According to the New Brunswick Solid Waste Association (NBSWA) website, the association, "is a non-profit group dedicated to promoting and furthering the principles of solid waste management in New Brunswick." It was incorporated in 1998 pursuant to significant interest from the twelve member commissions in having such an organization in place.
- **4.165** Its website also states:

Benefits of a provincial association have

included:

- presenting a unified voice when dealing with government legislation;
- dealing with provincial issues relating to solid waste management;
- public education and awareness on a provincial level as it pertains to all Commissions;
- building a communication network among partners in the solid waste management field.
- **4.166** The NBSWA also provides a forum through which the twelve solid waste commissions may exchange information, and operates an illegal dumping hotline on a limited basis.
- **4.167** The Department indicated the NBSWA will be dissolved when the new regional service commissions are established in the Province in 2013.