Reference Manual Phase Two

Newfoundland and Labrador Municipalities

PSAB Working Committee Department of Municipal Affairs



Table of Contents Part 1

SECTION	I 1 – Government Reporting Entity (PS1300)	. 3
1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10 1.11	What is meant by the Terms GRE and MRE?	3 5 7 9 9 9 9
SECTION	I 2 - Government Partnerships (PS3060)	.13
2.1 2.2 2.3 2.4 2.5	What is a Government Partnership? Forms and Structures of Government Partnerships Accounting for Government Partnerships Presentation and Disclosure Requirements Additional Resources	. 14 . 15 . 15
SECTION	I 3 - Basic Principles of Consolidation (PS2500)	.18
3.1 3.2 3.3 3.4 3.5 3.6 3.7	Being "Prepared" is the Key for 2009 Basic Steps in Full Consolidation Basic Steps in Proportional Consolidation Statements at Different Dates Government Reporting Entity Decision Tree Example of a Consolidation Prepare Your Own 2008 Comparatives?	. 18 . 20 . 21 . 22 . 22
Glossary	of Terms and Acronyms	.30
Appendix	1 - Municipal (Consolidated) Reporting Entity Checklist	.33
Appendix	2 - Examples: Municipal Reporting Entity Checklist	35
Appendix	3 - Government Partnership and GBP Checklist	50
Appendix	4 - Examples: Government Partnership and GBP Checklist	52

Background

Part 1 of this manual has been prepared as a useful and practical reference to help municipal administrators and councillors in Newfoundland and Labrador define the scope of their municipal reporting entity. Part 1 also provides guidance on how to account for controlled entities and government partnerships.

This manual has been prepared by the Department of Municipal Affairs, PSAB Implementation Working Committee and has been approved by the PSAB Implementation Steering Committee. This manual is not meant to be the final authoritative source on defining the government reporting entity and the accounting for controlled entities and government partnerships. The CICA Handbook is the final authoritative source.

Part 1 of the manual is divided into 4 main sections:

Section 1 - Government Reporting Entity

Section 1 provides an overview of PSAB's recommendations on defining the government reporting entity. This section describes why we consolidate entities under the control of the municipality and how control is defined. The section also provides examples of persuasive indicators of control, as well as more subjective examples of control. Finally, the section describes how organizations under the control of a municipality should be accounted for along with the required disclosures in the financial statements.

Section 2 - Government Partnerships

It is a common practice in Newfoundland and Labrador for a municipality to provide services through shared service agreements with other municipalities. Section 2 describes what are government partnerships and the various possible forms and structures they take. Finally, the section describes how to account for government partnerships along with the required disclosures.

Section 3 - Basic Principles of Consolidation

Section 3 provides an overview of the basic steps to consolidate a controlled entity or proportionately consolidate a municipality's interest in a government partnership.

Critical Dates

The audited financial statements of municipalities for the year ended December 31, 2009, are due June 30, 2010. The financial statements should include all the organizations that make up the municipal reporting entity.

By **<u>December 31, 2008</u>** municipalities should determine which organizations should be included in their reporting entity.

These organizations will either have to provide audited financial statements for 2008 and 2009, or at least be prepared to be audited.

Other Sources of Information

Municipal administrators and councillors who would like to obtain additional information on the government reporting entity are encouraged to visit the PSAB web-site at:

www.ma.gov.nl.ca/ma/psab

Information sessions on the municipal reporting entity and consolidations will be made available to all municipalities through the Fall of 2008. Check the Department of Municipal Affairs' PSAB web-site at www.ma.gov.nl.ca/ma/psab for dates and locations.

If you are uncertain about any issue, users of this manual are encouraged to contact:

Department of Municipal Affairs Confederation Building P.O. Box 8700 St. John's, NL A1B 4J6

Telephone: 1-877-729-4393 Facsimile: (709) 729-5535 E-mail: psab@gov.nl.ca

Section 1 – Government Reporting Entity (PS1300)

1.1 What is meant by the Terms GRE and MRE?

A reporting entity is an organization that is required to prepare audited financial statements for external reporting. All governments (federal, provincial, territorial & local) are reporting entities. For the purposes of financial reporting, the phrase government reporting entity (GRE) refers to the departments, funds, agencies, boards, commissions and not-for-profit organizations that should be included in the government's financial statements.

The municipal reporting entity (MRE) refers to the organizations that should be included in the municipality's financial statements. When referring to municipal governments, the terms MRE and GRE mean the same thing and are interchangeable.

1.2 Why do Municipalities Need to Prepare Consolidated Financial Statements?

Differences in Service Delivery:

Municipalities are responsible for providing certain services to their rate payers but deliver the services in various methods. The method which a municipality chooses to deliver its services should not affect the financial reporting.

Many municipalities are responsible for providing safe, clean drinking water to their rate payers.

Municipality "A" provides this service entirely on its own. The financial statements of Municipality "A" would have infrastructure such as a water treatment plant and the related amortization on its books. If the water treatment plant was financed by debt, then the debt would also be on the municipality's books. Finally, all the revenues and expenses related to the provision of the service would also be included in its statements, including any surpluses or deficits.

Municipality "B" provides water to its citizens through a water cooperative of which the municipality is a member. Under current accounting practices, Municipality "B" would not be required to proportionately consolidate its interest in the water cooperative. The water treatment plant, amortization, and debt related to the plant would not appear in the municipality's financial statements. These would all be found in the water cooperative's financial statements. Finally, any surplus or deficit incurred by the water cooperative would not show up in Municipality "B's" financial statements. Municipality "B's" financial statements would only show purchases of water from the water cooperative.

Unless Municipality "B" does not proportionately consolidate its interest, it would be unfair to compare the financial results between municipalities "A" and "B".

The financial statements currently prepared by municipalities only present a partial view of the overall activities and responsibilities of the municipality. Further, there is no comparability with other municipalities that provide the same service using a different delivery method.

Without consolidation it is impossible for a financial statement reader to:

- i) Get a complete picture of the activities and responsibilities of the municipality, and
- ii) To compare the financial results of one municipality to another that provides the same service under a different delivery method.

Financial Statement Objectives:

Section PS1100 – Financial Statement Objectives sets out the nature of the information needed to meet the requirements of financial statement users. Agreement between users and preparers on the objectives of financial statements is a prerequisite for setting appropriate accounting and reporting standards. Without financial statement objectives there would be no basis for preferring one accounting treatment over another.

Financial Statement Objective #1 states:

Financial statements should provide an accounting of the full nature and extent of the affairs and resources which the government controls, including those related to the activities of its agencies and enterprises (PS1100.16).

The method of service delivery should not affect the financial statements. Only through the consolidation of the entire MRE can financial statement users get the entire scope of activity, assets, and liabilities of the municipality. The consolidation of controlled entities will help councillors understand the full extent of the financial affairs and resources for which they are responsible.

1.3 Defining the Municipal Reporting Entity

Defining the MRE is Critical:

The most important issue presented in this whole manual is determining what to include or exclude in the financial statements of the municipality. The issue of what should be included or excluded in the MRE can have a significant effect on the financial statements.

The Criteria is Control:

The MRE should be comprised of all organizations controlled by the municipality.

The government reporting entity should comprise the organizations that are controlled by the government (PS1300.07).

The challenge is to understand what control means. PSAB has decided that a principles based approach to determining what organizations should be included in the GRE was best because of the wide variety of organizations and relationships with governments.

Control is determined by looking at the particular circumstances of each organization. It is necessary to determine the substance of the relationship between the organization and the government. The determination of whether control exists is often a matter of professional judgment based on the definition of control. In some circumstances it will be easy to determine if the municipality has control while in others it may be more difficult.

For example, school districts in Newfoundland and Labrador are considered to be controlled by the Province and are consolidated into the Province's summary consolidated financial statements. In Saskatchewan, school districts are not considered to be controlled and are left out of the Province of Saskatchewan reporting entity. The difference in accounting treatment for school districts is due to differences in their relationship with their provincial government.

1.4 What is Control?

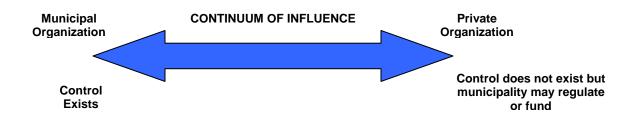
Control is defined as the:

"Power to govern the financial and operating policies of another organization with expected benefits or the risk of loss to the government from the organization's activities" (PS1300.08).

Control is a principles based concept. The legal form of the relationship between the municipality and the organization is irrelevant.

Care has to be taken when assessing control as there are differences between control, regulation, and financial dependence.

It helps to understand control as a continuum of influence. At one end, it is evident that the municipality controls the organization. At the other end, it is clearly evident that the municipality has no control whatsoever over the organization. In between the two ends there are varying levels of control.



There are 3 main elements to the definition of control:

- a) Control does not depend on actually exercising control. Having the power to govern is sufficient.
- b) Governing the financial and operating policies does not mean that the municipality needs to manage an organization's activities on a day to day basis. What is significant is the municipality's authority to determine the operating and financial policies.

Having the authority to govern the financial and operating policies could mean that the municipality is running the day to day affairs of the organization, or it could mean that the municipality takes a "hands off" approach. The organization only consults with council on significant decisions such as the budget or capital expenditures.

Financial and operating policies may be governed in different ways:

- Establishing an organization's fundamental purpose and significantly limiting the ability of the organization's future decisions by predetermining its financial and operating policies.
- A municipality may direct the organization's financial and operating policies on an ongoing basis.

- Council may veto, overrule or modify the organization's financial and operating policies.
- c) The final element is that a municipality must expect to benefit or be exposed to a risk of loss from the controlled organization's activities. The benefits may be financial or non-financial. The benefits or the risk of loss should flow directly from the control relationship and have to accrue to the municipality itself rather than the public at large.

<u> Tip #1:</u>

It may be difficult at times to evaluate if a municipality expects to benefit from the controlled organization's activities. In these cases, examine the issue from the other side. "What happens if things go wrong"? If the controlled organization runs into financial difficulty, does the municipality have financial exposure? Will council be required to fund the losses to keep the organization operating? These are examples where the risk of loss flows directly from the organization and accrue to the municipality.

Examples where losses accrue to the public at large would be when an organization decided to increase their user fees or rates. In these cases, the risk of loss is accruing to the public at large rather than the municipality.

If council feels that it has no responsibility to keep an organization operating then the municipality has no exposure to future losses.

1.5 What are the Main Indicators of Municipal Control?

There are four main indicators of control. You do not need all four indicators to be present to decide if a municipality has control. Normally, if any of these indicators are present then the municipality likely controls the organization.

- 1. The municipality has the **power to unilaterally appoint or remove a majority of the members of the organizations governing body**.
- 2. The government has **ongoing access to the assets of the organization**, has the ability to direct the ongoing use of those assets, or has ongoing responsibility for losses. For example:
 - can council force the organization to transfer excess cash or other assets to the municipality;
 - upon dissolution of the organization would the assets revert back to the municipality; or
 - similarly, upon dissolution would the municipality be responsible for the liabilities.
- 3. The municipality **holds the majority of the voting shares** or a "golden share" that confers the power to govern the financial and operating policies of the organization.

Municipalities don't often have voting shares in their organizations, but possessing the majority of voting shares would be a persuasive indicator of control.

4. The municipality has the **unilateral power to dissolve the organization** and thereby access its assets and become responsible for its obligations. If a council can

dissolve an organization without consultation, this ability may be an indicator of control.

1.6 Are There Other Indicators of Municipal Control?

Other indicators of control may exist and should be evaluated collectively. Together, these other indicators **may indicate that control exists**. However, unlike the main indicators of control, the evidence for control is persuasive but not conclusive.

- a) The municipality has **significant input into the appointment of the members of the governing body** such as appointing a majority of those members from a list of nominees or is heavily involved in the appointments in some other way.
- b) The municipality can appoint or remove the CEO or other key personnel.
- c) Council establishes or can amend an organization's mission or mandate.
- d) Council **approves the organization's business plans or budgets** with the power to require amendments.
- e) Council can **establish borrowing or investment limits** or restrict the organization's investments.
- f) Council can **restrict the revenue generating capacity** of the organization.
- g) Council can **establish or amend organizational policies** such as accounting policies, personnel, compensation, etc.

Example #1:

In April, 1997 council passed a resolution to form a Recreation Board. The terms of reference for the Board are to manage the recreational facilities of the municipality (hockey arena, curling rink, golf course and pool). All the recreational facilities in the municipality were built by the municipality on municipal property. The Board was also assigned the responsibility to recommend to council on capital improvements to the facilities. Finally, the Board was responsible for developing and overseeing recreational programs that increase the physical fitness and health of the community at large.

The Board is made up of 6 citizens who are all appointed by council. The Board members must be local citizens that are active in the recreational community. They may be leaders in local minor hockey or part of the curling club, etc. The terms are for 3 years and no Board member may serve more than 3 years without the approval of council.

The Board must annually submit its operating budget to council for approval.

Using the indicators of control, is the Board part of the municipality's reporting entity and provide reasons.

Example #1 - Answer:

The Board is part of the municipal reporting entity because it is controlled by council.

- 1. Members are appointed by council.
- 2. The Recreation Board was created by council so it can also be dissolved by council.
- 3. Terms of reference or mandate was established by council.
- 4. Council must approve terms beyond the normal 3 years.
- 5. The Board makes recommendations on capital improvements but council must approve them before any funds are spent.
- 6. The Board's operating budget is approved by council.
- 7. The municipality has ongoing use of the Board's major assets and would be responsible for losses.

Example #2:

Using the Recreation Board in Example #1, consider the following changes in fact.

The Recreation Board was created by several local recreational community groups and not the council. Five out of the six Board members are appointed by the local community groups. The Board does receive funding from the municipality but the choice on how to spend the funds is at the Board's discretion. The Board is also free to raise funds from other sources in any manner it decides to employ. The Board built most of the major recreational facilities.

The Board must annually present its budget to council to obtain funding but once the funding is received there is no requirement to report to council on the use of the funds.

Using the indicators of control is the Board part of the municipality's reporting entity and provide reasons.

Answer:

The Board is not part of the municipal reporting entity because it is not controlled by council.

- 1. Majority of the members are not appointed by council
- 2. Council did not create the Board and therefore does not have the power to dissolve it. Further the Board can establish its own terms of reference or mandate.
- 3. Budget is not approved by council only the request for funding is approved.
- 4. Council has no authority to restrict the revenue generating capacity of the Board.
- 5. Council does not have ongoing use to the Board's assets and is not responsible for any losses.

1.7 What is Not Control?

Temporary Control:

During a crisis, a municipality may intervene and take control of an organization. Temporary control is not control. Temporary control is short term in nature and it is council's intention to relinquish control after the crisis has passed.

Financial Dependence:

Many organizations may be dependent on council for their funding and have to comply with funding terms. In these situations, councils have a significant amount of influence on the organization. However, financial dependence on its own is not an indication of control. The organization still has the choice to not accept the funding and close its doors if it chooses to. Many not-for-profit organizations may rely on municipal funding but they are not necessarily controlled by the council.

Regulatory Control:

Governments often regulate organizations to protect the public interest. Governments can impose conditions or sanctions that will affect the operations of the organization but these requirements are not control. The government's interest in these organizations extends only to the regulatory aspects of operations.

Municipalities are responsible for administering the Provincial building codes and conducting inspections. The building inspector may require an organization to perform modifications to the building but the municipality is not in control of the organization.

1.8 Restricted Organizations

If an organization's assets are restricted, can such an organization be controlled by a municipality? The definition of the GRE is based on control and not on the risks and rewards of ownership. The fact that restrictions exist does not change the relationship between a municipality and an organization.

1.9 Trusts Under Administration

Trusts are property that has been transferred or assigned to a trustee to be administered or directed by a trust agreement or statute. The trustee holds title to the property for the benefit of the beneficiary.

Trusts administered by a government or government organization should be excluded from the government reporting entity (PS1300.40).

Government financial statements should disclose in a note or schedule, a description of trusts under administration by the government or government organization, and a summary of trust balances (PS1300.44)

Cemetery trusts or "perpetual care trusts" is an example of a trust under the administration of a municipality. Cemetery trusts should be left out of the MRE but should be reported in a note or schedule.

1.10 Accounting Treatment for Controlled Organizations

Municipalities should fully consolidate the **<u>financial statements</u>** of all controlled organizations except government business enterprises.

Government business enterprises (GBE) are defined in the Glossary of Terms and Acronyms. GBE should be accounted for by the modified equity method. It is believed that there are no GBE at the municipal level in Newfoundland and Labrador. If someone believes that they have a GBE, please inform the Project Manager of PSAB Implementation.

For organizations where another party has a non-controlling interest in the organization, proportionate consolidation is used. A non-controlling interest could include another municipality.

<u>Tip #2:</u>

It is the responsibility of municipalities to prepare the consolidated financial statements and the responsibility of the auditor to ensure that the financial statements present fairly, in all material respects, the financial position of the municipality and the results of operations and cash flows for the year then ended.

However, in 2009, it will be unlikely that all municipalities will be able to prepare their consolidated financial statements on their own.

It is very important to ensure that both the municipality and its controlled entities are ready for the 2009 audit. Your auditor will not be able to complete the audit of your municipality unless the controlled entities are ready to be audited. This may prevent the audited financial statements from being filed by the June 30, 2010 deadline.

A controlled entity would be considered ready for the audit if:

- 1. Audited financial statements are available for consolidation, or
- 2. In situations where the controlled entity and the municipality share the same auditor, the controlled entity should be ready to be audited.

<u>Tip #3:</u>

Consider winding down controlled entities in 2008 if there is no statutory requirement for a separate audit. If the controlled entity is wound down in 2008 there will be no requirement to audit the entity and consolidate it into the municipality in 2009.

Many municipal entities are small and will have great difficulty in preparing separate audited financial statements on time for the municipal audit. This could delay the completion of the municipality's audited financial statements.

In 2009 municipalities should consider taking over the accounting for these small entities. The controlled entity could still exist but operate within a budget set by council. The approval, processing, and recording of the expenses can be done by the municipality and recorded directly into its accounting records. Since all the transactions related to the entity would already be included in the municipality's accounting records, there would be no need to prepare separate financial statements for the controlled entity.

1.11 Presentation and Disclosure Requirements

Government financial statements should disclose, in notes or schedules, a listing of the major organizations comprising the reporting entity, separately identifying those that are consolidated and those that are accounted for by the modified equity method. (PS1300.39)

Sample note disclosures have been included to give municipalities in Newfoundland and Labrador an idea of what their financial statement disclosure will resemble for December 31, 2009.

Town of Warwick – Dec 31/09

1. Significant Accounting Policies

The consolidated financial statements include the assets, liabilities, surplus/deficits, revenues and expenses of those Town funds and governmental functions or entities which have been determined to comprise a part of the aggregate Town operations based upon control exercised by the Town except for the Town's government businesses which are accounted for on the modified equity basis of accounting. Inter-fund and inter-corporate balances and transactions have been eliminated.

i) Consolidated entities

The organizations included in the consolidated financial statements are as follows:

Community Development Corporation The Convention Centre Corporation Warwick Arts Council Inc. Warwick Public Library Board

ii) Government business

The investment in the Warwick Housing Corporation is reported as a government business enterprise. This business is accounted for using the modified equity method. Under this method, the government business principles are not adjusted to conform to those of the Town and intercorporate transactions are not eliminated.

City of Devonshire - Dec 31/09

1. Significant Accounting Policies

These consolidated financial statements reflect the assets, liabilities, surplus/deficits, revenues and expenses and include all the activities of all committees of Council and the boards, municipal enterprises and utilities that are accountable to the City for the administration of their financial affairs and resources and are owned or controlled by the City.

i) Consolidated Entities

The following local boards are consolidated: Devonshire Police Services Board Devonshire Public Library Board Devonshire Housing Corporation Devonshire Museum

ii) Equity Accounting

Government business enterprises are accounted for by the modified equity method. The government business enterprises operating during the year were:

Devonshire Hydro Inc.

1.12 Additional Resources

See Appendix 1 for a checklist on Municipal (Consolidated) Reporting Entity.

This checklist has been developed by the PSAB Working Committee of the Department of Municipal Affairs and will assist municipalities in determining whether organizations are controlled by the municipality.

Some typical organizations that maybe included in the Municipal Reporting Entity in Newfoundland and Labrador are:

- Arenas
- Museums
- Recreational facilities & associations
- Libraries
- Fire departments
- Garbage collection
- Various committees, such as Heritage Committees

Please note this list is not exhaustive as each municipality is unique and each organization will have to be evaluated to determine whether they are a component of the MRE using the checklist provided in Appendix 1.

In determining whether an organization is a component of the MRE, use this checklist in conjunction with supporting documents to substantiate each answer. Once all organizations have been evaluated, provide the checklists and supporting documentation to your auditor for their review to ensure you have gathered sufficient audit evidence to support your conclusions.

See Appendix 2 for a examples on how to use the checklist on Municipal (Consolidated) Reporting Entity

These examples have been developed to help clarify how a municipality could evaluate the various indicators of control and make a final conclusion as to whether an organization is a component of the MRE.

Section 2 – Government Partnerships (PS3060)

2.1 What is a Government Partnership?

Government partnerships are very common in Newfoundland and Labrador. Most municipalities provide some form of service to their citizens through a shared service agreement with one or more other municipalities. Government partnerships take many forms, and there are a variety of scenarios, terms and conditions.

PSAB's definition of a government partnership is a **contractual relationship between a municipality and a party or parties outside the MRE.** In Newfoundland and Labrador, the other "party or parties" in a government partnership are normally other municipalities.

A government partnership **must have all** of the following characteristics:

- Partners have common goals for the activity;
- A financial investment is made by the parties;
- Control of decisions relating to the partnership is shared; and
- Significant risks and benefits of the activities are shared equitably by the partners.

Contractual Relationship:

The contractual relationship can be in writing but it does not have to be. The contractual relationship can be an agreement, a by-law establishing the organization, or a passed resolution of council. The contractual relationship sets out the terms by which the partners share control of the partnership. Activities conducted with no formal contractual agreement, but which meet the definition of a government partnership, is in substance a government partnership.

Common Goals:

In a government partnership the goals of the partners must be common to all partners. If four municipalities join together to form a water cooperative and their common goal is to provide safe drinking water to their communities, then the water cooperative would be a government partnership.

At a later date, a private sector company, wishing to earn a return on its investment, purchases a 33% interest in the water cooperative. While the goals of the partners are mutually beneficial, they are no longer common to all the partners. The water cooperative would then not be a government partnership and would simply be accounted for as a supplier.

Financial Investment:

A financial investment may be in the form of assets or assuming responsibility for ongoing operating costs. Investment in government partnerships is not limited to activities that generate a financial return. Financial investment in partnerships extends to the production and delivery of goods and services that provide benefits to the community.

Shared Control:

Shared control means that the partners make decisions relating to the financial and operating activities of the partnership in accordance with the contractual arrangement. None of the partners should be in control of the partnership. As soon as there is a partner with unilateral control, there can be no shared control and therefore no government partnership.

Shared Risks and Benefits:

In a government partnership there must be an equitable sharing among the partners of the significant risks and benefits. The **<u>equitable</u>** sharing of risks and benefits does not necessarily mean that the partners must **<u>equally</u>** share the risks and benefits.

Purchase/Sale Transactions:

The purchase or outsourcing of government services to the private sector and other municipalities are not government partnerships.

A municipality has outsourced garbage pickup to a private contractor. The municipality would not be in a partnership with the contractor. The municipality and contractor are simply in a buyer/vendor relationship. The municipality and the contractor do not share common goals. Further, the municipality is not responsible for any losses, nor does it share in any profits.

The substance of the relationship between the municipality and contractor is simply that of purchaser/vendor. The purchase of service should be accounted for as an expense.

If your municipality pays operating grants, for services such as fire protection or the use of recreational facilities, to another municipality or their controlled organizations, you are not in a partnership unless:

- 1. Your municipality has a voice in the decisions affecting the services (i.e. shared control); and
- 2. Your municipality shares the risks and benefits on an equitable basis with the other municipality.

2.2 Forms and Structures of Government Partnerships

Government partnerships do not have to be legal partnerships. Government partnerships do not even have to be operated out of a separate organization.

Operations under Shared Control:

Operations under joint control involve the use of assets and other resources of the partners. The partners operate under an agreement. An example would be a landfill operation where one municipality provides the land and equipment and another town provides the cash for operations.

Assets under Shared Control:

In some partnerships, the partners may acquire or build one or more assets for the benefit of more than one municipality. The partners may even be co-owners of the asset. There is often

a public board or commission appointed by the partners to operate the assets. This is a very common arrangement for arenas, recreational facilities and fire departments.

Organizations under Shared Control:

An organization under shared control is a type of government partnership which involves the establishment of a separate organization like a corporation. Each partner has a financial investment in the partnership but the organization owns the assets and incurs their own liabilities and expenditures. Examples could include water cooperatives and planning districts.

2.3 Accounting For Government Partnerships

Municipal financial statements should recognize the municipality's interest in government partnerships, except for government business partnerships, using the proportionate consolidation method.

Government business partnerships (GBP) are defined in the Glossary of Terms and Acronyms. GBP should be accounted for by the modified equity method. It is believed that there are no GBP at the municipal level in Newfoundland and Labrador. If someone believes that they have a GBP, please inform the Project Manager of PSAB Implementation.

2.4 Presentation and Disclosure Requirements

Municipal financial statements should disclose in the notes or schedule:

- i) A description of the nature and purpose of the government partnership;
- ii) List of the partnerships, the municipality's share and how it accounted for the partnership (proportionate consolidation or modified equity method);
- iii) Condensed supplementary financial information:
 - Assets and liabilities by main classification
 - Net assets
 - Total revenues and expenditures
 - Operating results
 - Adjustments to reconcile the amounts included in the financial statements
 - Transactions and balances between the partnership and the government (modified equity method); and
- iv) Share of any commitments and contingencies

An example of Note Disclosure for a Government Partnership:

City of Smiths – Dec 31/08

1. Significant Accounting Policies

Basis of Consolidation

The City has several partnership agreements in place with The Corporation of Smiths and as such, consistent with generally accepted accounting treatment for government partnerships, the following local boards are accounted for on a proportionate consolidation basis whereby the City's pro-rata share of each of the assets, liabilities, revenues and expenditures (including capital expenditures) are combined on a line by line basis in the financial statements. These include:

- 1. Smiths-City Health Unit (57%) (2007 57%)
- 2. Greater Smiths Area Economic Development Corporation (60%) (2007 60%)
- 3. Smiths-City Waste Management Facility (50%) (2007 50%)

Interdepartmental and inter-organizational transactions and balances between these organizations are eliminated.

2. Partnerships with the Corporation of Smiths

Smiths – City Waste Management Facility

On July 1, 2002, the Corporation of Smiths entered into an agreement to jointly develop and operate a waste disposal facility with the City. The Facility will receive non-hazardous waste from the surrounding residences in accordance with the acceptable regulations and the Certificate of Approval issued by the Government Services Centre to develop, operate and close the Facility. All revenues and cost related to the development, management, closure, post-closure care and monitoring of the Facility are shared equally by both organizations.

Included in the Statement of Financial Position is an amount due to the City of \$45,091 (2005 - \$606,772).

	<u>200</u>	<u>2007</u>		
Financial Activities	Total	City Portion	Total	City Portion
Current Fund	\$	\$	\$	\$
Revenues	4,127,000	2,063,750	3,903,33	1,965,166
Expenditures	2,315,159	<u>1,157,579</u>	<u>2,137,73</u>	2 1,068,866
Net revenues	1,812,341	906,171	1,1792,5	99 896,300

2.5 Additional Resources

See Appendix 3 for a checklist on Government Partnerships and Government Business Partnerships.

This checklist has been developed by the PSAB Working Committee of the Department of Municipal Affairs and will assist municipalities in determining whether organizations are partnerships.

In determining whether an organization is a partnership, use this checklist in conjunction with supporting documents to substantiate each answer. Once all organizations have been evaluated, provide the checklists and supporting documentation to your auditor for their review to ensure you have gathered sufficient audit evidence to support your conclusions.

See Appendix 4 for a examples on how to use the checklist on Government Partnerships and Government Business Partnerships

These examples have been developed to help clarify how a municipality could evaluate the various characteristics of a partnership and make a final conclusion as to whether an organization is a Government Partnership or Government Business Partnership.

Section 3 – Basic Principles of Consolidation (PS2500)

3.1 Being "Prepared" is the Key for 2009

The Working Committee understands that many town clerks and municipal staff are uncomfortable at the thought of preparing consolidated financial statements and most municipalities will rely mainly on their auditors to prepare their municipality's consolidated financial statements. All municipalities can, however, be prepared for 2009.

There are two things that all municipalities can do to minimize their audit fees and ensure that their consolidated financial statements are completed by June 30, 2010:

1. Have audited financial statements for your controlled entities and government partnerships available for consolidation.

In many circumstances, municipalities use the same auditors for their controlled entities. If you will not have audited financial statements available, then ensure that your controlled entities are also ready to be audited at the same time as your municipality.

2. Ensure that you have considered <u>all</u> your agencies, boards, commissions, cooperatives and non-profit entities for possible consolidation into your municipal financial statements. You may have audited financial statements for all the controlled entities that you have identified, but the audit of your municipality may be delayed if you failed to identify one or several organizations as a controlled entity.

By December 31, 2008 all municipalities should have identified all the entities that should be included in their reporting entity. It is crucial that you complete your listing of controlled entities by December 31, 2008 as these controlled entities will have to be audited for the 2009 comparatives.

This manual includes checklists in **Appendices 1 & 3 for Identifying Controlled Entities and Government Partnerships**. For all your entities you should go through the checklists to identify possible entities that should be included in your MRE.

If you are uncertain about including some organizations, your municipal auditor is a key resource as they are likely quite familiar with your municipal entities. You can also contact the Project Manager of PSAB Implementation, but please ensure that you complete the checklist yourself before calling.

3.2 Basics Steps in Full Consolidation

Municipal financial statements should consolidate controlled entities on a line by line basis using a uniform basis of accounting after eliminating any inter-organizational transactions and balances.

The steps are as follows:

i) Restatement:

Restate the financial statements of the controlled entity in accordance with the accounting policies of the municipality (i.e. PSAB);

ii) Elimination:

Eliminate the controlled entity's balances and transactions with the municipality; and

iii) Combination:

Combine the assets, liabilities, revenues, and expenses of the controlled entity, on a line by line basis, with those of the municipality.

A simplified example of the consolidation of a library board under the control of a municipality is given below:

	Library Board F/S Dr(Cr)	Restatement Entries Dr(Cr)	Elimination Entries Dr(Cr)	Library Balances for Consolidation Dr(Cr)	Municipality Unconsolidated F/S Dr(Cr)	Consolidated F/S Dr(Cr)
Cash	1,800			1,800	3,000	4,800
A/R	800			800	600	1,400
Due from Library Board			(2,000)	(2,000)	2,000	-
A/P	(200)			(200)	(400)	(600)
Due to Muni	(2,000)		2,000	-		-
Surplus (Def)	1,200			1,200	(2,200)	(1,000)
Grant Rev	(4,000)		4,000	-		-
User Fees	(1,000)			(1,000)	(500)	(1,500)
Tax Rev				-	(10,000)	(10,000)
Supplies	400	(400)		-		-
Wages	3,000	(3,000)		-		-
Protective Services				-	3,500	3,500
Recreation & Culture		3,400	(4,000)	(600)	4,000	3,400
1. Restatement Entries – Library Board Dr. Cr.						Cr.

	Residiement Entries - Library Doard	DI.	C 1.
	Dr. Recreation & Culture Cr. Supplies Cr. Wages	3,400	400 3,000
	To restate Library Board expenses		
2.	Elimination Entries – Library Board		
	Dr. Due to Muni Cr. Due from Library Board	2,000	2,000
	To eliminate inter-company balance		
	Dr. Grant Revenue Cr. Recreation & Culture	4,000	4,000
	To eliminate the annual grant (inter-company transaction) from the municipality		

The above example is simple but it clearly illustrates the 3 separate steps:

- Restatement of the entity financial statements;
- Elimination of entity balances and transactions with the municipality; and
- Combination of the entity balances with the municipality's financial statements on a line by line basis.

3.3 Basic Steps in Proportional Consolidation

The basic steps in proportional consolidation are the same as full consolidation, except that you only combine the municipality's interest in the assets, liabilities, revenues and expenses with the municipality's unconsolidated financial statements.

i) Restatement:

Restate the financial statements of the government partnership in accordance with the accounting policies of the municipality (i.e. PSAB);

ii) Elimination:

Eliminate the government partnership's balances and transactions with the municipality;

iii) Combination:

Using the municipality's pro-rata share, combine the assets, liabilities, revenues, and expenses of the government partnership, on a line by line basis, with those of the municipality.

Continuing with the above example of the library board, assume that instead of having control of the board, the municipality only has a 50% interest.

	Library Balances for Proportional Consolidation Dr(Cr)	Municipality's Interest - 50% Dr(Cr)	Municipal Unconsolidated F/S Dr(Cr)	Balances for the Consolidated F/S Dr(Cr)
Cash	1,800	900	3,000	3,900
A/R	800	400	600	1,000
Due from Library				
Board	(2,000)	(1,000)	2,000	1,000
A/P	(200)	(100)	(400)	(500)
Due to Muni	-	-		-
Surplus (Def)	1,200	600	(2,200)	(1,600)
Grant Rev	-	-		-
User Fees	(1,000)	(500)	(500)	(1,000)
Tax Rev	-	-	(10,000)	(10,000)
Supplies	-	-		-
Wages	-	-		-
Protective Services	-	-	3,500	3,500
Recreation & Culture	(600)	(300)	4,000	3,700

In this example, the consolidated surplus has increased from \$1,000 for full consolidation to \$1,600 under proportional consolidation. This is because the library board has a deficit of \$1,200. Under proportional consolidation, we are only including half the deficit of \$600 in the consolidated financial statements. The other partner(s) are responsible for the other 50% of the deficit.

3.4 Statements at Different Dates

Controlled entities and government partnerships often have year ends other than December 31st. However, this would not be a valid reason to exclude them from the MRE.

When, for purposes of consolidation, it is not possible to use governmental unit financial statements for a period that substantially coincides with that of the government's summary financial statements, this fact, and the period covered by the governmental unit financial statements used, should be disclosed (PS2500.20).

When the fiscal periods of a government reporting entity and a governmental unit are not the same, events relating to or transactions of the governmental unit that have occurred during the intervening period and significantly affect the financial position or results of operations of the government reporting entity should be recorded in the government's summary financial statements (2500.21).

Example:

Municipality "A" controls entity "B". Municipality "A" has a December 31st year end while entity "B" has a June 30th year end. Entity "B's" only asset is a receivable of \$100,000 from a major customer. The audit report for entity "B" was dated October 31, 2007. Subsequent to 31st of October, the major customer went bankrupt. Entity "B" feels that collecting anything on the receivable is extremely doubtful. It is February 2008. The town clerk of municipality "A" is preparing to consolidate entity "B". What should the town clerk do?

Answer:

On the entity worksheet, the town clerk should restate the receivable balance to nil.

Dr. Bad debt expense

\$100,000

\$100,000

Cr. Amount receivable To adjust the receivable to its net realizable value

Therefore there are no longer any asset balances from entity "B" to consolidate.

<u>Tip #4:</u>

If you have a large number of controlled entities and partnerships consider changing their year ends. If your controlled entities all have December 31st year ends it may be difficult to get them all ready for consolidation into the municipality's financial statements.

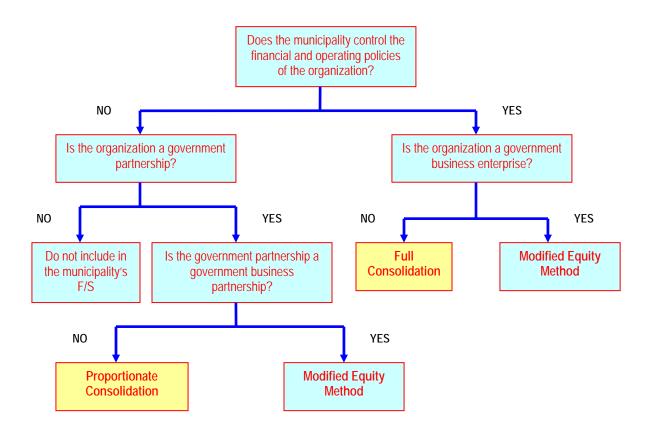
For 2009, consider changing some of your December 31st year ends to September or October. This will give you some additional months to complete their audits and have audited financial statements for consolidation into the municipality.

You cannot change the year end of your municipality or any other entities with statutory audit dates.

However, there is a downside to this. You will have a short year end for 2009 thus you may have two year ends (2008 & 2009) to complete within a short period of time.

3.5 Government Reporting Entity Decision Tree

The following decision tree summarizes the decision process on whether to include or exclude an entity in the MRE and how to account for it. **Determining if a municipality has control is often a difficult decision that requires professional judgment and the assistance of an auditor.** After that decision is made, PSAB is very clear on how the municipality should account for the entity.



3.6 Example of a Consolidation

The following example is of a municipality that operates a municipal museum, an arena, and has a volunteer fire department. The facilities used by these three organizations are owned by the municipality and are included in the financial statements of the municipality. Each organization is operated through a board of directors, or, in the case of the fire department, through a volunteer fire commissioner's office. By completing the questionnaire on the municipality, it was determined that these three organizations are controlled by the municipality. Therefore, these organizations must be included in the consolidated financial statements of the municipality.

The individual financial statements of the fire department, museum and arena management board and the consolidation process with the financial statements of the Municipality is completed as follows:

Municipal Museum and Archives

Statement of Financial Position December 31, 20XX

Financial Assets	\$ 2,000
Cash	<u> 1,500</u>
Accounts receivable	<u> 3,500</u>
Liabilities	4,300
Accounts payable and accrued liabilities	1,800
Accrued salaries and vacation pay	<u>35,000</u>
Pension obligations	41,100
Net Debt	(37,600)
Non-Financial Assets	8,300
Tangible capital assets	55,000
Artefacts and collections	<u>750</u>
Prepaid expenses	64,050
Accumulated Surplus	\$ <u>26,450</u>

Municipal Museum and Archives Statement of Operations

Statement of Operations December 31, 20XX

Revenues Municipal operating grant Admissions Facility rentals Student wage subsidies	\$	50,000 9,475 7,500 <u>3,000</u> 69,975
Expenses Salaries and benefits Restoration and preservation Janitorial Electricity Telephone Office	-	47,000 11,785 4,800 3,600 1,080 975 69,240
Annual surplus Accumulated surplus, beginning of year	_	735 25,715
Accumulated surplus, end of year	\$ <u>_</u>	26,450

	Arena Management Board Statement of Financial Position December 31, 20XX		
Financial Assets Cash Accounts receivable	\$	3,700 <u>2,150</u> 5,850	
Liabilities Accounts payable and accru Accrued salaries and vacatio Zamboni financing obligation	on pay	7,200 2,700 54,500 54,400	
Net Debt	(5	<u>58,550</u>)	
Non-Financial Assets Tangible capital assets Prepaid expenses		37,500 <u>2,450</u> 39,950	
Accumulated Surplus	\$ <u>3</u>	<u>31,400</u>	

Revenues Ice rentals General skating Trade shows Concert rentals Advertising	Arena Management Board Statement of Operations December 31, 20XX \$ 134,895 11,430 10,000 8,500
Expenses	87,000
Salaries and benefits	44,600
Electricity	24,360
Repairs and maintenance	5,450
Loan interest	4,800
Janitorial	2,750
Telephone	<u>1,650</u>
Office	<u>170,610</u>
Annual surplus	1,965
Accumulated surplus, beginnin	g of year <u>29,435</u>
Accumulated surplus, end of ye	ear \$ <u>31,400</u>

Municipal Fire Department Statement of Financial Position

December 31, 20XX

Financial Assets Cash	\$ <u>5,400</u>
Liabilities Accounts payable and accrued liabilities	850
Net Surplus	4,550
Non-Financial Assets Prepaid expenses	1,050
Accumulated Surplus	\$ <u> </u>

Municipal Fire Department Statement of Operations

December 31, 20XX

Revenues Radio bingo Municipal days celebrations Christmas raffle	\$ 39,000 5,475 <u>3,500</u> 47,975
Expenses	20,000
Loan payments on fire truck Fire fighting equipment	30,000 11,500
Vehicle fuel and repairs	2,250
Radio and pager service	1,750
Insurance	1,750
Telephone	360
Office	255
	47,865
Annual surplus	110
Accumulated surplus, beginning of year	5,490
Accumulated surplus, end of year	\$ <u> 5,600</u>

Municipality Consolidated Statement of Financial Position December 31, 20XX

	Municipality	Museum	Arena	Fire Dept	Adjust	Adjust	Final
Financial Assets Cash	\$ 12,405	\$ 2,000	\$ 3,700	\$ 5,400	\$	\$	\$ 23,505
Accounts receivable	<u>24,165</u> <u>36,570</u>	<u>1,500</u> <u>3,500</u>	<u>2,150</u> <u>5,850</u>	5,400			<u> </u>
Liabilities							
Accounts payable	55,390	4,300	7,200	850			67,740
Accrued salaries and vacation pa		1,800	2,700	-			26,100
Pension obligations	168,080	35,000	-	-	0		203,080
Long-term debt	600,865		54,500		<u>(18,000</u>) ³		637,365
	845,935	41,100	64,400	850	<u>(18,000</u>)		934,285
Net (Debt) Surplus	(809,365)	(37,600)	(58,550)	4,550	(18,000)		(882,965)
Non-Financial Assets							
Tangible capital assets	9,673,270	8,300	87,500	-			9,769,070
Artefacts and collections	-	55,000	-	-			55,000
Inventory	41,210	-	-	-			41,210
Prepaid expenses	5,470	750	2,450	1,050			9,720
	9,719,950	64,050	89,950	1,050			9,875,000
Accumulated Surplus	\$ <u>8,910,585</u>	\$ <u>26,450</u>	\$ <u>31,400</u>	\$ <u> </u>	\$ <u>(18,000</u>)	\$	\$ <u>8,992,035</u>

Municipality Consolidated Statement of Operations December 31, 20XX

	Municipality	Museum	Arena	Fire Dept	Adjust	Adjust	Final
Revenues							
Property taxation	\$ 1,517,590	\$-	\$-	\$-			1,517,590
Business taxation	1,011,725	-	-	-			1,011,725
Government grants	271,430	-	-	-			271,430
Arena revenues		-	172,575	-			172,575
Miscellaneous revenues	35,000	69,975		47,975	<u>(50,000</u>) ¹	<u>(11,500</u>) ³	91,450
	2,835,745	69,975	172,575	47,975	(50,000)	(11,500)	3,064,770
Expenses							
Transportation services	692,605	-	-	-			692,605
Recreation services	296,765	69,240	170,610	-	$(50,000)^1$		486,615
Protective services	348,020	-	-	47,865	$(18,000)^2$	(11,500) ³	366,385
General government services	302,700	-	-	-			302,700
Environmental health services	280,275	-	-	-			280,275
Debt servicing	62,320						62,320
	1,982,685	69,240	170,610	47,865	<u>(68,000</u>)	<u>(11,500</u>)	2,190,900
Annual surplus Accumulated surplus,	853,060	735	1,965	110	18,000	-	873,870
beginning of year	8,057,525	25,715	29,435	5,490	<u> </u>		8,118,165
Accumulated surplus, end of year	\$ <u>8,910,585</u>	\$ <u>26,450</u>	\$ <u>31,400</u>	\$ <u> </u>	18,000		\$ <u>8,992,035</u>

Transaction and Balance Eliminations

During the consolidation process, the following account balances and transactions should be eliminated:

- i) Payable and receivable due to and from other organizations that are included in the municipal reporting entity.
- ii) Revenue and expense transactions between organizations within the municipal reporting entity.

In the above example, the following account balances and transactions were required to be eliminated.

- 1. During the year, the Museum received an operating grant of \$50,000 from the municipality. This is included in both the revenues of the Museum and the expenses of the Municipality. This must be eliminated from the consolidated reporting entity.
- 2. Included in the expenses of the Fire Department is \$11,500 spent on firefighting equipment. The municipality includes all firefighting equipment in its TCA continuity schedule when purchased and records the associated cost as a donation from the Fire Department. Therefore, the amount is included in both the revenues of the Municipality and the expenses of the Fire Department. This must be eliminated from the consolidated reporting entity.
- 3. Included in the expenses of the Fire Department is \$30,000 paid on loan payments for the fire truck. These have to be reallocated between principal and interest and the principal payments applied against the outstanding debt that has been recorded by the Municipality (Interest: \$12,000, Principal \$18,000).

3.7 Prepare Your Own 2008 Comparatives?

All municipalities in Newfoundland and Labrador will eventually have to prepare their 2008 comparatives from the 2008 audited financial statements filed with the Department of Municipal Affairs. The 2008 audited financial statements of the municipality, prepared under the current accounting principles, will have to be converted into a PSAB compliant format by:

- 1. Consolidating all the funds and reserves of the municipality at December 31, 2008;
- 2. Entering the TCA balances, additions, disposals, and amortization for the year ended December 31, 2008;
- 3. Adjusting the financial statements for environmental liabilities, including landfill closure and post-closure costs; and
- 4. Consolidating the statements of financial position and operations of all the entities under the control or shared control of the municipality.

Municipalities will not be required to prepare their 2008 comparative figures until they are working on their 2009 financial statements. The December 31, 2009 financial statements do not need to be completed and filed with the Department of Municipal Affairs until June 30, 2010. However municipalities are encouraged to complete their 2008 comparatives as soon as possible.

Any municipality that wants to prepare their 2008 comparatives prior to December 31, 2009 can send them to the Department of Municipal Affairs, PSAB Implementation Team for review. The PSAB Implementation Team will only review them to see if they are properly prepared. Readily apparent errors will be noted and reported to you.

It is important to realize that this review by the PSAB Implementation Team should not be considered an audit or verification of your 2008 comparatives. The 2008 comparatives will still have to be verified by your auditor.

Remember that the PSAB Implementation Team review of your 2008 comparatives is completely voluntary, but we can only accept submissions until December 31, 2009. Your submission should include:

- 1. Copies of the 2008 financial statements of all the entities consolidated, or proportionately consolidated, with the municipality;
- 2. A completed "MRE Checklist" for every organization that is being consolidated or proportionately consolidated;
- 3. A completed "Consolidation Worksheet" with:
 - All the funds and reserves of the municipality consolidated at December 31, 2008;
 - All the required adjustments for TCA entered and posted;
 - If the information is available, all the required adjustments for environmental liabilities and landfill closure and post-closure costs: and
 - All the balances for consolidation transferred from MRE.
- 4. A completed statement of financial position at December 31, 2008.
- 5. A completed statement of operations for the year ended December 31, 2008.

You do not need to send copies of your municipality's 2008 audited financial statements as the Department will already have copies on file.

All information should be sent by email and email attachments to the PSAB Project Manager at anthonykeeping@gov.nl.ca. Copies of the entity financial statements can be faxed to (709) 729-5535.

Glossary of Terms and Acronyms

<u>Terms:</u>

Control:

Control by a government is defined as having the power to govern the financial and operating policies of another organization with expected benefits or the risk of loss to the government from the organization's activities.

Elimination Entries:

Elimination entries are adjustments made to an organization's financial statements for consolidation with the government's financial statements. Elimination entries are done to eliminate balances and transactions with the government. These are not posted in your accounting system but are done for consolidation purposes only.

Fair Market Value:

Fair market value is the amount of consideration that would be agreed upon in an arms length transaction between knowledgeable, willing parties who are under no compulsion to act.

Government Business Enterprise:

A government business enterprise is an organization under government control and is:

- i) A separate legal entity with the power to contract in its own name and that can sue or be sued;
- ii) Has been delegated the financial and operating authority to carry on a business;
- iii) Sells goods and services to individuals and organizations other than the government reporting entity; and
- iv) Can, in the normal course of its operations, maintain its operations and meet its liabilities from revenues received from sources other than the government reporting entity.

Government business enterprises should be included in the financial statements under the modified equity method.

Examples of GBE at the Provincial level include:

- Newfoundland and Labrador Hydro
- Newfoundland and Labrador Liquor Corporation

The Working Committee believes that there are no organizations controlled by a municipality that meets the definition of a GBE. If anyone is aware of a municipal GBE please inform the Project Manager, PSAB Implementation.

Government Business Partnership:

A government business partnership is a <u>government partnership</u> that has all of the following characteristics:

- i) Is a separate legal entity with the power to contract in its own name and that can sue or be sued;
- ii) Has been delegated the financial and operating authority to carry on a business;
- iii) Sells goods and services to individuals and organizations other than the partners as its principal activity; and

Glossary of Terms and Acronyms

iv) Can, in the normal course of its operations, maintain its operations and meet its liabilities from revenues received from sources other than the partners.

The characteristics of a government business partnership (GBP) are the similar to a government business enterprise (GBE) except that a GBE is controlled by the government. A GBP is a government partnership whose partners only have shared control.

Government business partnerships should be included in the financial statements under the modified equity method.

The Working Committee believes that there are no government partnerships at the municipal level that meets the definition of a GBP. If anyone is aware of a municipal GBP please inform the Project Manager, PSAB Implementation.

Government Partnership:

A government partnership is a contractual relationship between a government and a party or parties outside the government reporting entity. A government partnership <u>must have all</u> of the following characteristics:

- Partners have common goals for the activity;
- A financial investment is made by the parties;
- Control of decisions relating to the partnership is shared; and
- Significant risks and benefits of the activities are shared equitably by the partners.

Government Reporting Entity:

The term government reporting entity refers to the departments, funds, agencies, boards, commissions and not-for-profit organizations that should be included in the government's financial statements. A government reporting entity comprises all organizations controlled by the government.

Municipal Reporting Entity:

Municipal reporting entity refers to all the funds, agencies, boards, commissions and not for profit organizations that should be included in the municipality's financial statements. When referring to municipalities it means the same thing as the government reporting entity.

Net Present Value:

Net present value is the net value on a given date of a future payment, or series of future payments, discounted to reflect the time value of money. The time value of money is based on the premise that an investor prefers to receive a payment of a fixed amount today, rather than an equal amount in the future, all else being equal.

Restatement Entries:

Restatement entries are adjustments made to an organization's financial statements to conform to the accounting policies used by the government. The organization's restated financial statements can then be consolidated into the government's financial statements.

Glossary of Terms and Acronyms

Summary Financial Statements:

Summary financial statements refer to the financial statements prepared by governments for external reporting. Summary financial statements are prepared on a consolidated basis and present the financial information of the entire government reporting entity at a summary level.

Acronyms:

ABC	-	Agencies, Boards and Commissions
FMV	-	Fair Market Value
GBE	-	Government Business Enterprise
GBP	-	Government Business Partnership
GRE	-	Government Reporting Entity
LSD	-	Local Service District
MRE	-	Municipal Reporting Entity
NPV	-	Net Present Value

Yes

No

Municipal (Consolidated) Reporting Entity Checklist

Beginning on January 1, 2009, municipal financial statements will include all of the financial transactions and balances relating to the activities of the municipality, including those related to the activities of agencies and enterprises controlled by the municipality. These all inclusive statements are referred to as the "Consolidated Financial Statements".

The basic premise for inclusion of a board or agency in municipal financial statements is the concept of control. "Control is the power to govern the financial and operating policies of another organization with expected benefits or the risk of loss from the other organization's activities". A municipality may have control over an organization but choose not to exercise that control; however, in this situation control does still exist. The determination of whether a municipality controls another organization will require professional judgment considering the nature of the relationship between the municipality and the organization.

To determine whether the Municipality effectively controls an organization, enterprise, board or agency to which it provides funding, services or facilities, the following should be completed:

Organization:

Purpose:

Criteria	for	the	evaluation	of	control.
Ginena	101	uic	evaluation	UI.	control.

Primary Indicators	Primary	Indicators
--------------------	---------	------------

The municipality has:

- i) the power to unilaterally appoint or remove a majority of the members of the governing body of the organization,
- ii) access to the assets of the organization, has the ability to direct the ongoing use of those assets, or has ongoing responsibility for losses,
- iii) holds the majority of the voting shares or a "golden share" that confers the power to govern the financial and operating policies of the organization,
- iv) the unilateral power to dissolve the organization and thereby access its assets and become responsible for its obligations.

Appendix 1

Municipal (Consolidated) Reporting Entity Checklist

Secondary Indicators

The municipality has the power to:

		Yes	No
ij) provide significant input into the appointment of members of the governing body of the organization by appointing a majority of members from a list of nominees provided or being involved in the appointment or removal of a significant number of members,		
ij) appoint or remove the CEO or other key personnel,		
iii) establish or amend the mission or mandate of the organization,		
iv) approve business plans or budgets for the organization and require amendments, either on a net or line by line basis,		
V) establish borrowing or investment limits or restrict the organization's investments,		
vi) restrict the revenue generating capacity of the organization, notably the sources of revenue, and		
vii	establish or amend the policies that the organization uses to manage, such as those relating to accounting, personnel, compensation, collective bargaining or deployment of resources.		

Based on our assessment of the above indicators, it has been concluded that the Municipality (does / does not) have control of the organization and consequently, the statements of financial position, revenues and expenditures and cash flows of the organization (will / will not) be included with the financial operations of the Municipality in the consolidated financial statements.

If you concluded that your municipality does not control the entity, it may be a government partnership. Complete the Government Partnership Checklist.

Signature

Position

Date

Notes:

Examples: Municipal (Consolidated) Reporting Entity Checklist

Municipal Libraries established through the NF Libraries Board

The Municipality has established a local library through the Newfoundland Libraries Board. The Municipality is responsible for the provision of the library premises, snow clearing, garbage collection and a portion of the electricity, janitorial services and maintenance.

The local library is operated through a Municipal Library Board that is comprised of five residents, one member of council, and the librarian. The Municipal Library Board makes decisions as to the opening hours, material acquisitions and both young and adult reader programs.

The Newfoundland Libraries Board is responsible for the remaining portion of the electricity, janitorial services and maintenance, and all of the salaries and benefits of library employees.

In preparing its year-end financial statements, the Municipality must determine whether the local library will comprise part of the Municipal Reporting Entity.

The Municipality will have to evaluate the criteria for control of library operations:

Primary Indicators	Yes	Νο
The municipality has:		
 i) the power to unilaterally appoint or remove a majority of the members of the governing body of the organization, 		X
The Municipality can only appoint one member to the six member board.		
ii) access to the assets of the organization, has the ability to direct the ongoing use of those assets, or has ongoing responsibility for losses,		X
The Municipality only pays a portion of the operating expenses, the remainder are the responsibility of the Newfoundland Libraries Board.		
iii) holds the majority of the voting shares or a "golden share" that confers the power to govern the financial and operating policies of the organization,		X
The Municipality holds only one vote on the six member board.		
iv) the unilateral power to dissolve the organization and thereby access its assets and become responsible for its obligations.		X
The Municipality cannot dissolve the organization as it was formed through the Newfoundland Libraries Board.		

Examples: Municipal (Consolidated) Reporting Entity Checklist

Secondary Indicators

The municipality has the power to:

 i) provide significant input into the appointment of members of the governing body of the organization by appointing a majority of members from a list of nominees provided or being involved in the appointment or removal of a significant number of members, 	X
The Municipality holds only one vote on the six member board.	
ii) appoint or remove the CEO or other key personnel,	V
The Municipality holds only one vote on the six member board.	X
iii) establish or amend the mission or mandate of the organization,	X
The mission of the organization is determined by the Newfoundland Libraries Board.	
iv) approve business plans or budgets for the organization and require amendments, either on a net or line by line basis,	X
The budget and financial statements of the organization are approved by the Newfoundland Libraries Board.	
 v) establish borrowing or investment limits or restrict the organization's investments, 	X
The organization does not have any significant investments.	
vi) restrict the revenue generating capacity of the organization, notably the sources of revenue, and	X
The majority of expenses are funded by the Newfoundland Libraries Board.	
vii) establish or amend the policies that the organization uses to manage, such as those relating to accounting, personnel, compensation, collective bargaining or deployment of resources.	X

All operating policies are determined by the Newfoundland Libraries Board.

Examples: Municipal (Consolidated) Reporting Entity Checklist

Based on the assessment of the above indicators, it was determined that the Municipality does not have control of the library and consequently the Municipality's consolidated statements of financial position, revenues and expenditures and cash flows will not include the financial operations of the library.

The expenses and services provided by the Municipality to the library will be recorded as operating grants in the financial statements of the Municipality.

Examples: Municipal (Consolidated) Reporting Entity Checklist

Museum

The Municipality provides funding for a local Heritage Museum to operate within the community. The Museum is located in a heritage house that was purchased by the Municipality. Many of the artifacts within the Museum are either on loan from community residents or were donated by community residents. The Museum is operated through a Heritage Committee comprised of five members of the public and one member of council. The Heritage Committee receives annual funding from the Municipality for approximately 70% of its budgeted revenues. The remaining 30% of revenues is comprised of museum admissions, Christmas raffles, donations, and the proceeds of card games. Prior to advancing the annual funding to the Museum, council reviews and approves the budget of the Museum for the coming year. Council has the authority to request revisions to the budget prior to approval

In preparing its year-end financial statements, the Municipality must determine whether the local library will comprise part of the Municipal Reporting Entity.

The Municipality will have to evaluate the criteria for control of museum operations:

Primary Indicators	Yes	No
The municipality has:		
 i) the power to unilaterally appoint or remove a majority of the members of the governing body of the organization, 		X
The Municipality can only appoint one member to the six member board.		
 ii) access to the assets of the organization, has the ability to direct the ongoing use of those assets, or has ongoing responsibility for losses, 	X	
The Municipality is responsible for 70% of the operating expenses of the museum and any cost overruns.		
iii) holds the majority of the voting shares or a "golden share" that confers the power to govern the financial and operating policies of the organization,		X
The Municipality can only appoint one member to the six member board.		
iv) the unilateral power to dissolve the organization and thereby access its assets and become responsible for its obligations.		X
The Municipality cannot dissolve the organization as it was formed by the committee members.		

Examples: Municipal (Consolidated) Reporting Entity Checklist

Secondary Indicators

The municipality has the power to:

i) provide significant input into the appointment of members of the governing body of the organization by appointing a majority of members from a list of nominees provided or being X involved in the appointment or removal of a significant number of members. The Municipality can only appoint one member to the six member board. Х ii) appoint or remove the CEO or other key personnel, The Municipality can only appoint one member to the six member board. iii) establish or amend the mission or mandate of the organization, The mission of the organization is determined by the Heritage Committee itself. iv) approve business plans or budgets for the organization and X require amendments, either on a net or line by line basis, The Municipality approves the budget for the organization and can request any revisions it determines are necessary. v) establish borrowing or investment limits or restrict the Х organization's investments, The Municipality approves the budget for the organization and can request any revisions it determines are necessary. vi) restrict the revenue generating capacity of the organization, X notably the sources of revenue, and The Municipality provides 70% of operating revenues and controls access to the building and therefore the ability to generate revenues from admissions. vii) establish or amend the policies that the organization uses to manage, such as those relating to accounting, personnel, X compensation, collective bargaining or deployment of resources.

Prior to providing any funding the Municipality approves the budget for the organization including such items as compensation and accounting policies.

Examples: Municipal (Consolidated) Reporting Entity Checklist

Based on the assessment of the above indicators it was determined that the Municipality does have control of the Museum and consequently the Municipality's consolidated statements of financial position, revenues and expenditures and cash flows will include the financial operations of the Museum.

The operating grant provided by the Municipality to the Museum will be eliminated upon consolidation and replaced with the actual operating costs of the Museum in the financial statements of the Municipality.

Examples: Municipal (Consolidated) Reporting Entity Checklist

Shared Recreation Programs with a Not for Profit Organization ("NPO")

Bigtown has several recreation facilities throughout the municipality. During the year, they entered into a five year management agreement with a NPO. In exchange for a quarterly operating subsidy of \$20,000, the NPO will run all of the recreation programs at the Town's facilities on a user fee basis. Because the municipality wants to ensure that the programs at its facilities are affordable to residents, the NPO's user fee schedule must be approved by council. The NPO hires its own staff and also does external fund raising to help cover their operating costs. The total annual operating budget of the NPO is \$500,000. One member of Bigtown's council and the youth recreation program director are on the nine member board of directors of the NPO.

Since the municipality can only control 2 votes out of 9 on the board of directors, voting control does not exist.

The municipality provides an annual operating subsidy of \$80,000 to the NPO. However, the NPO generates \$420,000 in revenues through user fees and external funding raising. This would indicate that the municipal grant is not critical to their operations.

Prior to the approval of the operating grant, the NPO's budget associated with the operations of the Town's facilities is examined and approved by council. Council can request revisions to the budget prior to the approval of the operating grant.

The final point to examined is whether the Town can restrict the revenue generating capacity of the organization and its sources of revenues. While the Town can influence the price of user fees charged, it cannot influence the volume of participants in the NPO's programs. Neither does the Town have any influence over the external fund raising activities of the NPO. Therefore, any influence over the revenues of the NPO would be limited.

In preparing its year-end financial statements, the Municipality must determine whether the operating activities of the Municipality's recreation facilities will comprise part of the Municipal Reporting Entity.

The Municipality will have to evaluate the criteria for control of the recreation facilities operations:

Primary Indicators

Yes No

X

The municipality has:

i) the power to unilaterally appoint or remove a majority of the members of the governing body of the organization,

The municipality can only control 2 votes out of 9 on the board of directors.

Appendix 2 Examples: Municipal (Consolidated) Reporting Entity Checklist

X

X

X

Х

Х

ii) access to the assets of the organization, has the ability to direct the ongoing use of those assets, or has ongoing responsibility for losses,

The municipality provides an annual operating subsidy of \$80,000, however, the NPO is responsible for the majority of expenses which are paid through \$420,000 in generated from user fees and external funding raising

iii) holds the majority of the voting shares or a "golden share" that confers the power to govern the financial and operating policies of the organization,

The municipality can only control 2 votes out of 9 on the board of directors.

iv) the unilateral power to dissolve the organization and thereby access its assets and become responsible for its obligations.

The NPO was formed independently from the Municipality, therefore, the Municipality does not have the ability to dissolve the organization.

Secondary Indicators

The municipality has the power to:

 i) provide significant input into the appointment of members of the governing body of the organization by appointing a majority of members from a list of nominees provided or being involved in the appointment or removal of a significant number of members,

The municipality can only control 2 votes out of 9 on the board of directors.

ii) appoint or remove the CEO or other key personnel,

The municipality can only control 2 votes out of 9 on the board of directors.

iii) establish or amend the mission or mandate of the organization,

The NPO was formed independently from the Municipality, therefore, the Municipality cannot amend the mission or mandate of the organization.

iv) approve business plans or budgets for the organization and require amendments, either on a net or line by line basis,

Appendix 2 Examples: Municipal (Consolidated) Reporting Entity Checklist Prior to the approval of the operating grant, the NPO's budget associated with the operations of the Town's facilities is examined and approved by council. Council can request revisions to the budget prior to approval of the operating grant. v) establish borrowing or investment limits or restrict the Х organization's investments, Council can only approve and revise the NPO's budget associated with the operations of the Town's facilities.. The Municipality has no ability to influence the other areas of the NPO. vi) restrict the revenue generating capacity of the organization, X notably the sources of revenue, and The NPO's user fee schedule must be approved by council. vii) establish or amend the policies that the organization uses to manage, such as those relating to accounting, personnel, X compensation. collective bargaining or deployment of resources.

The NPO hires its own staff and has its own operating policies with regards to accounting, compensation and personnel that cannot be influenced by the Municipality.

Based on the assessment of the above indicators, it was determined that the Municipality <u>does</u> <u>not</u> have control of the operations of the Municipality's recreation facilities and consequently the Municipality's consolidated statements of financial position, revenues and expenditures and cash flows <u>will not</u> include the financial operations of the recreation facilities.

The funding provided by the Municipality to the NPO will be recorded as an operating grant in the financial statements of the Municipality.

Examples: Municipal (Consolidated) Reporting Entity Checklist

Local Fire Departments

The Municipality has a local volunteer Fire Department. The Fire Department is managed by a committee consisting of the fire chief and assistant fire chiefs. All positions are elected annually by the volunteer firefighters themselves.

The Fire Department does not receive any funding from the Municipality. The Fire Department operates out of the fire depot and all major firefighting equipment is purchased by the Municipality. The Fire Department raises funds for the purchase of secondary firefighting equipment such as oxygen masks and tanks, coats, helmets and communication equipment. The Fire Department also pays for the operating expenses and maintenance on the fire truck. The Fire Department raises their funds through municipal day's celebrations, bingo and a Christmas raffle.

The majority of the funds raised by the Fire Department are used to make payments on the Municipality's fire truck.

In preparing its year-end financial statements, the Municipality must determine whether the Fire Department will comprise part of the Municipal Reporting Entity.

The Municipality will have to evaluate the criteria for control of the Fire Department:

Primary Indicators	Yes	Νο
The municipality has:		
 i) the power to unilaterally appoint or remove a majority of the members of the governing body of the organization, 		X
The Fire Department is managed by a committee consisting of the fire chief and assistant fire chiefs. All positions are elected annually by the volunteer firefighters themselves.		
ii) access to the assets of the organization, has the ability to direct the ongoing use of those assets, or has ongoing responsibility for losses,		X
The Fire Department raises funds through municipal day's celebrations, bingo and a Christmas raffle. The use of these funds is totally at the discretion of the Fire Department.		
iii) holds the majority of the voting shares or a "golden share" that confers the power to govern the financial and operating policies of the organization,		X
The Fire Department is managed by a committee consisting of the fire chief and assistant fire chiefs. All		

X

X

X

X

X

Х

Examples: Municipal (Consolidated) Reporting Entity Checklist

positions are elected annually by the volunteer firefighters themselves.

iv) the unilateral power to dissolve the organization and thereby access its assets and become responsible for its obligations.

The Municipality has no authority to dissolve the organization as it was formed independently from the Municipality.

Secondary Indicators

The municipality has the power to:

 i) provide significant input into the appointment of members of the governing body of the organization by appointing a majority of members from a list of nominees provided or being involved in the appointment or removal of a significant number of members,

The Fire Department is managed by a committee consisting of the fire chief and assistant fire chiefs. All positions are elected annually by the volunteer firefighters themselves.

ii) appoint or remove the CEO or other key personnel,

The Fire Department is managed by a committee consisting of the fire chief and assistant fire chiefs. All positions are elected annually by the volunteer firefighters themselves.

iii) establish or amend the mission or mandate of the organization,

The mission and mandate of the organization is determined by the Fire Department.

iv) approve business plans or budgets for the organization and require amendments, either on a net or line by line basis,

The Fire Department raises its own funds and approves its own expenditures.

v) establish borrowing or investment limits or restrict the organization's investments,

The Fire Department cannot borrow funds. The debt obligation to purchase the fire truck was financed by the Municipality.

Appendix 2 Examples: Municipal (Consolidated) Reporting Entity Checklist

X

X

vi) restrict the revenue generating capacity of the organization, notably the sources of revenue, and

The Fire Department raises funds through municipal day's celebrations, bingo and a Christmas raffle.

vii) establish or amend the policies that the organization uses to manage, such as those relating to accounting, personnel, compensation, collective bargaining or deployment of resources.

> The Fire Department is comprised of volunteers, raises and accounts for its own funds and elects its own chief and assistant chiefs completely outside of the influence of the Municipality.

Based on the assessment of the above indicators, it was determined that the Municipality <u>does</u> <u>not</u> have control of the operations of the Fire Department and consequently the Municipality's consolidated statements of financial position, revenues and expenditures and cash flows <u>will not</u> include the financial operations of the Fire Department.

The loan payments and purchases of firefighting equipment by the Fire Department will be recorded as contributions to the Municipality in the financial statements of the Municipality.

Care should be taken when evaluating local Fire Departments. In this example, the Fire Department had a great degree of autonomy but that will not always be the case. In instances where the Municipality can influence the decisions and provides financial assistance to the Fire Department, the Fire Department may have to be included in the Municipal Reporting Entity.

Examples: Municipal (Consolidated) Reporting Entity Checklist

Arena Management Board

The Municipality owns the local arena. The operations of the arena are carried out through a local arena management board. The board consists of the presidents of the minor, men's and women's hockey associations, the ball hockey association and the figure skating club, along with one member of council and the general manager of the arena.

The operations of the arena are not self supporting and any annual shortfall is covered by an operating grant from council. The annual financial statements and budget of the arena management board are reviewed and approved by council. Council has the authority to request any revisions it feels are required. All capital expenditures are the responsibility of the Municipality and are recorded by the Municipality as tangible capital assets. The Municipality is also responsible for the hiring and payment of all arena staff.

In preparing its year-end financial statements, the Municipality must determine whether the operations of the Arena Management Board will comprise part of the Municipal Reporting Entity.

The Municipality will have to evaluate the criteria for control of the Arena Management Board:

Primary Indicators	Yes	Νο
The municipality has:		
 i) the power to unilaterally appoint or remove a majority of the members of the governing body of the organization, 		X
The municipality can only appoint one member to the seven member board.		
 ii) access to the assets of the organization, has the ability to direct the ongoing use of those assets, or has ongoing responsibility for losses, 	X	
Any funding shortfalls are to be subsidized by the Municipality.		
iii) holds the majority of the voting shares or a "golden share" that confers the power to govern the financial and operating policies of the organization,		X
The municipality can only appoint one member to the seven member board.		
iv) the unilateral power to dissolve the organization and thereby access its assets and become responsible for its obligations.	X	
The Municipality can, upon providing sufficient notice, restrict the Board's use to the major asset thereby terminating the operations of the Board.		

Examples: Municipal (Consolidated) Reporting Entity Checklist

Secondary Indicators

The municipality has the power to:

i) provide significant input into the appointment of members of the governing body of the organization by appointing a majority of members from a list of nominees provided or being X involved in the appointment or removal of a significant number of members. The municipality can only appoint one member to the seven member board. X ii) appoint or remove the CEO or other key personnel, The municipality can only appoint one member to the seven member board. iii) establish or amend the mission or mandate of the organization, X The mission of the organization has been set by the Board. iv) approve business plans or budgets for the organization and Х require amendments, either on a net or line by line basis, The annual financial statements and budget of the Board are reviewed and approved by council. Council has the authority to request any revisions it feels are required. v) establish borrowing or investment limits or restrict the X organization's investments, The annual financial statements and budget of the Board are reviewed and approved by council. Council has the authority to request any revisions it feels are required. vi) restrict the revenue generating capacity of the organization, X notably the sources of revenue, and The Municipality can, upon providing sufficient notice, restrict the Board's use to the major asset thereby restricting its source of revenues. vii) establish or amend the policies that the organization uses to manage, such as those relating to accounting, personnel, X compensation, collective bargaining or deployment of resources. Prior to providing any funding the Municipality approves the budget for the organization including such items as

Examples: Municipal (Consolidated) Reporting Entity Checklist

compensation and accounting policies and also hires and pays all salaried staff.

Based on the assessment of the above indicators, it was determined that the Municipality <u>does</u> have control of the operations of the Arena management Board and consequently the Municipality's consolidated statements of financial position, revenues and expenditures and cash flows <u>will</u> include the financial operations of the Arena Management Board.

The operating grant provided by the Municipality to the Arena Management Board will be eliminated upon consolidation and replaced with the actual operating revenues and expenses of the Board in the financial statements of the Municipality.

No

Yes

Government Partnership and GBP Checklist

A **Government Partnership** is a contractual arrangement between the government and a party or parties outside of the government reporting entity. These outside parties can be other governments. Activities conducted with no formal contractual arrangement, but which meet the criteria of a government partnership as outlined below, are in substance government partnerships.

A Government Partnership has all of the following characteristics:

- i) The partners cooperate toward achieving significant clearly defined common goals.
- ii) The partners make a financial investment in the government partnership.
- iii) The partners share control of decisions related to the financial and operating policies of the government partnership on an on-going basis.
- iv) The partners share, on an equitable basis, the significant risks and benefits associated with the operations of the government partnership.

If the municipality answe	ered yes to all of the	e above questions,	the venture being	evaluated is a
Government Partnersh	ip.		-	

If the municipality has determined that it is participating in a government partnership, a further assessment must be made as to whether the venture is a **Government Business Partnership** (GBP).

If the economic venture is a government partnership but not a government business partnership, a Municipality's financial statements should recognize the municipality's interest in the **Government Partnership**, using the proportionate consolidation method.

Proportionate consolidation is the method of accounting and reporting whereby the Municipality includes its pro-rata share of the assets, liabilities, revenues and expenses of the partnership on a line by line basis with similar items in the Municipality's financial statements.

Government Partnership and GBP Checklist

A Government Business Partnership is a government partnership that has all of the following characteristics:

	Yes	No
i) It is a separate legal entity with the power to contract in its own name and that can sue and be sued.		
ii) It has been delegated the financial and operational authority to carry on a business.		
iii) It sells goods and services to individuals and organizations other than the partners as its principal activity.		
v) It can, in the normal course of its operations, maintain its operations and meet its liabilities from revenues received from		

iii) It

iv) It

sources other than the partners.

If the municipality answered yes to all of the above questions, the government partnership being evaluated is a Government Business Partnership.

If an organization is determined to be a government business partnership (GBP), the MRE's financial statements should recognize their interest in the GBP by applying the modified equity method.

The modified equity method of accounting for a government business partnership results in the Municipality recording the original investment in the partnership at cost. The carrying value of that investment is then adjusted annually to include the Municipality's pro-rata share of the earnings of the partnership. The amount of the adjustment recorded is included in the determination of the net income of the Municipality. The partnership investment account of the Municipality is also increased or decreased to reflect the Municipality's share of capital transactions¹. Any profit distributions received from the partnership reduce the carrying value of the investment in the partnership.

Capital transactions in this instance do not refer to the purchase or construction of equipment or infrastructure. Capital transactions with respect to investments refers to an additional infusion of cash (capital) made by the Municipality into the partnership. The carrying value of the investment in the partnership is increased by the amount of the cash infusion.

Regional Arena Management Boards

The municipalities of Lead Cove, Daniel's Cove, and Cooks Cove agreed to cooperate on the construction of a new arena and set up an arena management board to oversee the operations. There are six seats on the arena management board. These seats are held by the arena manager, the president of the minor hockey association, the president of the local ball hockey association and one seat is allocated to a council representative from each municipality.

The original construction of the facility was funded through a cost shared capital works project with the provincial government. The total cost of the arena was \$2,500,000, which was 80% covered through the province's contribution. The remaining \$500,000 was divided between the municipalities based of their respective populations, with allocations of Lead Cove \$200,000; Daniel's Cove \$175,000 and Cooks Cove \$125,000.

The arena is meant to be self supporting; however, any losses incurred by the Arena Board will be covered by the participating municipalities based on their respective capital contributions.

It is now the end of year one and the arena management board has finalized it financial statements for the year.

Arena Management Board

Statement of Financial Position December 31, 20XX

Financial Assets Cash Accounts receivable	\$ 5,500 <u> 7,150</u> <u> 12,650</u>
Liabilities Accounts payable and accrued liabilities Accrued salaries and vacation pay Zamboni financing obligation	13,200 1,700 <u>62,500</u> 77,400
Net Debt	<u> (64,750</u>)
Non-Financial Assets Tangible capital assets Arena Zamboni Prepaid expenses	2,500,000 67,000 <u>1,750</u> 2,568,750
Accumulated Surplus	\$ <u>2,504,000</u>

	Arena Management Board Statement of Operations December 31, 20XX
Revenues	
Provincial government grant Municipal grants	\$ 2,000,000
Lead Cove	200,000
Daniel's Cove	175,000
Cooks Cove	125,000
Ice rentals	86,895
General skating	6,430
Advertising	4,750
5	2,598,075
Expenses	
Salaries and benefits	41,000
Electricity	32,600
Repairs and maintenance	9,360
Loan interest	5,450
Janitorial	4,100
Telephone	1,215
Office	350
	94,075
Annual surplus	2,504,000
Accumulated surplus, beginnin	
Accumulated surplus, end of ye	ear \$ <u>2,504,000</u>

Each Municipality must now decide the amounts that are to be recorded in their financial statements pertaining to the operations of the arena. Upon completion of the municipal reporting entity checklist, **it was determined that no one municipality controls the arena**; therefore, the arena operations are not consolidated with the financial statements of the Municipalities.

The arena board must now be evaluated to determine if it qualifies as a **Government Partnership**:

	Yes	No
 i) The partners cooperate toward achieving significant clearly defined common goals. 	X	
The partners cooperate towards the provision of a shared recreational service at a reasonable and affordable price.		
ii) The partners make a financial investment in the government partnership.	X	

Appendix 4 Examples: Government Partnership and GBP Checklist Municipalities made significant financial The а investment during the construction of the arena. iii) The partners share control of decisions related to the financial Х and operating policies of the government partnership on an on-going basis. Decisions relating to the operations of the arena are made through the Board where each municipality has equal representation. iv) The partners share, on an equitable basis, the significant risks X and benefits associated with the operations of the government partnership. The arena is meant to be self supporting, however, any losses incurred by the Arena Board will be covered by

Now that it has been determined that the municipality is participating in a government partnership, a further assessment must be made as to whether the venture is a **Government Business Partnership**.

the participating municipalities based on their respective

capital contributions.

A **Government Business Partnership** is a government partnership that has all of the following characteristics:

	Yes	Νο
 i) It is a separate legal entity with the power to contract in its own name and that can sue and be sued. 	X	
The Board is a legally incorporated entity.		
ii) It has been delegated the financial and operational authority to carry on a business.	X	
The Board operates the arena on the basis of a self- sustaining business.		
iii) It sells goods and services to individuals and organizations other than the partners as its principal activity.	X	
Substantially all revenues are earned from the general public.		
iv) It can, in the normal course of its operations, maintain its operations and meet its liabilities from revenues received from sources other than the partners.	X	
The arena is completely self-funded through operations.		

Based on the answers to the above questions, the government partnership being evaluated is a **Government Business Partnership**.

Each municipality would account for its investment in the arena on the modified equity basis of accounting. The financial statements of each municipality would include the following amounts:

	Lead Cove	Daniel's Cove	Cooks Cove
Statement of Financial Position			
Investment in regional Arena Capital Contribution Pro-rata share of earnings	\$ 200,000 <u>1,600</u> 201,600	\$ 175,000 	\$ 125,000
Statement of Operations			
Share of arena earnings	\$ <u>1,600</u>	\$ <u>1,400</u>	\$ <u>1,000</u>

The journal entries that would be recorded in the accounting records of Lead Cove are as follows:

Dr	Investment in Arena	\$200,000	
Cr	Cash		200,000

To record initial investment in the regional arena

Dr	Investment in Arena	\$1,600	
Cr	Share of Arena Earnings		1,600

To record pro-rata share of arena earnings

Regional Waste Management Facilities

The municipalities of Poole, Leeds and Manchester agreed to cooperate on the use of a regional landfill site. A regional waste management board was set up to oversee the operations of the landfill. There are four seats on the waste management board. Of these four seats, one is held by the landfill manager and the remaining three are allocated to a council representative from each municipality.

The costs of operating the landfill site are paid by each municipality through tipping fees. Any revenue shortfall is to be covered by the participating municipalities based on their respective use of the landfill. The landfill was designed to hold 100,000 tons of solid waste and was expected to last for 20 years until full.

It is now the end of year five and the waste management board has finalized its financial statements for the year.

	Regional Waste Management Board Statement of Financial Position December 31, 20XX		
Financial Assets Cash Accounts receivable		\$ 1,500 <u> 2,150</u> <u> 3,650</u>	
Liabilities Accounts payable and accrued liabilities Accrued salaries and vacation pay Estimated closure costs Estimated post-closure costs		1,200 700 12,000 <u>27,500</u> 41,400	
Net Debt		(37,750)	
Non-Financial Assets Prepaid expenses		750	
Accumulated Deficit		\$ <u>(37,000</u>)	

Regional Waste Management Board

Statement of Operations December 31, 20XX

Revenues

Tipping fees	
Poole (2,000 tons)	15,000
Leeds (1,800 tons)	13,500
Manchester (1,300 tons)	9,750
	38,250

Expenses	
Salaries and benefits	32,000
Increase in closure costs	1,350
Increase in post closure costs	3,360
Maintenance	2,550
	39,260
Annual deficit	(1,010)
Accumulated surplus, beginning of year	<u>(35,990</u>)
Accumulated deficit and of year	¢ (27.000)
Accumulated deficit, end of year	φ <u>(37,000</u>)

Each Municipality must now decide the amounts that are to be recorded in their financial statements pertaining to the operations of the regional landfill. Upon completion of the municipal reporting entity checklist, **it was determined that no one municipality controls the landfill**; therefore, the landfill operations are not consolidated with the financial statements of the Municipalities.

The regional waste management board must now be evaluated to determine if it qualifies as a **Government Partnership**:

	100	110
 i) The partners cooperate toward achieving significant clearly defined common goals. 	X	
The partners cooperate for the purpose safely and efficiently disposing of solid waste materials.		
ii) The partners make a financial investment in the government partnership.	X	
The partners pay tipping fees and subsidize any shortfalls in operating revenues.		
iii) The partners share control of decisions related to the financial and operating policies of the government partnership on an on-going basis.	X	
The partners share equally in the decision making of the entity through the Board.		
 v) The partners share, on an equitable basis, the significant risks and benefits associated with the operations of the government partnership. 	X	
Any funding shortfalls are paid by the partners based on their respective use of the facility.		
Now that it has been determined that the municipalities are participating partnership, a further assessment must be made as to whether the venture	• •	

Business Partnership.

A **Government Business Partnership** is a government partnership has all of the following characteristics:

 i) It is a separate legal entity with the power to contract in its own name and that can sue and be sued. 	Yes X	No
The Regional Waste Management Board is a legally incorporated entity.		
 ii) It has been delegated the financial and operational authority to carry on a business. 	X	
It has been delegated the authority to collect tipping fees from partners to fund the operations and maintenance of a landfill site.		
iii) It sells goods and services to individuals and organizations other than the partners as its principal activity.		X
The Board only provides services to partnering municipalities.		
iv) It can, in the normal course of its operations, maintain its operations and meet its liabilities from revenues received from sources other than the partners.		X
100% of revenues are earned from partners through either tipping fees or allocations to cover funding		

Based on the answers to the above questions, the government partnership being evaluated is not a **Government Business Partnership**.

Each municipality would account for its investment in the government partnership using the proportionate consolidation method. Since any revenue shortfall is to be covered by the participating municipalities based on their respective use of the landfill, the proportionate consolidation will be based on the amount of solid waste dumped by each of the municipalities.

	Tons	%
Poole Leeds Manchester	20,800 18,200 <u>13,000</u>	40.00 35.00 25.00
	<u> 52,000</u>	100.00

shortfalls.

The financial statements of each municipality would include the following amounts:

Statement of Financial Position	Poole 40%	Leeds 35%	Manchester 25%
Financial Assets Cash Accounts receivable	\$ 600 <u> 860</u> <u> 1,460</u>	\$ 525 <u>752</u> 1,277	\$ 375 <u>538</u> 913
Liabilities Accounts payable Accrued salaries Estimated closure costs Estimated post-closure costs	480 280 4,800 <u>11,000</u> 16,560	420 245 4,200 <u>9,625</u> 14,490	300 175 3,000 <u>6,875</u> 10,350
Net Debt	(15,100)	(13,213)	(9,437)
Non-Financial Assets Prepaid expenses	300	263	187
Accumulated Deficit	\$ <u>(14,800</u>)	\$ <u>(12,950</u>)	\$ <u>(9,250</u>)
Statement of Operations			
Revenues Tipping fees	\$ <u>15,300</u>	\$ <u>13,387</u>	\$ <u>9,563</u>
Expenses Salaries and benefits Increase in closure costs Increase in post closure costs Maintenance	12,800 540 1,344 <u>1,020</u> 15,704	11,200 472 1,176 <u>893</u> 13,741	8,000 338 840 <u>637</u> 9,815
Annual deficit Accumulated surplus, beginning of year	<u>(404</u>) <u>(14,396</u>)	<u>(354</u>) <u>(12,596</u>)	<u>(252)</u> (8,998)
Accumulated deficit, end of year	\$ <u>(14,800</u>)	\$ <u>(12,950</u>)	\$ <u>(9,250</u>)

The amounts would be included using a consolidation spreadsheet and not through the use of journal entries. At the end of each year, the municipalities will have to proportionately consolidate their respective share of financial statements of the Regional Waste Management Board on a line by line basis.

Provincial Municipal Shared Capital Works Project

iii) .

iv) i

The Municipality of Tucker's Town entered into a partnership with the provincial government to upgrade the Town's water supply so that sufficient water pressure would exist when the fish plant was operating in the summer. With the old water supply, once the plant started operations in the morning, there was a water pressure drop which severely restricted water flow to the areas of the Town at higher elevations. To correct this problem, the province has approved capital funding under the Provincial Municipal Shared Capital Works Program. The province is contributing 90% of the funding and the Town is responsible for the remaining 10%. The Town intends to finance its share of the project using debt financing. The project involves the upgrading of the water distribution system and the construction of a new pumping station. The estimated total cost of the project is \$450,000.

Before preparing its financial statements, the Town must determine whether this project is a true partnership for the purpose of reporting the associated costs.

The Town must evaluate whether the project has the characteristics of a Government Partnership:

•

...

	The partners cooperate toward achieving significant clearly defined common goals.	X	
	The partners cooperate towards the construction of the infrastructure and the related enhancement in services construction will provide.		
ii)	The partners make a financial investment in the government partnership.	X	
	Each partner contributes funding based on the applicable shared capital works funding ratio.		
	The partners share control of decisions related to the financial and operating policies of the government partnership on an on-going basis.		X
	The province participates in the decision making only up until the point when the initial tender is awarded for the construction of the infrastructure. All on-going decisions are the responsibility of the Municipality.		
v)	The partners share, on an equitable basis, the significant risks and benefits associated with the operations of the government partnership.		X
	Once the infrastructure has been constructed there is no longer any benefit to the Province.		

Based on the above assessment, the project <u>is not</u> a government partnership for PSAB purposes. Therefore, the Town would record the provincial government's contribution to the project as revenues and capitalize the full cost of the project as a tangible capital asset.

The journal entry to record the project is:

Dr	Tangible Capital Assets	\$ 450,000	
Cr	Long-term Debt		\$ 45,000
Cr	Provincial Capital Grant revenues		\$ 405,000

Table of Contents Part 2

SECTIO	N 1 - Obligations	2
	Liabilities Contingent Liabilities Contractual Obligations PSAB's Obligations Decision Tree	. 4 9
SECTIO	N 2 - Environmental Liabilities	12
2.1 2.2 2.3 2.4 2.5 2.6 2.7 2.8 2.9 2.10	Background Environmental Liabilities Decision Tree Identify Potential Contaminated Site Is Environmental Remediation Required? Is the Municipality Obligated to Accept Responsibility? Can the Liability be Reasonably Estimated? Accounting for Environmental Liabilities Critical Dates for Identifying Environmental Liabilities Accounting Entries for Environmental Liabilities Examples.	13 15 15 16 16 17 18 18
SECTIO	N 3 - Landfill Closure and Post-Closure Costs (PS3270)	21
3.1 3.2 3.3 3.4 3.5 3.6 3.7 3.8 3.9 3.10	What are Closure Costs? What are Post-Closure Costs? Waste Disposal Ground Regulations in Newfoundland and Labrador Provincial Solid Waste Management Strategy Funding of Landfill Closure Costs Recognition Measurement How Should You Estimate the NPV of Total Expenditures? Examples Disclosure Requirements	22 22 25 25 26 27 28
Glossar	y of Terms and Acronyms	34
Appendix	1 - Examples: Liabilities Post Employment Costs for Health Benefits Pension Liabilities	36
Appendix	2 - Examples: Contingent Liabilities Lawsuits Loan Guarantees	41

Appendix 3 - Examples	: Contractual Obligations		
	Engineering Consultant fees		
	Capital Leases	45	
	Contract for Snow Clearing Services	46	
Appendix 4 - Examples	: Environmental Liabilities		
	Fuel Leak at the Depot	48	
	Wastewater Collection System Leak	49	
Appendix 5 - Newfoundland and Labrador Landfill Site Listing			
Appendix 6 - Map of Ne	wfoundland Waste Management Zones	57	
Appendix 7 - Examples	: Landfills	59	
	Closure Costs	59	
	Post-Closure Costs	61	
	Amortization of Landfill Land Costs	64	
Appendix 8 - Town of H	amilton - Example 1: Closed Landfill	65	
Appendix 9 - Town of H	amilton - Examples 2 & 4: Open Landfill	66	
Appendix 10 - Town of	Hamilton - Example 3: Change in Cost Estimates	67	
Appendix 11 - Town of Hamilton - Example 56			
Appendix 12 - Present Value and Future Value Tables			

Background

Part 2 of this manual has been prepared as a useful and practical reference to help municipal administrators and Councillors in Newfoundland and Labrador recognize, measure, and disclose their municipality's environmental liabilities. This includes Public Sector Accounting Board (PSAB) recommendations on liabilities (PS3200), contingent liabilities (PS3300), contractual obligations (PS3390) and solid waste landfill closure and post-closure liabilities (PS3270).

This manual has been prepared by the Department of Municipal Affairs, PSAB Implementation Working Committee and has been approved by the PSAB Implementation Steering Committee. This manual is not meant to be the final authoritative source on obligations, environmental liabilities and landfill closure and post-closure costs. The CICA Handbook is the final authoritative source.

Part 2 of the manual is divided into 3 main sections:

Section 1 - Obligations

Section 1 provides an overview of the various types of obligations:

- 1. Liabilities;
- 2. Contingent liabilities; and
- 3. Contractual obligations.

This section describes the basic characteristics of a liability and what makes a liability different from a contingent liability or a contractual obligation. Finally, this section covers the accounting and disclosure requirements for contingent liabilities and contractual obligations. Examples are provided to illustrate the disclosure requirements.

Section 2 - Environmental Liabilities

Section 2 describes the approach a municipality should use to evaluate if it is responsible for the remediation of a contaminated site. Then, if the municipality is responsible for the contaminated site, how should it account for and disclose the environmental liability. Examples of the accounting treatment and required disclosures are provided. This section also provides guidance on the measurement of the environmental liability as well as examples of the common types of contaminated sites found in municipalities.

Section 3 - Landfill Closure and Post-Closure Liabilities

Section 3 provides an overview of the accounting standards for solid waste landfill closure and post-closure liabilities (PS3270). This section will review waste disposal ground regulations in Newfoundland and Labrador, and with numerous examples, demonstrate how landfill liabilities should be measured. Finally, this section covers the disclosure requirements for landfill closure and post-closure cost and provides examples.

Section 1 – Obligations

Obligations represent a duty or responsibility to others, leaving the government little or no choice to avoid the settlement of which is expected to decrease the available assets of the government.

The difference between liabilities, contingent liabilities and contractual obligations can be summarized as follows:

- Liabilities are present obligations;
- Contingent liabilities are possible obligations that **may become** liabilities; and
- Contractual obligations are obligations that will become liabilities in the future.

1.1 Liabilities (PS3200)

It is critical to understand the definition of a liability. There are currently no specific PSAB recommendations on environmental liabilities; yet federal, provincial, territorial and municipal governments across Canada have been accruing environmental liabilities for many years. Governments do so because "environmental liabilities" meet the definition of a liability.

Definition of a Liability (PS3200.04)

Liabilities are present obligations of a government to others arising from past transactions or events, the settlement of which is expected to result in the future sacrifice of economic benefits. Liabilities have three essential characteristics:

- a) They represent a duty or responsibility to others, leaving a government **little or no discretion to avoid settlement of the obligation**;
- b) The duty or responsibility to others entails settlement by future transfer or use of assets, on occurrence of a specified event; and
- c) The transactions or events obligating the government have already occurred.

Obligations are not liabilities unless they meet **all three** characteristics of a liability.

Discretion is the ability to make choices. Little or no discretion to avoid settlement means that a government has no realistic alternative but to settle the obligation.

Through by-laws, councils establish reserve funds for general and specific purposes. The obligation to contribute to a reserve is <u>not</u> a liability because municipalities do have discretion to avoid settlement. Councils can simply revoke the by-law rather than contribute to the reserve fund.

Sacrificing economic resources represents a duty or responsibility to others to a **future transfer** or use of assets on the occurrence of a specified event. The obligation must be to a third party but it is not necessary to know the specific identity of the party or parties involved. The timing of the sacrifice of economic benefits in the future must be specified such as a date in time or on the occurrence of a specified event.

"Due to other funds" are <u>not</u> liabilities because the obligations are not due to third parties. Further, there is normally no specified time set as to the settlement of the obligation.

Consequently "Due from other funds" are not assets. When preparing financial statements, "due to" and "due from" accounts should always be eliminated against each other.

The occurrence of an **obligating event** before the financial statement date distinguishes a present obligation from a future obligation. For most liabilities the obligating event usually occurs at the point of exchange (i.e. delivery of goods or services).

Purchase commitments or open purchase orders at year end are <u>not</u> liabilities, and should not be accrued, because there is no obligating event requiring the sacrifice of future assets.

Payment in advance for goods and services not received as of the year end date are prepaid expenses.

Recognition Criteria (PS3200.03)

Liabilities should be recognized in the financial statements when:

- a) There is an appropriate basis of measurement; and
- b) A reasonable estimate can be made of the amount involved.

Information on liabilities that cannot be recognized should be disclosed along with the reason(s) why a reasonable estimate cannot be made of the amount involved.

	Delivery of culverts to a municipality by a supplier (i.e. accounts payable)	Holiday time/pay earned by a municipal employee (i.e. accrued liability)
Obligating event has occurred?	 Delivery of culverts is the obligating event 	 Employee has worked the required number of hours to earn time or pay for holidays
Sacrifice of assets on a specific date or on the occurrence of a specified event	 Payment of invoice by cheque or cash Payment due within 30 days of the receipt of invoice 	 Pay out holiday time accrued when the employee leaves Provide time off with pay when the employee chooses to take holidays
Duty or responsibility with little or no discretion to avoid the obligation	 Supplier will repossess the culverts and in the future will only do business on a cash basis 	 Provincial regulations require employers to pay for holidays Employee will quit and/or may threaten legal action

Examples of Liabilities (for additional examples see Appendix 1)

1.2 Contingent Liabilities (PS3300)

Definition of a Contingent Liability (PS3300.03)

Contingent liabilities are possible obligations that may result in the future sacrifice of assets from existing conditions or situations involving uncertainty. That uncertainty will ultimately be resolved when one or more future events, not wholly within the government's control, occurs or fails to occur. Resolution of the uncertainty will confirm the incurrence or non-incurrence of a liability.

Contingent liabilities are distinct from liabilities as there is a degree of uncertainty as to whether a present obligation exists at the financial statement date. There are two distinct characteristics of contingent liabilities:

- a) There must be an existing condition or situation; and
- b) There must be an **expected future event that will resolve the uncertainty** as to whether a present obligation exists.

For a contingent liability to exist there must be an **existing condition or situation** such as a loan guarantee or ongoing lawsuit. There must also be an **expected confirming future event that will end the uncertainty**. The confirming future event will settle whether a liability exists at the balance sheet date. A government may be involved in a lawsuit but it is only the settlement of the suit (i.e. future event) that will confirm that the government has a liability.

Levels of Uncertainty

The existence of a liability at the financial statement date depends on the probability of the future event occurring or not occurring.

The level of uncertainty can be expressed by a range of probabilities:

a) **Likely** – the probability of the confirming future event occurring is high.

Legal counsel has advised that a settlement should be reached with a plaintiff because they have a strong case.

b) **Unlikely** – the probability of the confirming future event occurring is slight.

A lawsuit is viewed by legal counsel to be frivolous and has no basis in law.

c) **Not determinable** – the probability of the confirming future event occurring cannot be determined.

Legal counsel views the lawsuit as possibly being settled in favour of either party.

Assessing the likelihood of future confirming events is a matter of judgment. Consideration should be given to all information available prior to the completion of the financial statements. This includes the period subsequent to the date of the financial statement to the date of the auditor's report.

Recognition of Contingent Liabilities (PS3300.15)

A contingent liability should be recognized in the financial statements when:

- a) It is likely that a future event will confirm that a liability has been incurred at the date of the financial statements; and
- b) The amount can be reasonably estimated.

PSAB does not allow for the recognition or accrual of a contingent gain. Gains must be realized to be recognized in the financial statements.

Disclosure

PS3300.27:

The existence of a contingent liability at the date of the financial statements should be disclosed in the notes to the financial statements when:

- a) The occurrence of the confirming future event is likely but the amount of the liability cannot be reasonably estimated;
- b) The occurrence of the confirming future event is likely and an accrual has been made, but there exists an exposure in excess of the amount accrued; or
- c) The occurrence of the future event is not determinable.

In current financial statements, some municipalities may have disclosed employee holidays' payable as a contingent liability. This treatment of holidays' payable will not be acceptable under PSAB.

Holidays' payable should be accrued as a liability because:

- 1. The occurrence of the confirming future event is likely. Everyone takes holidays eventually and even if they don't, holiday balances have to be paid out when the employee leaves or retires.
- 2. The amount can be reasonably estimated.

PS3300.28

The following information should be disclosed in notes or schedules relative to a contingent liability, unless its occurrence is unlikely:

- a) The nature;
- b) The extent, except in those cases where the extent cannot be measured or disclosure of the extent would have an adverse effect on the outcome;
- c) The reasons for any non-disclosure of the extent; and
- d) When an estimate of the amount has been made, the basis for that estimate.

Loan Guarantees (PS3310)

A loan guarantee is a promise to pay all or part of the principal and/or interest on a debt obligation in the event of default by the borrower. Loan guarantees are commonly used by governments to achieve policy objectives such as supporting regional development or giving economic assistance to certain industries.

A loan guarantee is a contingent liability of the municipality.

PS3310.05

Government loan guarantees should be accounted for and reported as contingent liabilities in the government's summary financial statements.

PS3310.08

A provision for losses on loan guarantees should be established when it is determined that a loss is likely, and should be accounted for as a liability and an expenditure.

The provision for losses on loan guarantees should include the principal amount outstanding, accrued and unpaid interest if it is guaranteed. Amounts recoverable from the borrower and from the sale of assets pledged as security should be deducted from the provision. The provision should be determined using the best estimates available in light of past events, current conditions, and all the circumstances known at the date of preparation of the financial statements.

Under PSAB, municipalities will be required to consolidate organizations under their control and their proportionate share of government partnerships. See Part 1 of this reference manual on the Municipal Reporting Entity and Consolidations.

Only loan guarantees to organizations and individuals that are outside the municipal reporting entity need to be disclosed in the consolidated financial statements.

When preparing the consolidated financial statements it is not necessary to disclose the guarantees to controlled organizations and government partnerships. Upon consolidation, the organization or partnership's loans will already be included in the consolidated financial statements of the municipality.

The provision for loan losses should be reviewed on an ongoing basis. Any changes in the provision should be charged or credited to current year's expenditures.

Guaranteed Loans to be Repaid From Future Municipal Assistance:

Sometimes governments guarantee a loan and then provide a funding commitment to the borrower to repay the guaranteed loan. In effect, the government has assumed the obligation for repayment of all or a portion of the guaranteed loan. This is often commonly referred to as third party loans.

Guaranteed loans that will be repaid from future funding from the municipality have to be accounted for as a liability and expense of the municipality in the period the funding commitment is provided, unless it can be established that the borrower can repay the loan from its own existing revenues. PSAB's recommendations on third party loans need only be applied if the borrower is outside the municipal reporting entity. If the borrower is part of the municipal reporting entity, then the loan will be included in the consolidated financial statements anyway.

On March 1, 2009 a local council voted to guarantee a loan of \$150,000 for replacement of an air supported structure for the Tucker's Tennis Club. In addition, the council elected to commit funding of \$15,000 a year over the next 10 years to the Tennis Club to repay the loan. The first grant to the Club is due October 31, 2009. The municipality does not control or have shared control in the Tennis Club. Without the assistance from the municipality, the Tennis Club does not have significant revenues of its own to pay for the replacement cost of the structure.

Under PSAB, the 2009 accounting entries for the loan would be:

Dr. Expense – Recreation Grant Cr. Liability – Funding to Tennis Club	\$150,000	\$150,000		
To record future government assistance to Tennis Club for guaranteed loan at March 1/09				
Dr. Liability – Funding to Tennis Club Cr. Cash	\$ 15,000	\$15,000		
To record 2009 grant payment to Tennis Club at October 31/09				

Contingent Liabilities – Recognition/Disclosure Matrix

The following table summarizes the accounting treatment for contingent liabilities.

Probability of the confirming future event	Amount of the liability <u>can</u> be reasonably estimated	Amount of the liability <u>cannot</u> be reasonably estimated
Likely	Accrue in the F/S	Disclose in the notes
Not Determinable	Disclose in the notes	Disclose in the notes
Unlikely	No action required	No action required

For examples on contingent liabilities see Appendix 2.

Examples of Note Disclosure for Contingent Liabilities:

Below are examples of disclosure for contingent liabilities taken from actual financial statements:

Probability Amount of the liability can be reasonably estimated		Amount of the liability cannot be reasonably estimated	
Likely	Dec 31/06 – City of St. John'sSt. John's Transportation Commission is contingently liable for claims below \$50,000 which are not covered under its current insurance policy. At December 31, 2006 a provision of approximately \$347,500 has been recorded as a result of known claims.March 31/07 – Province of Newfoundland and LabradorUnder the loan guarantee component of the Newfoundland and Labrador Student Loans Program, the Province has issued guarantees totalling \$0.1 million. Under the debt reduction component of the Program, the Province is contingently liable for probable grants totalling \$24.3 million. An amount of \$18.2 million has been recorded as a provision for probable grants related to student loans due to the debt reduction program.	Dec 31/07 – Town of Stephenville The Town is financing costs associated with repairing damages caused by the 2006 flooding. The costs incurred to December 31, 2007 have been accrued in the Town's financial statements; a corresponding amount, net of funding received to date, has been recorded as a receivable. Any amount not recovered will be accounted for in the year determined.	
Not Determinable	Dec 31/06 – Town of Marystown The Town has received a claim relating to property expropriated in 1978 and subsequently sold. The Town has accrued \$75,000 as its estimate of the cost to settle the claim. The claim is the subject of litigation and the final settlement amount is not determinable but is estimated to be in the range of \$75,000 to \$700,000.	<u>Dec 31/07 – City of Corner Brook</u> A number of claims have been filed against the City for various reasons; the City is denying liability and defending any actions accordingly. No provisions have been made in the financial statements for any losses that may result from the claims; losses, if any, to the City will be accounted for in the year liability is established. The City will seek to recover any losses from its insurance carrier. <u>Dec 31/07 – Town of Conception Bay South</u> The Town has received notices of claims or intent to claim of approximately \$390,000 and certain other claims with unspecified damages. No provision has been made for these claims either because the Town is not expected to incur any significant liability, or because an estimate of loss, if any, is not determinable at this time.	
Unlikely	No action required.	No action required.	

1.3 Contractual Obligations (PS3390)

Contractual obligations are obligations of the government **that will become liabilities** in the future when the terms of the contracts and agreements are met. Contractual obligations are distinct from liabilities as there has been no past transaction or event obligating the government at the balance sheet date.

Contractual obligations are distinct from contingent liabilities as **there is no uncertainty** to the obligations existence. Contractual obligations are often commonly referred to as commitments.

Contractual obligations do not include a municipality's obligations related to provide services such as police, fire protection, waste collection, and water and sewer services.

Disclosure

Disclosure of contractual obligations relates to the unperformed portion of the contracts.

PS3390.08

Information about a government's contractual obligations that are significant in relation to the current financial position or future operations should be disclosed in the notes or schedules to the financial statements and should include descriptions of their nature and extent and the timing of the related expenditures.

Determining what represents a significant contractual obligation is a matter of professional judgment. What would be considered significant by one municipality could be viewed as insignificant by a larger municipality.

For municipalities there are two key factors to consider:

- 1. Is the level of the expenditures significant when compared to the overall operations of the municipality?
- 2. How long is the commitment?

The leasing of office space for the next ten years would likely represent a significant commitment for most municipalities. The leasing of a photocopier for three years may not.

Contractual obligations that would be disclosed include, but are not limited to, contractual obligations that:

- a) Involve a high degree of speculative risk;
- b) Involve expenditure levels that are abnormally large to the usual government operations; and
- c) Commit the government for a considerable period of time in the future.

For examples on contingent liabilities see Appendix 3.

Examples of Note Disclosure for Contractual Obligations:

Below are examples of disclosure for contractual liabilities taken from actual financial statements:

Operating Obligations

Dec 31/07 – Town of Burin

The Town is committed to the following minimum annual payments for the lease of office, fax and postage equipment and the annual contracts including garbage collection, animal control, and heating for each of the next three years:

<u>Equipment</u>	<u>Contracts</u>
\$15,005	\$89,880
\$8,165	\$89,880
\$2,550	
	\$15,005 \$8,165

Dec 31/07 – Town of Conception Bay South

The Town is committed to minimum annual lease payments for vehicles, equipment, and office space in each of the next five years as follows:

2011	\$133,924
2012	\$101,583
2013	\$45,266
2014	\$13,564
2015	\$4,056

Capital Obligations

Dec 31/07 – Town of Clarenville

The Town entered into agreements with the Provincial government and the Local School Board Authority to administer the construction of a facility to host the 1994 Newfoundland and Labrador Winter Games. Government funding for this project totalling \$2,380,000, consisted of a government guaranteed loan in the amount of \$1,300,000, and capital grants totalling \$1,080,000, received over a three year period. The government guaranteed loan is financed through the Newfoundland Municipal Financing Corporation, with all payments being the responsibility of the Department of Municipal Affairs until such time as the debt is retired. Funds advanced under the guarantee will be repaid from allocations under the School Construction Program as funds become available. Neither the Winter Games facility nor the government guaranteed loan is reflected in the Town's financial statements as of December 31, 2007.

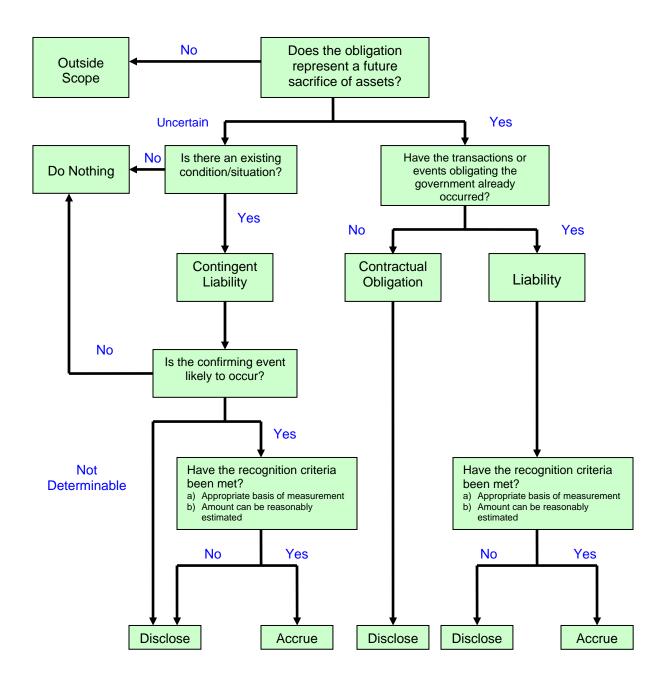
March 31/07 – Province of Newfoundland and Labrador

Contractual obligations to outside organizations in respect of contracts entered into before 31 March 2007 amount to \$389.1 million, of which \$212.0 million is for capital projects, \$55.1 million for lease payments, \$44.1 million for information technology services, \$24.2 million for energy savings projects, \$17.0 million for ferry services, \$14.5 million for forestry related projects, \$5.0 million for phone services, and other agreements of \$17.2 million. These contractual obligations will become liabilities when the terms of the contracts are met. Payments in respect of these contracts and agreements for the Consolidated Revenue Fund are subject to the voting of supply by the Legislature.

1.4 PSAB's Obligations Decision Tree

PSAB has designed a decision tree to help financial statement preparers decide if:

- a) an obligation is a liability, contingent liability or contractual obligation; and
- b) whether the obligation should be accrued or disclosed in the notes to the financial statements.



Section 2 – Environmental Liabilities

All municipalities in Newfoundland and Labrador should report their environmental liabilities in their financial statements in accordance with PSAB's recommendations for liabilities and contingent liabilities effective January 1, 2009.

The accounting for environmental liabilities is independent from the decisions surrounding the funding of these liabilities. The determination of the liability amounts should not be influenced by the availability of funding. Under PSAB you have to record all your liabilities regardless of whether you have funded/budgeted for the liabilities.

2.1 Background

The Department of Environment and Conservation is responsible for the enforcement of all regulations covered by the:

- a) Environmental Protection Act (EPA);
- b) Water Resources Act (WRA)

The key act is the EPA. All acts and regulations can be downloaded from the House of Assembly of Newfoundland and Labrador web-site at http://www.assembly.nl.ca/.

In 2005, the Department of Environment and Conservation updated the contaminated site cleanup criteria in a document entitled The Guidance Document for the Management of Impacted Sites. The guiding principles of which include the following:

- Human health and the environment must be protected through the timely and proper management of impacted sites;
- Site assessment and remediation is based on the Polluter Pays principle.
- The person responsible for an impacted site must ensure that the Site Management Process is taken to completion to provide protection of human health and the environment;
- The Site Professional providing the technical expertise and final documentation is responsible for the results of their work;
- The public may require final documentation of the Site Professional's opinion stating the condition and safe uses of the site and the Province's confirmation of satisfactory completion of the Site Management Process; and
- The management process should be applicable to all impacted sites and provide a flexible, cost-effective approach to achieving closure on identified impacts

The Guidance Document provides a clear process for the remediation of contaminated sites in order to mitigate the risks of further damage to human health, or the environment, and where practicable, to restore the site to operation. Upon identification of a contaminated site the following process is followed:

- 1. Initial Actions;
- 2. Site Assessment;
- 3. Remedial Action Planning; and
- 4. Remediation and Closure.

Under the Guidance Document for the Management of Impacted Sites, the principle of "polluter pays" applies to ensure, where possible, the party responsible for the contamination bears the cost of site remediation. Therefore, if a municipality is the polluter it may be responsible for the remedial action.

In cases where the "polluter" cannot be located, or has no financial resources, the site becomes an orphaned and abandoned (O&A) site. The Province is not legally responsible for the remediation of O&A sites; however, in rare cases where a contaminated site is identified that a potential threat to human health is imminent, then they may be pay for costs for site remediation.

2.2 Environmental Liabilities Decision Tree

There is a logical thought process that all municipalities need to follow in order to evaluate if they have an environmental liability:

- 1. Do we have any potential contaminated sites?
- 2. Is remediation required?
- 3. Is the municipality obligated to accept responsibility for the remediation costs?
- 4. Can the liability be reasonably estimated?

A decision tree has been designed to illustrate the thought process in dealing with potential environmental liabilities.

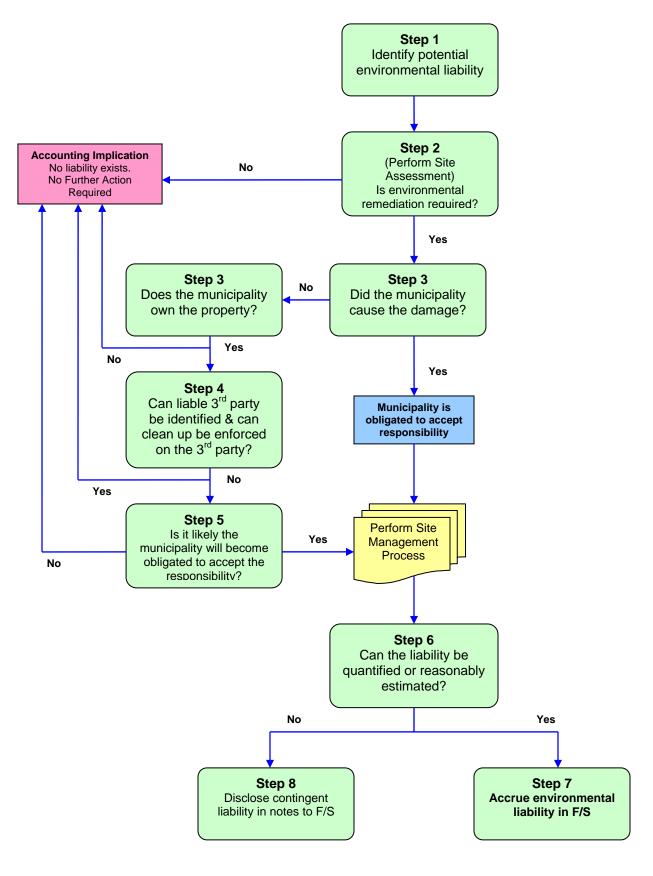
Obligating Event

As with all liabilities, there must be an obligating event before a municipality is deemed to be responsible for remediation of the environment. The date of the obligating event is significant because it determines which accounting period the remediation costs should be accrued.

For environmental liabilities, <u>the obligating event occurs when the municipality accepts</u> <u>responsibility</u> for the remediation cost. The municipality may have to accept responsibility because it is either the polluter or it has elected to accept responsibility anyway. See steps 3 to 5 in the decision tree.

The obligating event **is not when the pollution occurs**. Even if a site has been contaminated for 20 years prior to its discovery, the municipality is not obligated for remediation cost until it has accepted responsibility or is deemed responsible.

Decision Tree: Environmental Liabilities



2.3 Identify Potential Environmental Liability – Step 1

Some common sites within a municipality where potential environmental liabilities can potentially be found are:

1. <u>Petroleum and Chemical Storage Facilities:</u>

Petroleum and chemical products are either stored in above-ground or below-ground tanks, drums or bags. Petroleum storage facilities could include past or present storage facilities or gas stations. Soil contamination can occur from the transfer of petroleum or chemicals into and out of the storage containers, or from leaky containers. The damage caused by underground containers can be quite serious because the leak may not be noticed for some time.

As per Section 22 of the Storage and Handling of Gasoline and Associated Products Regulations, 2003 under the Environmental Protection Act, in the event of a spill or leak from a vehicle, pipeline or storage tank system, the operator shall immediately notify the Department of Environment and Conservation and take the necessary steps for cleaning and restoring the contaminated site.

2. Landfills:

Soil contamination from landfills can be the result of improper handling and disposal of solid waste. Landfill closure and post-closure costs, covered in section 3, are a separate environmental liability from contamination caused by landfills.

3. Buildings:

Asbestos and mold can pose serious damage to human health. Asbestos is commonly found in older buildings as insulation for pipes. Asbestos is not viewed as an environmental liability as long as it is properly wrapped and not disturbed. However, when renovations or repairs are needed, the asbestos may have to be removed and properly disposed. If the building is being demolished, the asbestos must again be properly disposed.

There are many other potential environmental liabilities besides the aforementioned. If you believe you have a potential environment liability, please contact the Department of Environment and Conservation to determine if further action is required.

2.4 Is Environmental Remediation Required? – Step 2

Upon notification of contamination on a site to the Department of Environment and Conversation, an Environmental Protection Officer (EPO) will gather site information to assess the type and extent of contamination and the receptors at possible risk. Based on the results of the investigation the EPO will:

- Determine and order any immediate, emergency remedial action that is required to protect human health or the environment;
- Determine the person responsible for emergency and remedial actions
- Determine if the initial response and cleanup is satisfactory
- Determine if the expertise of a Site Professional is required or if the necessary clean up can be completed without a Site Professional

If the EPO determines that a Site Professional is required then an Environmental Site Assessment (ESA) will have to be completed. ESA should be conducted by qualified professionals on all properties that have been exposed to contaminants. When contamination is identified, it should be reported to the Department of Environment and Conservation.

2.5 Is the Municipality Obligated to Accept Responsibility? – Steps 3 to 5

Under the EPA, the polluter is the party responsible for the remediation of the contaminated site. In some cases it may be difficult to assess blame. However, in circumstances where the municipality is clearly the polluter, the municipality will be required to pay the remediation cost.

The municipality is not necessarily obligated because it owns or occupies the contaminated site. The polluter may be the previous owner. The municipality may, however, feel obligated to remedy the contaminated site if the polluter cannot be located or does not have adequate resources.

2.6 Can the Liability be Reasonably Estimated? – Step 6

Remedial Action Plan

Remediation involves the development and application of a planned approach that monitors, removes, destroys, contains or otherwise reduces the availability of contaminants to the receptors. Simply put, it is the correction of the contamination. Often more than one Remediation Action Plan, or RAP, is available to choose from. Your choice of RAP or remediation strategy will have a direct effect on the costs involved. For more information on options for RAPs, please visit the Department of Environment and Conversation website at:

http://www.env.gov.nl.ca/env/Env/pollprev/contaminated_sites.asp

Calculation of Remediation Costs

Remediation costs involved should be consistent with your RAP. Remediation cost should be determined on a site by site basis.

Cost to be included in your estimate should include all incremental direct operating costs associated with the remediation. This could include legal fees, site assessment costs, consulting and engineering fees, and contractors. Only operating expenditures should be included in the estimate of the liability. Capital expenditures should not be included in the liability.

If there is more than one acceptable remediation strategy being considered, a range of remediation costs should be provided.

Time Value of Money

Many RAP could take several years before they are started or completed. If the timing and future amounts of remediation payments can be estimated, the measurement of the liability should be discounted for the time value of money.

If the environmental liability is recorded at a net present value, the accrued amount should be revalued annually. Any changes in the value of the liability should be recorded as a current period cost.

Recoveries From 3rd Parties

Remediation costs should be reduced by any recoveries from identified third parties as long as they can be convinced to accept responsibility for the obligation and have the resources available.

Remediation costs can be reduced by any partial or complete recoveries from insurance.

Remediation costs should not be reduced by any anticipated recoveries through lawsuits. They should only be reduced when the proceeds from lawsuits have been received.

2.7 Accounting for Environmental Liabilities – Steps 7 & 8

By using the characteristics of liabilities and contingent liabilities, and the potential results of the investigation by the EPO, a very simple matrix on how to account for environmental liabilities can be designed.

Remember that the criteria for accruing a liability are:

- a) There is an appropriate basis of measurement; and
- b) A reasonable estimate can be made of the amount involved.

Results of EPO Investigation	Remediation Costs <u>Can</u> be Reasonably Estimated	Remediation Costs <u>Cannot</u> be Reasonably Estimated
High priority; action is required	Liability – accrue in the F/S	Contingent Liability – Disclose condition in the notes to F/S
Medium priority; action is likely required	Liability – accrue in the F/S	Contingent Liability – Disclose condition in the notes to F/S
Low priority for action; action may be required	Contingent Liability – Disclose condition & amount in the notes to F/S	Contingent Liability – Disclose condition in the notes to F/S
No priority for action.	Do nothing	Do nothing
Insufficient information	Contingent Liability – Disclose condition & amount in the notes to F/S	Contingent Liability – Disclose condition in the notes to F/S

2.8 Critical Dates for Identifying Environmental Liabilities

Most municipalities will be recording and/or disclosing their environmental liabilities in accordance with PSAB recommendations on contingent liabilities for the first time in fiscal 2009. In order to comply with the time frame, the Department of Municipal Affairs recommends all environmental liabilities be **identified by December 31, 2008**.

Given the time constraints, it may be difficult for municipalities to obtain the services of an environmental consultant to complete an environmental site assessment by the December 31, 2009. Therefore, there is no downside to reporting a **potential** environmental liability even if an environmental site assessment has not been completed. Reporting a potential environmental liability does not mean that your municipality is accepting responsibility. If it eventually turns out that no remedial action is required, then nothing has been lost. If your reported site does require future remedial action, and your municipality accepts responsibility, then the remediation costs have already been recorded.

There is, however, a definite risk in not reporting a potential environmental liability. If you don't report a potential liability you will not be in compliance with PSAB GAAP and an auditor may issue a qualified opinion audit report on your financial statements. This could affect a municipality's funding from the Government as well as financial institutions.

2.9 Accounting Entries for Environmental Liabilities

An environmental liability should be accrued for all environmental liabilities where:

- 1. Remediation action is required or likely to be required;
- 2. The municipality is responsible for the contamination or feels obligated for the cost of the remediation; and
- 3. The cost of remediation can be reasonably estimated.

Under PSAB, it is only permissible to restate the opening surplus if:

- 1. For an accounting error; or
- 2. For a change in accounting policy.

The initial recording of environmental liabilities is a change in accounting policy. Municipalities will be permitted to record an environmental liability as an adjustment to the opening surplus at January 1, 2009 if the site was identified as having potential contamination at or prior to December 31, 2008.

Environmental liabilities discovered after December 31, 2008 will have to be recorded as a current cost of the period, even if the contamination existed before January 1, 2009. Environmental liabilities which arose from environmental damage occurring during 2009 would be an expense of 2009.

Contingent environmental liabilities should be disclosed in the notes to the December 31, 2009 financial statements. These liabilities will be accrued at a later date when more information is available, and will be charged to operations in the year of the accrual.

As time passes, estimates for remediation costs will have to be adjusted. Changes in the valuation of the liability should be treated as a change in accounting estimate. Changes in accounting estimates should be recorded as a current expense or gain of the period.

2.10 Examples (for additional examples see Appendix 4)

Example 1: Liability Exists and Was Identified at Dec 31/08				
Linda Anderson, the town clerk for the municipality of Devonshire, is in the process of identifyin potential environmental liabilities in her municipality. PSAB comes in force starting January 1, 2009 therefore, Linda must identify all her potential contaminated sites and notify the Department Environment and Conservation.				
Linda believes that the old abandoned fuel storage site may be contaminated. Linda notifies the Department of Environment and Conservation and an EPO determines that an ESA is required. Linda then hires an environmental consultant, who performs an ESA, and confirms that the property has soil contamination. Remediation action is required. The consultant prepares a RAP. Remediation costs are estimated to be \$100,000.				
It is now June 2009 and Linda wants to record the environmental liability. Her entry is:				
Dr. Opening surplus \$100,000 Cr. Environmental liabilities – Fuel Storage Site \$100,000				
To record the liability for remediation cost at January 1, 2009				
There were no changes to the estimate during 2009.				
In December 2010, Linda is informed that the estimate for the remediation cost of the old fuel storage site was too low. It is now estimated to be \$125,000.				
Linda's entry at December 31, 2010 is:				
Dr. Expense - Environmental Health Services \$25,000 Cr. Environmental liabilities – Fuel Storage Site \$25,000				

e

To increase the liability to \$125,000 at December 31, 2010

Example 2(a): Contingent Liability Was Identified at Dec 31/08

Linda Anderson, the town clerk for the municipality of Devonshire, is in the process of identifying potential environmental liabilities in her municipality. PSAB comes in force starting January 1, 2009; therefore, Linda must identify all her potential contaminated sites and notify the Department of Environment and Conservation.

Linda believes that the old abandoned fuel storage site may be contaminated. Linda notifies the Department of Environment and Conservation and an EPO determines that the property has soil contamination. However, more work will be required to determine if there is a threat to human health and the environment. If remediation action is required, it is estimated the cost will be \$100,000.

December 31/09 F/S - No Confirmation of Liability

By the spring of 2010 it is still not determinable if remediation of the site is required.

Linda, therefore, discloses the contingent liability in the notes to the financial statements at December 31, 2009.

December 31/10 – Confirmation of Liability

It is now the summer of 2010 and the December 31, 2009 financial statements have been released. A consultant has determined that remediation action is required for the fuel storage site. At December 31/10, Linda wants to record the environmental liability. Her entry is:

Dr. Expense - Environmental Health Services	\$100,000	
Cr. Environmental liabilities – Fuel Storage Site	\$	100,000

To record the liability for remediation cost at December 31/10

Example 2(b): Contingent Liability Was Identified at Dec 31/08

Example is the same as 2(a) but instead of getting confirmation of the liability after the release of the 2009 financial statements, the liability is confirmed before the release of the 2009 financial statements.

December 31/09 F/S - Confirmation of Liability

It is the early spring of 2010. The December 31, 2009 financial statements have not yet been released. A consultant has determined that remediation action is required for the fuel storage site. At December 31, 2009. Linda records the liability.

Dr. Opening surplus Cr. Environmental liabilities – Fuel Storage Site \$100,000 \$100,000

To record the liability for remediation cost at January 1/09

An Example of Note Disclosure for an Environmental Liability:

March 31/07 – Province of Newfoundland and Labrador

As a result of delivering its stated programs and initiatives, there are a number of sites throughout the Province which are considered potentially contaminated sites. A liability will be accrued in the financial statements when it has been determined that the Province is liable for a site which has become contaminated and where a reasonable estimate of the remediation costs can be made. To date, \$7.3 million has been recorded. Where it is uncertain as to whether an obligation exists for the Province to remediate a contaminated site, then information on any such sites will be disclosed as contingent liabilities.

As at 31 March 2007, while the Province is aware of a number of contaminated sites, the full extent of the remediation costs for these known sites is not readily determinable. Efforts are ongoing to identify any other potentially contaminated sites which are owned by the Province and to collect the information necessary to assess the extent or likelihood of any environmental damage. These efforts may result in recognizing environmental liabilities or disclosing contingent liabilities due to newly identified sites and/or changes in the assessments of currently known sites.

Section 3 – Landfill Closure and Post-Closure Costs (PS3270)

A landfill site is an area of land or excavation that receives household, commercial and industrial solid waste. Provincial regulations set out an environmental approval process for landfill sites. These regulations are available from the Government Service Centre. Landfill operators (i.e. municipalities) agree to certain obligations for closure and post-closure care of the site after it stops accepting waste.

PS3270 does not apply to the:

a) Development and construction cost of opening a new landfill site;

In order to put a licensed landfill into operation, a municipality spent \$400,000 on capital improvements. This included a new access road, fence, gate, scales and a small office. These capital expenditures should be capitalized as TCA – roads, land improvements, equipment, building, etc.

b) End use transformation costs (i.e. converting a closed landfill site into a park or transfer station); and

After closing its landfill, a municipality used the property for a transfer station. The estimated total expenditures for closing of the landfill were \$500,000. The purchasing of equipment and the cost of land improvements for the transfer station was \$250,000. The landfill liability should only include the closure costs. The transformation of the property into a transfer station should be capitalized as TCA – land improvements, equipment, etc.

c) Unforeseen and catastrophic events such as leachate contamination.

A municipality estimated that the total expenditures for closing its new landfill was \$250,000. During year 10 of the landfill operation, it was discovered that the neighbouring wells were contaminated and the water was unfit for human consumption. It was later discovered that the source of the contamination was the landfill. The remediation plan to prevent the leachate from continuing would cost \$600,000.

Therefore, in year 10 of the landfill operation, the municipality not only has a landfill closure liability but it also has an environmental liability of \$600,000.

Any contamination from a landfill site should be treated as a potential environmental liability as described in **Section 2**.

The PSAB recommendations on landfill closure and post-closure costs **apply to all operating and closed landfill sites** of municipalities, including entities under the control of municipalities or municipal government partnerships.

3.1 What are Closure Costs?

Closure cost includes all activities related to closing the landfill site:

- a) Final cover and vegetation; and
- b) The completion of facilities for:

- Drainage
- Leachate monitoring
- Water quality monitoring
- Monitoring and recovery of gas

3.2 What are Post-Closure Costs?

Post-closure costs include all activities related to monitoring the site after it no longer accepts waste:

- a) Acquisition of additional land for buffer zone
- b) Treatment and monitoring of leachate
- c) Monitoring of ground and surface water
- d) Ongoing maintenance of control and monitoring systems and final cover

The list of closure and post-closure activities is not exhaustive and may not apply in all circumstances. Closure and post-closure activities vary from landfill to landfill throughout Newfoundland and Labrador. Legislative and regulatory requirements should determine which activities to include in closure and post-closure costs.

3.3 Waste Disposal Ground Regulations in Newfoundland and Labrador

The Department of Environment and Conservation is responsible for the policy direction with respect to the *Environmental Protection Act 2002* and the Regulations under this Act within the province. The Government Services Centre is responsible for licensing, inspection, and enforcement services with respect to landfills as they relate to the EPA.

All acts and regulations can be downloaded from the from the House of Assembly of Newfoundland and Labrador web-site at http://www.assembly.nl.ca/.

The Government Services Centre classifies landfills by the risk level of the site, as defined in a report compiled in 2005 by an independent consultant. See Appendix 5 for a complete listing of landfills, their grouping, as well as anticipated closure dates based on the Provincial Solid Waste Management Strategy.

Class A Sites	Waste disposal sites which are considered high risk. Characteristics include one or more of the following: population served is greater than 10,000 and includes industrial, commercial, and institutional wastes, visible leachate, close to the community (less than 1.6 km), poorly maintained, and the potential for contamination (current or future) is high.
Class B Sites	Waste disposal sites which are considered moderate risk. Characteristics would generally be intermediate between Class A and C.
Class C Sites	Waste disposal sites which are considered low risk. Characteristics include: waste from residential sources only, no visible leachate, at least 1.6 km from the community it serves, well-maintained, and the potential for future contamination is low.

It should be noted that sites considered Class B or C may, in the future, be re-classified as Class A or B respectively, if new evidence or reassessment determines a greater environmental risk.

The clocure and	nact clocura r	conviroment for	oach landfill	alace is as follows:
The closure and	post-ciosule n		each ianuin	class is as follows:

	Class A Sites	Class B & C Sites
Closure Activities	Class A sites will require a detailed site specific closure plan to ensure environmental controls are in place during closure and for a period of time thereafter; the services of a consultant may be required for this work. The key elements of the plan would address: • Final cover design • Surface water and drainage control systems • Control of landfill gases • Control of landfill gases • Control and treatment of leachate • Groundwater management • Financial assurance plan • Potential land use • Post-closure plans must be sent to the appropriate regional office of the Government Service Centre for review and approval.	 Waste disposal sites in the province <u>must meet</u> the following basic minimum closure requirements. Grade and compact all waste material on the site, to the extent possible, with appropriate heavy equipment prior to the application of the final cover material. Cover all refuse (backfilled or open) with a minimum of 0.3 m of approved cover material, compacted to the extent possible. Construct the final cover in a manner which prevents surface ponding and seepage and directs surface drainage. As a guideline, the final grade should not exceed 15%. Note: there are additional requirements however they are not relevant to direct costs and have therefore been omitted. For a complete listing please contact the Department of Environment and Conservation.
Post- Closure Activities	 Maintenance of leachate detection Groundwater monitoring Landfill gas monitoring 	 Municipal officials shall inspect site annually for three years after closing. Regularly maintain the integrity and effectiveness of the final cover by filling and grading depressions in the cover and surface as necessary to correct adverse effects such as settling, subsidence, erosion, or animal burrowing. Also, keep drainage and flood control channels clear of accumulated debris. Maintain vegetation cover.

3.4 Provincial Solid Waste Management Strategy

In a news release from the Department of Municipal Affairs and Department of Environment and Conservation dated May 7, 2007, it was announced that the Provincial Government would be implementing a \$200 million multi-year Provincial Waste Management Strategy to ensure effective and efficient management of solid waste in Newfoundland and Labrador.

The strategy calls for three full service regional waste management facilities. One facility will be located in each of the Avalon peninsula, Central and Western areas of the island portion of the province. Programs will be developed for the zones in Labrador to meet the provincial waste management goals. Regional waste management authorities will be established in 15 waste management zones; 11 on the island portion of the province and four in Labrador, see Appendix 6 for a map of the zones.

"The environmental standards and regulations will govern the design, construction and operation of all new waste management systems and facilities, as well as the closure of existing non-contained waste management systems. Collectively they will ensure proper protection of the environment and public health and safety," said the Honourable Clyde Jackman, Minister of Environment and Conservation. "Furthermore, closure of 80 per cent of all waste sites in our province will undoubtedly reduce green house gases and have a positive impact on the environment."

The original strategy in 2002 identified 250 dump sites which have since been reduced to 200. It is anticipated that the number of dump sites in the province will decrease to 40 sites, which are located in remote locations, through the implementation of this initiative. The provincial strategy will aim to reduce the amount of waste going into landfills in the province by 50 per cent. This strategy is supported by the use of disposal bans and the development of new waste diversion programs.

Schedule for Advancing the Strategy	Projected Date of Completion
Eliminate open burning in the Avalon region	2007
Avalon regional site fully operational and eliminate open burning in Central region	2010
Central site fully operational and eliminate burning in Western region	2011
Western regional site fully operational	2016
All non-host waste management zones fully integrated	2020

The Provincial Solid Waste Management Strategy has the following time-line:

For more information on the Provincial Solid Waste Management Strategy visit the Multi-Materials Stewardship Board (MMSB) website at www.mmsb.nf.ca.

3.5 Funding of Landfill Closure Costs

The accounting for landfill closure and post-closure costs is independent from the decisions surrounding the funding of these liabilities. The determination of the liability amounts should not be influenced by the availability of funding. Under PSAB, a municipality has to record all liabilities regardless of whether they have funded/budgeted for the liabilities. If funding is available to municipalities it would be recorded as an account receivable, separate from the liability for closure and post-closure costs. A receivable would not be recorded until such time as funding has been approved.

To date, MMSB has been providing funding to assist in the closure of waste disposal sites. In the future, the Department of Municipal Affairs, Waste Management Division will be assuming a greater role in funding future landfill closures.

For more information on funding, please contact the Waste Management Division of the Department of Municipal Affairs.

3.6 Recognition

There is no question that municipalities in Newfoundland and Labrador with closed or operating landfills have a liability:

- 1. The municipality has little or no discretion to avoid settlement of the obligation.
 - EPA requires operators to properly close and monitor landfills.
- 2. There will be a future transfer of assets on the occurrence of a specified future event.
 - Municipality will incur expenditures after the landfill is closed.
- 3. The transactions or events obligating the government have already occurred.
 - Municipality is obligated once the site starts accepting waste.

It is improper to disclose the closure and post-closure liability as a contingency or a contractual obligation as the existence of the liability is known with certainty.

Disclose:

PS3200.03

Liabilities should be recognized in the financial statements when:

- a) There is an appropriate basis of measurement; and
- b) A reasonable estimate can be made of the amount involved.

According to MMSB, no two landfill sites are the same and thus will have different closure and post-closure costs. Costs can be impacted by several factors such as maintenance and management of the site, years in services, usage, etc. The best method for determining a reasonable estimate of the amount of closure and post-closure costs is to have a Remedial Action Plan or closure plan completed.

A closure plan will usually be completed after a landfill site is identified to be closed and alternative arrangements have been made for the disposal of solid waste that would normally be disposed of in the closed landfill. The identification of landfill sites to be closed is usually

determined by a group of individuals comprised of representatives from the Department of Municipal Affairs, the Department of Environment and Conservation, and the municipality.

Until such time as a landfill is designated to be closed, a reasonable estimate will likely not be available and, therefore, the existence of undeterminable closure and post-closure costs should be disclosed in the notes to the financial statements.

The majority of municipalities throughout Newfoundland and Labrador will only be required to provide adequate disclosure in the notes to their December 31, 2009 financial statements of future solid waste landfill closure and post-closure costs due to a reasonable estimate of these costs being unavailable.

Accrue:

However, closure and post-closure costs may be able to be reasonable estimated sooner than most would expect, due to the time-lines of the Provincial Solid Waste Management Strategy, (see section 3.4). With the announcement of the first regional site being fully operational by 2010, most municipalities with landfills in the Avalon Region should expect closures to take place relatively soon. Once a closure has been identified, a closure plan will have to be established and closure and post-closure costs identified. It is at this point that a municipality can reasonably estimate the costs and thus should accrue the costs as a liability.

Based on the Provincial Solid Waste Management Strategy time-line in section 3.4, municipalities can anticipate when they will be required to disclosure or accrue closure and post-closure costs.

Waste Management Zone	Disclose Closure and Post-Closure Costs	Accrue Closure and Post-Closure Costs
Avalon Region	Before December 31, 2010	After December 31, 2010
Central Region	Before December 31, 2011	After December 31, 2011
Western Region	Before December 31, 2016	After December 31, 2016
All non-host waste management zones excluding isolated communities	Before December 31, 2020	After December 31, 2020
Isolated Communities	Dates will vary based on condition of landfill	Dates will vary based on condition of landfill

Note that this is only a guide to raise awareness of approximate dates landfill closure and postclosure costs should be recognized. Some landfills will be identified for closure and closure plans completed well before the proposed dates and some may even fall after the dates. It is at the time costs can be reasonably estimated that the liability should be accrued.

3.7 Measurement

This section only applies to those municipalities that have determined they can reasonably estimate landfill closure and post-closure costs.

PS3270.13

Financial statements should recognize a liability for closure and post-closure care as the landfill site's capacity is used. Usage should be measured on a volumetric basis (e.g., cubic meters).

If the site is operated on a phase basis, the closure and post-closure liability associated with that phase would be fully recognized when the phase stops accepting waste.

The change in the liability and the annual expense for the site or phase would be calculated as follows:

NPV of Estimated	Х	Cumulative Capacity Used	-	Expenditures Previously
Total Expenditure		Total Estimated Capacity	-	Recognized

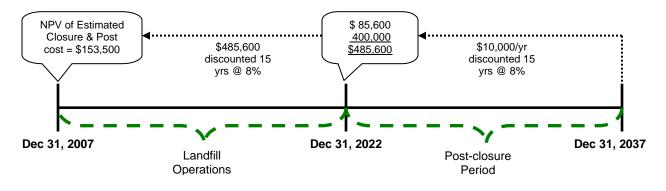
The closure and post-closure costs may not be incurred for 20 - 40 years. The estimated total expenditure should be discounted to their net present value (NPV) of the future cash flows. The municipality's long term average borrowing rate may be appropriate to use as the discount rate. The discount rate used should only be changed for significant long term changes in the municipality's borrowing rate. The discount rate should not be changed for short term fluctuations in the borrowing rate.

The capacity used would be estimated based on a rational and systematic method and on the best available information. The available remaining capacity should be periodically reviewed (e.g. every 3 years) to ensure that the total estimated capacity and cumulative capacity used are reasonable.

3.8 How Should You Estimate the NPV of Total Expenditures?

The NPV of total expenditures is the total closure and post-closure costs at the date of closing, discounted to the current date.

An illustration is provided for the accrual of a closure and post-closure liability at December 31, 2007 for an isolated landfill that will close at December 31, 2022 (i.e. 15 years). Closure costs at December 31, 2022 are expected to be \$400,000. Post-closure care period is expected to be 15 years (i.e. until 2037) at \$10,000 per year. The discount rate is 8%.



You can imagine that it would be difficult for the average municipality in Newfoundland and Labrador to estimate their closure costs 15 years into the future. It is possible to estimate your closure cost in the present (i.e. at December 31, 2007) and project the cost fifteen years into the future. However, such a projection would have a very high level of uncertainty.

Many will wonder whether it would be acceptable to simply estimate the closure cost at the time of the accrual rather than estimating the closure cost in the future and discounting it to the present. Such an approach would not be technically correct, but the end result would likely not be materially different. If the discount rate exceeds the rate of increase in construction cost then your liability will be overstated. If the rate of increase in construction cost exceeds the discount rate then your liability will be understated.

Using the previous example, if the landfill was full, and had to be closed at December 31, 2007, closure costs are estimated to be \$150,000. The NPV of the total estimated expenditures would then be:

- \$10,000/yr discounted for 15 years @ 8% = \$85,600
- \$85,600 discounted for 15 years @ 8% = \$27,000
- Total NPV of Estimated Costs (\$27,000 + \$150,000) = \$177,000

Many large municipalities with landfills may have the expertise on staff to estimate their closure costs. But many will still hire an independent consultant (i.e. environmental engineer) to arrive at their estimated total expenditures for their landfill.

Smaller municipalities with landfills could possibly come up with a proper estimate of their total expenditures; however, they may also still prefer to hire an environmental engineer. If a municipality chooses to estimate their liability on their own they will need documented support for their estimate.

3.9 Examples (for additional examples see Appendix 7)

Example 1: Closed Landfill

The Town of Hamilton closed its old landfill in 1998. The municipality was required to drill test wells and monitor the groundwater for 20 years after the landfill is closed. It is now December 31, 2008. Testing of the wells costs \$6,000 per year. For PSAB, the town clerk must accrue the landfill liabilities at January 1, 2008 and December 31, 2008 and 2009. The Town's long term average cost of borrowing is 6.5%.

Answers:

See Appendix 8 for the landfill liability balances at December 31, 2007, 2008 and 2009.

1.	Dr. Opening Surplus Cr. Landfill Liability #1	\$46,134	\$46,134
	To accrue the opening landfill liability at January 1, 200	08 (i.e. 11 years	remaining)
2.	Dr. Landfill liability #1 (\$6,000 – interest) Dr. Interest – landfill (\$46,134 x 6.5%) Cr. Cash	\$3,001 \$2,999	\$6,000
	To adjust the landfill liability for the 2008 payment (\$46,	134 - \$43,133 =	\$3,001)
3.	Dr. Landfill liability #1 (\$6,000 – interest) Dr. Interest – landfill (\$43,133 x 6.5%) Cr. Cash	\$3,196 \$2,804	\$6,000
	To adjust the landfill liability for the 2009 payment (\$43,	133 - \$39,937 =	\$3,196)

Example 2: Operating Landfill

The Town of Hamilton operates a landfill operation. The landfill opened January 1, 1999 and is expected to be closed by December 31, 2016. The town clerk has an engineering report that estimates the total capacity of the landfill at 120,000 tonnes. Linda estimates that the total capacity used to December 31, 2007 is 50,000 tonnes. The landfill received an additional 5,000 tonnes for the year ended December 31, 2008 and 5,000 more for the year ended December 31, 2009.

A consultant estimates that closure costs in 2017 for final cover, re-vegetation, and drilling of 4 test wells would be \$225,000. In addition, the municipality would have to test the wells for 20 years after the landfill is closed. Testing of the wells would cost an additional \$6,000 per year. The Town's long term average cost of borrowing is 6.5%.

- 1. What is the estimated total expenditure?
- 2. What is the landfill liability at December 31, 2007?
- 3. What is the landfill liability at December 31, 2008?
- 4. What is the landfill liability at December 31, 2009?
- 5. What is the landfill cost for the year ended December 31, 2008?
- 6. What is the landfill cost for the year ended December 31, 2009?
- 7. What journal entries would the town clerk have to record for 2008 and 2009?

Answers:

1. Total estimated expenditures - See Appendix 9

Dec 31/07 - \$157,372 Dec 31/08 - \$167,601 Dec 31/09 - \$178,495

- 2. Landfill liability at Dec 31/07 = 50,000 tonnes/120,000 tonnes x \$157,372 = \$65,572
- 3. Landfill liability at Dec 31/08 = 55,000 tonnes/120,000 tonnes x \$167,601 = \$76,617
- 4. Landfill liability at Dec 31/09 = 60,000 tonnes/120,000 tonnes x \$178,495 = \$89,248
- 5. Landfill costs for the y/e Dec 31/08 = \$76,617 \$65,572 = \$11,045
- 6. Landfill costs for the y/e Dec 31/09 = \$89,248 \$76,617 = \$12,631
- 7. Dr. Environmental Health Landfill closure costs\$11,045Dr. Opening Surplus\$65,572Cr. Landfill Liability #2\$76,617

To record opening landfill liability at January 1, 2008 and landfill costs for the year ended December 31, 2008

Dr. Environmental Health - Landfill closure costs\$12,631Cr. Landfill Liability #2\$12,631

To record landfill costs for the year ended December 31, 2009

The reported liability may be affected by changes in the estimated total expenditures, estimated total capacity, cumulative capacity, interest rates or regulatory requirements.

Example 3: Change in Cost Estimates

It is now December 31, 2010. The landfill received an additional 6,000 tonnes for the year ended December 31, 2010. Because of rising construction costs, a consultant estimates that the current cost for the final cover, re-vegetation and construction of the wells has increased to \$300,000.

- 1. What are the total estimated expenditures?
- 2. What is the landfill liability at December 31, 2010?
- 3. What is the landfill closure cost for the year ended December 31, 2010?
- 4. What journal entries would the town clerk have to record?

Answers:

- 1. Total estimated expenditures See Appendix 10: \$238,360
- 2. Landfill liability at December 31, 2010: \$238,360 x 66,000 tonnes/120,000 tonnes = \$131,098
- 3. Closure costs for the y/e December 31, 2010: \$131,098 \$89,248 = \$41,850
- 4. Dr. Environmental Health Landfill Closure Costs\$41,850Cr. Landfill Liability #2\$41,850

To accrue landfill closure costs for the year ended December 31, 2010

Units of Measure – Cubic Metres, Tonnes or Years

PSAB recommends that capacity and usage should be measured on a volumetric basis such as cubic metres. Many cities in Canada use either cubic metres or tonnes to estimate their total capacity and usage.

Some larger landfill sites in Newfoundland and Labrador weigh the garbage coming in and charge a tipping fee. However, the majority of landfills are still small unattended landfill sites. These landfill operators or municipalities would not have records to determine the usage on an annual basis. They do, however, know the year they opened their landfill and can make a reasonable estimate of how long they expect to operate. For these landfill sites, there may be no other choice than to estimate their total capacity and usage in terms of years.

Example 4: Operating Landfill (Capacity and Usage Estimated in Years)

The Town of Hamilton operates a landfill that opened January 1, 1999 and is expected to be closed by December 31, 2016.

A consultant estimates that closure costs in 2017 for final cover, re-vegetation, and drilling of 4 test wells would cost \$225,000. In addition, the municipality would have to test the wells for 20 years after the landfill is closed. Testing of the wells would cost an additional \$6,000 per year. The Town's long term average cost of borrowing is 6.5%.

1.	What is the estimated total expenditure?
2.	What is the landfill liability at December 31, 2007?
3.	What is the landfill liability at December 31, 2008?
4.	What is the landfill liability at December 31, 2009?
5.	What is the landfill cost for the year ended December 31, 2008?
6.	What is the landfill cost for the year ended December 31, 2009?
7.	What journal entries would the town clerk have to record for 2008 and 2009?
Answ	ers:
1.	Total estimated expenditures – See Appendix 9 Dec 31/07 - \$157,372 Dec 31/08 - \$167,601 Dec 31/09 - \$178,495
2.	Landfill liability at Dec 31/07 = 9 yrs/18 yrs x \$157,372 = \$78,686
3.	Landfill liability at Dec 31/08 = 10 yrs/18 yrs x \$167,601 = \$93,112
4.	Landfill liability at Dec 31/09 = 11 yrs/18 yrs x \$178,495 = \$109,080
5.	Landfill costs for the y/e Dec 31/08 = \$93,112 - \$78,686 = \$14,426
6.	Landfill costs for the y/e Dec 31/09 = \$109,080 - \$93,112 = \$15,968
7.	Dr. Environmental Health - Landfill closure costs \$14,426 Dr. Opening Surplus \$78,686 Cr. Landfill Liability #2 \$93,112
	To record opening landfill liability at January 1, 2008 and landfill costs for the year ended December 31, 2008
	Dr. Environmental Health - Landfill closure costs \$15,968 Cr. Landfill Liability #2 \$15,968
	To record landfill costs for the year ended December 31, 2009

Example 5: Change in Estimate (Years & Costs)

It is now December 31, 2010. In the 12 years since the landfill has opened, the site has received far less garbage than was anticipated. The town clerk estimates that the Town will be able to use the landfill till 2019 or an additional 3 years.

A consultant estimates that closure costs in 2019 for final cover, re-vegetation, and drilling of 4 test wells would be \$250,000. In addition, the municipality would have to test the wells for 20 years after the landfill is closed. Testing of the wells would cost an additional \$6,000 per year for 2019 to 2033 and \$7,000 for 2035 to 2038. The Town's long term average cost of borrowing is 6.5%.

- 1. What are the total estimated expenditures at December 31, 2010?
- 2. What is the landfill liability at December 31, 2010?
- 3. What are the landfill costs for the year ended December 31, 2010?
- 4. What journal entries would the town clerk have to record?

Answers:

- 1. Total estimated expenditures at Dec 31/10 See Appendix 11: \$171,607
- 2. Landfill liability at December 31/10: \$171,607 x 12 yrs/21 yrs = \$98,061
- 3. Landfill costs for the y/e Dec 31/10 = \$98,061 \$109,080 = \$(11,919)
- 4. Dr. Landfill liability #2
 \$11,919

 Cr. Environmental Health Landfill closure costs
 \$11,919

To adjust the landfill liability for the additional 3 years of use and change in cost estimate.

3.10 Disclosure Requirements

PS3270.21

The notes to the financial statements should disclose:

- a) The nature and source of landfill closure and post-closure care requirements;
- b) The basis of recognition and measurement of the liability for closure and post-closure care;
- c) The reported liability for closure and post-closure care, and the amount remaining to be recognized;
- d) The remaining capacity of the site and the estimated remaining landfill life in years;
- e) How any requirements for closure and post-closure care financial assurance are being met, e.g. performance bonds;
- f) The amount of assets designated for settling closure and post-closure care liabilities; and
- g) The estimated length of time needed for post-closure care.

Examples of Note Disclosure for Landfill Closure and Post-Closure Costs:

City of Devonshire – December 31/06 (in thousands of dollars)

Legislation requires closure and post-closure care of solid waste landfill sites. Closure cost includes final covering and landscaping of the landfill and implementation of drainage and gas management plans. Post-closure care requirements include cap maintenance, groundwater monitoring, gas management system operations, inspections and annual reports.

	2006	2005
Estimated closure and post-closure cost over the next 40 years	34,670	27,410
Discount rate	5.00%	4.71%
Discounted cost	22,292	17,629
Expected year(s) capacity will be reached	2009-2010	2009-2010
Capacity (tonnes):		
Used to date	9,600,000	9,300,000
Remaining	900,000	1,200,000
Total	10,500,000	10,500,000
Percent utilized	91.43%	88.57%
Liability based on the percentage utilized	20,381	15,614

The liability recognized in the financial statements is subject to measurement uncertainty. The recognized amounts are based on the City's best information and judgment. Amounts could change by more than a material amount in the long term.

Town of Hamilton – December 31, 2009 (examples 1 & 2)

The municipality owns and operates one open landfill site and one closed landfill site. The active landfill site was opened in 1999 covering 5.5 acres with a capacity of 120,000 tonnes. As at December 31, 2009, the remaining capacity of the site is estimated at 60,000 tonnes, representing 50% of the total capacity. The open site is expected to reach its capacity and close in 2016.

The closure and post-closure costs for the open landfill site, and the post-closure costs for the closed site, are based upon best estimates by management. Post-closure care for the open landfill site is estimated to be required for 20 years from the date of closure. Post-closure care for the closed landfill site is estimated to be required until 2018.

The liability of \$129,185 (2008 - \$119,750) for closure and post-closure cost of the active site and the post-closure costs of the closed site, has been reported on the consolidated statement of financial position.

\$129,185 = (39,937 + 89,248) \$119,750 = (43,133 + 76,617)

Glossary of Terms and Acronyms

Terms:

Closure Costs:

Closure costs are all costs related to the closing of a landfill site.

Contaminant:

A contaminant is any product, substance or organism that is foreign or in excess of the natural levels of the environment.

Contaminated Site:

A contaminated site is any site that has been exposed to contaminants.

Contingent Liabilities:

Contingent liabilities are possible obligations to others arising from conditions or situations involving uncertainty not within the control of the government. The uncertainty will be resolved when one or more future events occur or fail to occur. The resolution of the uncertainty will confirm the existence or non-existence of a liability.

Contractual Obligation:

A contractual obligation is an obligation that will eventually become a liability when terms of contracts or agreements are met.

Contractual obligations are different from liabilities as there has been no event obligating the government at the balance sheet date.

Contractual obligations are different contingent liabilities as there is no uncertainty to the existence of an obligation.

Environmental Site Assessment:

An environmental site assessment is a comprehensive report detailing the nature, severity, and extent of contamination.

Landfill Site:

A landfill site is an area of land or excavation that receives household, commercial and industrial solid waste.

Leachate:

A leachate is a substance that contaminates by leaching or draining through the earth.

Liabilities:

Liabilities represent present obligations of a government to others arising from past transactions or events, the settlement of which is expected to result in the future sacrifice of assets or economic benefits.

Obligating Event:

An obligating event is a past transaction or event that distinguishes a present obligation from a future obligation.

Post-closure Costs:

Post-closure costs include all the costs related to the monitoring of a landfill site for contaminants after the landfill has been closed.

Glossary of Terms and Acronyms

Remedial Action Plan:

A remedial action plan is a detailed written proposal for the improvement of a contaminated site.

Remediation:

The improvement of a contaminated site to prevent, minimize or mitigate damage to human health or the environment.

<u>Acronyms:</u>

EPA	-	Environmental Protection Act
EPO	-	Environmental Protection Officer
ESA	-	Environmental Site Assessment
MMSB	-	Multi-Materials Stewardship Board
O&A	-	Orphaned and abandoned (site)
RAP	-	Remedial Action Plan

Examples: Liabilities

Appendix 1

Post Employment Costs for Health Benefits

As part of a benefits package, some municipalities grant post employment health benefits such as dental, vision and prescription drug coverage to retirees. In the past, these costs were treated as an expense when the insurance premiums were paid to the insurance company. Under PSAB, these costs will have to be accrued over the employment period of the employee. The amount accrued will be the actuarial present value of the expected cash outflows of the premium payments made on behalf of a retired employee. When the premiums are paid in the future, the premium payment will applied to the accrued liability as a reduction in the amount outstanding.

The municipality of Bigtown provides dental, vision and prescription drug coverage to retirees for a period after retirement equal to the number of years employed with Bigtown up to a maximum of ten years. At December 31, 2008, Bigtown hired an actuary to calculate the present value of the outstanding liability at that date and the increase in the amount of the liability for the fiscal year ended December 31, 2008. The actuarial valuation determined that the outstanding liability at December 31, 2008 was \$325,000 and the increase in that liability for the year was \$50,000. During 2008, Bigtown paid insurance premiums of \$120 per month for 12 retirees who are currently eligible for the program. This amounted to an annual payment of \$17,280 (\$120 x 12 employees x 12 months). Bigtown plans to have another actuarial valuation completed for the three year period ending December 31, 2011.

On January 1, 2009, Bigtown would make a journal entry to record the outstanding liability in its accounting records:

Dr	Accumulated Surplus	\$ 325,000	
Cr	Post Employment Benefits Liability		\$ 325,000

During 2009, Bigtown would be required to record the premium payments that are made each month to the insurance company as a reduction of the outstanding liability:

Dr	Post Employment Benefits Liability	\$ 1,440		
	(12 employees x \$120/month)			
Cr	Cash	\$	5	1,440

During 2009, Bigtown would be required to estimate the amount of expense to be recorded during each accounting period. Bigtown prepares quarterly financial statements and must record a Post Employment Benefits Expense at the end of each quarter. The amount recorded will be an estimate but must be reasonable. Bigtown bases their estimate upon the increase in the Post Employment Benefits Liability calculated for 2008. The outstanding liability increased by \$50,000 during 2008, net of premium payments during the year totalling \$17,280. Therefore, the amount of the annual post employment benefits expense to be recorded is 67,280 (50,000 + 17,280).

Dr	Post Employment Benefits Expense	\$ 16,820	
	(\$67,280 / 4 quarters)		
Cr	Cash		\$ 16,820

Bigtown will continue to make these journal entries until December 31, 2011 when the next actuarial valuations takes place. At that time the amounts recorded will be revise to reflect the amounts determined by the actuarial valuation.

Pension Liabilities

Pensions can take the form of either a defined contribution or a defined benefit pension plan. In the absence of a formal pension plan, some municipalities choose to make RRSP contributions in a set amount into an employee's RRSP account. Their RRSP account then serves as their individual pension plan.

i) Defined Contribution

Under a defined contribution pension plan, both the employer and the employee are required to make payments to a pension account held for the benefit of the employee. The employee then chooses how these funds are invested until retirement. Once the employer makes the required contribution to the employee's pension account, they have no further obligation for any additional contributions to the plan. The investment risk resides solely with the employee. At the time of retirement, the employee purchases an annuity (a fixed income stream) that they will receive for the period set in the annuity agreement. The amount of the pension received is determined by the value in the pension account at the time of retirement.

Midtown has a defined contribution pension plan. Each month the employer and the employee are required to contribute 5% of each participating employee's salary into the pension plan. All employee's are required to participate in the pension plan after one year of service has been completed. Midtown currently has 30 employees. 28 of these employees have been with the town in excess of one year. Two new employees were recently hired. Their monthly salaries are \$2,500 and \$2,800 per month. Total payroll for the month was \$100,000.

When processing payroll for the month, Midtown will withhold the required pension contributions of the employees.

Dr	Wage Expense (\$100,000 - (\$2,500 + \$2,800) x 5%)	\$ 4,735	
Cr	Pension Premiums Payable	\$	4,735

Midtown is also required to record the employer's matching contribution to the pension plan.

Dr	Wage Expense	\$ 4,735	
	(\$100,000 - (\$2,500 + \$2,800) x 5%)		
Cr	Pension Premiums Payable		\$ 4,735

As part of the next accounts payable payment cycle Midtown remits the required pension contributions to the employees' pension account.

Dr	Pension Premiums Payable	\$ 9,470	
	(\$4,735 + \$4,735)		
Cr	Cash	\$	9,470

Midtown no longer has any obligation to record with regards to the pension plan.

Examples: Liabilities

ii) RRSP Contribution

For municipalities who contribute to employee's RRSP accounts in lieu of a pension plan, the obligation is recorded in accordance with the terms of payment. If the contribution is a voluntary payment that is decided by council, then the obligation is not recorded until the contribution has been voted on and approved by council. If the contribution is in accordance with an employment contract between the town and the employees, then the contribution is recorded as earned by the employee by virtue of employment.

In lieu of a pension plan, Smalltown contributes to the RRSP accounts of its employees. This arrangement was agreed to under an employment contract that was signed with all employees. The RRSP contribution is equal to 4% of employees' salaries up to a maximum of \$2,000 per employee. Smalltown has two full-time (Town Clerk & Maintenance Manager) and two part-time staff. The part-time staff are predominantly used for snow clearing during the winter months and maintenance projects during the summer and fall on an as-required basis. The salaries of the Town Clerk and Maintenance Manager are \$36,000 and \$33,000 respectively. The two part-time staff earned \$12,000 during the period January to March and \$9,000 over the period July to September. Smalltown must record the obligation to contribute to the employees' RRSP in relation to the income earned by the employees. Smalltown prepares quarterly financial statements and will record the obligation at the end of each quarter.

At March 31, 2009, Smalltown will record the RRSP contribution earned by employees up to the quarter end.

Dr	Pension Expense	\$ 1,170	
	Town Clerk \$360 (\$36,000 / 4 quarters x 4%)		
	Maint Mgr \$330 (\$33,000 / 4 quarters x 4%)		
	Part-Time Staff \$480 (\$12,000 x 4%)		
Cr	RRSP Contributions Payable		\$ 1,170

At June 30, 2009, Smalltown will record the RRSP contribution earned by employees up to the quarter end.

Dr	Pension Expense	\$ 690	
	Town Clerk \$360 (\$36,000 / 4 quarters x 4%)		
	Maint Mgr \$330 (\$33,000 / 4 quarters x 4%)		
Cr	RRSP Contributions Payable		\$ 690

At September 30, 2009, Smalltown will record the RRSP contribution earned by employees up to the quarter end.

Dr	Pension Expense	\$ 1,050	
	Town Clerk \$360 (\$36,000 / 4 quarters x 4%)		
	Maint Mgr \$330 (\$33,000 / 4 quarters x 4%)		
	Part-Time Staff \$360 (\$9,000 x 4%)		
Cr	RRSP Contributions Payable		\$ 1,050

Appendix 1

Examples: Liabilities

At December 31, 2009, Smalltown will record the RRSP contribution earned by employees up to the quarter end.

Dr	Pension Expense Town Clerk \$360 (\$36,000 / 4 quarters x 4%) Maint Mgr \$330 (\$33,000 / 4 quarters x 4%) Part-Time Staff \$480 (\$12,000 x 4%)	\$ 1,170	
-			
Cr	RRSP Contributions Payable		\$ 1,170

In January, 2010, Smalltown will make the payments into the employees RRSP's and record the payment in their general ledger.

	RRSP Contributions Payable (1,170+690+1,050+1,170)	\$ 4,080	
Cr	Cash		\$ 4,080

iii) Defined benefit

Under a defined benefit pension plan, both the employer and the employee are required to make payments to a pension account held for the benefit of the employee. A pension plan administrator then invests these payments until such time that employee retires and begins to draw the pension that they have accumulated. Once the employee makes the required contribution to the pension account, they have no further obligation for any additional contributions to the plan. The investment risk resides solely with the employer. At the time of retirement, the employer is required to cover any shortfall in the earned pension amount that is payable to the retiree. Periodically, the employer is required to actuarially value the projected pension benefit to determine if there are sufficient funds in the pension plan to provide for the future payment. The actuarial valuation will determine if the pension plan is over or under funded.

Bigtown has a defined benefit pension plan. Each month the employer and the employee are required to contribute 7% of each participating employee's salary into the pension plan. All employees are required to participate in the pension plan after one year of service has been completed. Bigtown currently has 75 employees participating in the plan and 5 retirees receiving pensions from the pension plan. The average annual salary is 36,000 per employee.

When processing payroll for the month, Bigtown will withhold the required pension contributions of the employees.

Dr	Wage Expense	\$ 15,750	
	(\$3,000 x 75 x 7%)		
Cr	Pension Premiums Payable		\$ 15,750

Bigtown is also required to record the employer's matching contribution to the pension plan.

Dr	Wage Expense	\$ 15,750	
	(\$3,000 x 75 x 7%)		
Cr	Pension Premiums Payable		\$ 15,750

Appendix 1

Examples: Liabilities

As part of the next accounts payable payment cycle, Bigtown remits the required pension contributions to the employees' pension account.

Dr	Pension Premiums Payable	\$ 31,500	
	(\$15,750 + \$15,750)		
Cr	Cash		\$ 31,500

At year end, when Bigtown has its pension plan actuarially valued, it will record the costs associated with its pension plan.

The actuarial valuation determined the following:

Pension Obligation Beginning of year Current Service Costs Interest on the Pension Obligation Benefits paid Actuarial loss End of year	\$ 3,257,650 500,000 162,883 (48,000) (32,000) 3,840,533
Pension Plan Assets Beginning of year Actual return on plan assets Contributions Benefits paid End of year	2,758,925 165,535 378,000 (48,000) <u>3,254,460</u>
Unfunded Liability, beginning of year	498,725
Unfunded liability, end of year	<u> </u>
Pension expense	\$ <u>87,348</u>

The journal entry to record the pension expense in the financial statements of Bigtown is:

Dr	Pension expense	\$ 87,348	
Cr	Defined Benefit Pension Obligation		\$ 87,348

Examples: Contingent Liabilities

Lawsuits

When excavating a site to install a new pumping station, the Municipality accidentally struck and broke the water main. It took approximately fifteen minutes to shut off the flow of water. By this time, the basement of the house next to the break had flooded. Municipal staff inspected the basement and agreed to a payment of \$5,000 to repair the damage. The resident disagreed with this amount and sued the Municipality for \$10,000 for the damage that was done to the contents of the basement.

The Municipality is preparing its year-end financial statements and is trying to determine the amount to be recorded in their financial statements.

First the Municipality must determine whether a liability exits:

	Yes	No
Likely (probability is high) Legal counsel advises that you should settle the lawsuit with the litigant because they have a strong case.	X	
Unlikely (probability is slight) Legal counsel views a lawsuit to be frivolous and has no basis in law.		X
Not Determinable Legal counsel views a lawsuit as possibly being settled in favour of either party.		X

Once it has been determined that a liability exists, the Municipality must determine whether a reasonable estimate can be made of the amount involved.

Can the amount involved be reasonably estimated?



Based on the municipality's answers above; a contingent liability should be recorded, however, the amount to be recorded could not be determined. The resident is suing for \$10,000; however, the Municipality only feels that it is obligated to pay \$5,000 for the amount of damage caused.

The result is that the Municipality will record the amount in the financial statements that it feels it will likely have to pay and disclose the remainder in the notes to the financial statements.

The journal entry to record the \$5,000 amount likely to be paid is:

Dr	Repairs & Maintenance expense	\$ 5,000	
Cr	Accounts Payable		\$ 5,000

Note disclosure: The Municipality is currently involved in a legal action. The Municipality has determined that it is likely that the amount awarded for settlement of the action will be in the range of \$5,000 and has accrued this amount in the financial statements. However, the legal action is claiming damages of \$10,000, thereby exposing the Municipality to a further \$5,000 in damages that have not been recorded in the financial statements.

Examples: Contingent Liabilities

Loan Guarantees

The Town of Hartley's Harbour guaranteed a \$50,000 building improvement loan of the local Fisherman's Co-op. It was expected with a good summer that the Co-op would have been able to repay the entire loan. The summer didn't go as well as expected and the loan was not repaid in full. There is a balance of \$35,000 outstanding on the loan. To date, the Fisherman's Co-op has paid all interest payments as they come due, however, with the fishing season still six months away and cash running low, there is concern that the Co-op will default on an interest payment before long. It is now December 31 and the Town is preparing their year-end financial statements and has to decide what they need to report with regards to the loan guarantee.

As loan guarantees are, in fact, contingencies. the starting point would be to determine whether Hartley's Harbour must record the amount outstanding as an obligation or merely disclose the existence of the loan guarantee in the notes to the financial statements.

Is there probability that the default of interest payments will confirm that a liability exists:

Likely (probability is high)	Yes	Νο
Co-op will default on the interest payment.	x	
Unlikely (probability is slight) Co-op has sufficient funds to make all interest payments until the beginning of the next fishing season.		X
Not Determinable Co-op doesn't have much cash but if they can collect on some of their outstanding receivables, they will be able to		X

make the interest payments as scheduled.

Once it has been determined that a liability likely exists, a determination must be made as to whether the amount involved is measurable.

Can the amount involved be reasonably estimated?



Because the possibility of loss is likely and the amount can be reasonably estimated, Hartley's Harbour must record the loan guarantee as an obligation in the financial statements at December 31st.

The journal entry to record the loss on the loan guarantee is:

Dr	Loss on Loan Guarantee	\$ 35,000	
Cr	Loan Payable		\$ 35,000

If probability of the liability or a reasonable estimate of the amount was not determinable then, only note disclosure would be required instead of the recording of the obligation. Hartley's Harbour would have to disclose the following:

Examples: Contingent Liabilities

- a) The nature of the guarantee, including the term of the guarantee and the events which require the Municipality to perform under the guarantee.
- b) The maximum potential amount of future payments that could be required under the guarantee.
- c) The current amount of the liability that is guaranteed.
- d) Any amounts that could be recovered to offset the amount guaranteed.
- e) Any collateral pledged against the guarantee.
- f) To what extent the liquidation of the collateral would reduce the amount payable under the guarantee.

Examples: Contractual Obligations

Appendix 3

Engineering Consultant fees

The Town of Pigeon Inlet has entered into a consultant agreement with its engineering consulting firm to design an extension to its water distribution system. The engineering and design work is to be completed over the period from November to March with construction to begin by May 1st. The design fee agreed upon with the engineering firm is \$300,000 for the completion of the project with progress bills to be submitted for payment on a periodic basis. To date, only one bill has been submitted for payment. The bill in the amount of \$45,000 covers the period November 1st - December 10th. Pigeon Inlet's auditor sent a letter to the engineering firm inquiring whether any additional but unbilled work had been completed to December 31st. The engineering consulting firm responded that an additional \$15,000 in design work had been completed but was currently unbilled.

It is now December 31st and Pigeon Inlet is preparing their year-end financial statements. The Town needs to determine how much of the \$300,000 agreed upon fee will have to be recorded in its financial statements.

There are three amounts that need to be evaluated: the \$45,000 bill received, the \$15,000 in design services completed but not billed, and the remaining \$240,000 of the agreed upon fee.

The Municipality must determine whether it has a duty or responsibility with regards to these fees that it has little or no choice to avoid, whether settlement of the fees will result in a cash outflow and whether the transactions or event obligating the Municipality has already occurred.

This is the case for both the billed and unbilled services, as the engineering consulting firm has already provided the services and therefore is required to be paid.

For the \$240,000 remaining on the contract, this can be avoided as the services have not been provided and the Municipality has the option of cancelling the contract. Therefore, the remaining \$240,000 on the contract does not have to be recorded in the financial statements.

The next question then arises, does the municipality have to record the billed and unbilled but completed fees in its financial statement? The obligation must be recorded if the there is an appropriate basis of measurement and a reasonable estimate can be made of the amount involved.

Since the amount of the fees provided is known, the Municipality will have to record both of these amounts in its financial statements.

The journal entry to record the amounts is as follows:

Dr	Engineering Consulting fees	\$ 60,000	
Cr	Accounts Payable		\$ 45,000
Cr	Accrued Liabilities		\$ 15,000

To record engineering fees payable at year end.

Examples: Contractual Obligations

Capital Leases

The Town of Warwick leases the loader that it uses for snow clearing. The lease has a term of twelve years and calls for monthly payments of \$1,750 plus HST. The interest rate stated in the lease is 9.00%. At the end of the lease term, the Town can purchase the loader for \$100. Five years ago when the lease was negotiated, the loader had a cash purchase price of \$155,000. Up until the current year, the Town had been expensing the lease payments as an expense when paid.

The Town is trying to determine what amounts it will have to record in its year-end financial statements. The Town must first determine whether the lease is a capital or operating lease. Determining whether a lease is capital or operating involves evaluation of the following three criteria:

1. Does the lease term cover 75% or more of the useful life of the leased asset?

Lease term:	12 years
Useful life of Loader - as per the TCA Reference Manual, Appendix 2	15 years
	(12 years / 15 years) = 80%, yes

2. Does the present value of the minimum lease payments equal 90% or more of the fair market value of the asset at the inception of the lease?

Fair market value of Loader	\$155,000
Fail market value of Loader	\$155,000

Present Value of minimum lease payments: \$153,775

- the present value of the minimum lease payments was calculated using the present value table of a 9% discount rate for 15 years, see Appendix 12.

(\$153,775 / \$155,000) = 99.215%, yes

3. Does the lease contain a bargain purchase option, thereby ensuring the transfer of ownership at the end of the lease?

At the end of the lease term the Town can purchase the loader for \$100? Yes

This lease met all three criteria to be classified as a capital lease. However, meeting **any one** of the criteria would have qualified the lease as a capital lease.

Because the lease is a capital lease, the Town will have to record the leased equipment as a tangible capital asset and the related lease obligation on the Statement of Financial Position. The Town will also have to amortize the leased asset and allocate the payments made on the lease between interest and principal.

Examples: Contractual Obligations

The following journal entries will have to be recorded by the municipality:

Dr Cr To rece	TCA - Loader Lease Financing Obligation ord the leased Loader and related financing ob		153,775 on	\$	153,775
	Amortization expense (\$153,775 / 15 yrs) Accumulated Surplus (\$153,775 / 15 yrs x 4 yrs) Accumulated Amortization - Loader cord amortization expense for the curre zation for the four prior years on the leased Lo	-	10,252 41,008 ear and	\$ acc	51,260 umulated
	Lease Financing Obligation Accumulated Surplus Illocate the principal portion of the prior year expensed.	\$'s lea	34,322 se payme	\$ ents	34,322 that had
	Lease Financing Obligation Interest expense Lease expense allocate the principal and interest portions ents that had been expensed.	\$ of the	10,683 10,317 e current	\$ yea	21,000 ır's lease

Note: To properly allocate the interest and principal portions of the lease payment a loan amortization schedule must be prepared.

Contract for Snow Clearing Services

The Town of Snowy River does not have its own municipal snow clearing equipment. Instead, it tenders its snow clearing services for a three year term. The tender covers the months of November to April. A new tender was awarded on July 1st for three years. The lowest tender was for a rate of \$150 / hour for equipment and an operator. The minimum number of hours that would be billed under the contract are:

	Hrs	Bill
November	50	\$ 7,500
December	100	\$ 15,000
January	100	\$ 15,000
February	100	\$ 15,000
March	100	\$ 15,000
April	50	\$ 7,500

The agreement can be terminated by either party upon 90 days written notice being provided to the other party.

Examples: Contractual Obligations

It is December 31st, and the Town has not received any invoices for snow clearing services from the contractor to date. The winter has been relatively mild with only two storms, both occurring in December, with the clean-up from each storm requiring 40 hours of equipment time. The Town is trying to determine how much it should accrue in its year-end financial statements.

There are three amounts that need to be evaluated: the \$7,500 minimum fee for November, the \$15,000 minimum fee for December, and the remaining minimum amount over the duration of the three year contract of \$202,500.

The Town must determine whether it has a duty or responsibility with regards to these fees that it has little or no choice to avoid, whether settlement of the fees will result in a cash outflow and whether the transactions or event obligating the Municipality has already occurred.

This is the case for the minimum fees for both November and December. The contract has been approved and the obligating event is the passage of the month, therefore, the minimum amounts are required to be paid. Settlement of these amounts will result in an outflow of cash from the Town.

For the \$202,500 remaining on the contract, \$157,500 of this amount can be avoided as the Municipality has the option of cancelling the contract with 90 days written notice. For the other \$45,000, the obligating event is the passage of January, February and March. So while this \$45,000 cannot be avoided, it does not have to be recorded in the year-end financial statements as the obligating event has not occurred. Therefore, the remaining \$202,500 on the contract does not have to be recorded in the financial statements.

The last criteria prior to recoding an obligation is whether there is an appropriate basis of measurement and a reasonable estimate can be made of the amount involved.

Since the amount of the minimum fees as called for under the contract is known, the Municipality will have to record the minimum fees for both November and December in its financial statements.

\$

The journal entry to record the amounts is as follows:

Dr Snow Clearing fees Cr Accrued Liabilities

22,500 \$ 22,500

To record snow clearing fees payable at year end.

Examples: Environmental Liabilities

Fuel Leak at the Depot

A municipality maintains its own fuel storage tanks at the municipal depot. Through monitoring of vehicle fuel usage levels and purchasing records, it was discovered that fuel was leaking from the storage tanks. Upon further investigation, it was found that the fuel had entered the water table and was collecting in a nearby marsh.

Municipal engineers have been able to trace the leaking fuel back through a natural storm runoff to the municipal depot. The costs estimated with the gas collection from the marsh and water table are estimated at \$75,000. The Department of the Environment and Conservation is quite concerned with the escaped gas as the water run-off from the marsh eventually feeds into a park and picnic area that is frequented by many visitors.

Whether the Municipality has to record the costs for clean-up must be evaluated against the criteria for the recognition of liabilities.

To determine whether the municipality has an obligation, the following questions must be answered:

Does the Municipality have:

A duty or responsibility to	others	leaving	the	municipality	little	or
no choice to avoid;						

Settlement of this duty is expected to decrease the available assets of the government on the occurrence of a specified event;

162	NU
X	
X	
X	

No

Vac

Yes

X

X

No

The transaction or event obligating the municipality has already occurred (i.e. the obligating event).

If the municipality has answered yes to all three questions then a financial obligation exists on behalf of the municipality.

The next question then arises:

Does the municipality have to record the obligation in its financial statements? The obligation must be recorded if the following conditions are met:

Liabilities should be recognized in the financial statements when:

There is an appropriate basis of measurement;

A reasonable estimate can be made of the amount involved.

Because the Municipality caused the contamination to water table, the Municipality is responsible for the remediation costs. The obligating event occurred when the Municipality

Yes

Х

X

X

No

Examples: Environmental Liabilities

accepted responsibility for remediation costs. The Municipality would then accrue the remediation costs in the period in which the Municipality accepted responsibility.

The journal entry to record recognition of the environmental clean-up costs is as follows:

Dr.	Environmental Clean-Up costs	\$ 75,000	
Cr.	Environmental Liability		\$ 75,000

Wastewater Collection System Leak

During 2007 it was discovered that there was a leak in the wastewater collection system. This resulted in the contamination of a parcel of vacant property. At the time the leak was detected and repaired, no decision was made regarding the clean-up of the vacant property. A developer has recently purchased the property and is pressuring the Municipality to clean-up the area so that construction can commence on a proposed sub-division.

Municipal engineers have examined the vacant property. It has been determined that a section of the property must be excavated with the existing soil trucked away and properly disposed of and then replaced with new soil. The remediation costs to return the site to a condition suitable for a sub-division are estimated at \$45,000. The Department of the Environment and Conservation is concerned that there could be a long-term health hazard if the site remediation does not take place and will not approve the construction of the sub-division until site remediation has occurred.

Whether the Municipality has to record the remediation costs must be evaluated against the criteria for the recognition of liabilities.

To determine whether the municipality has an obligation, the following questions must be answered:

Does the Municipality have:

A duty or responsibility	to	others	leaving	the	municipality	little	or
no choice to avoid;							

Settlement of this duty is expected to decrease the available assets of the government on the occurrence of a specified event;

The transaction or event obligating the municipality has already occurred (i.e. the obligating event).

If the municipality has answered yes to all three questions then a financial obligation exists on behalf of the municipality.

The next question then arises:

Examples: Environmental Liabilities

Does the municipality have to record the obligation in its financial statements? The obligation must be recorded if the following conditions are met:

Liabilities should be recognized in the financial statements when:	Yes	Νο
There is an appropriate basis of measurement;	X	
A reasonable estimate can be made of the amount involved.	X	

Because the Municipality caused the contamination to the vacant property, the Municipality is responsible for the remediation costs. The obligating event occurred when the Municipality accepted responsibility for remediation costs. Because these are prior year costs and the Municipality is only currently adopting PSAB, these costs are not required to be recorded in the current year's operations. The Municipality can record these costs directly to its accumulated surplus thereby avoiding an unbudgeted charge to the current year's operations. In the future, the Municipality is required to accrue the remediation costs in the period in which the Municipality accepted responsibility.

The journal entry to record recognition of the environmental clean-up costs is as follows:

- Dr. Accumulated Surplus
- Cr. Environmental Liability

45,000 \$

45,000

\$ 45,0

Location	Classification	Closure Date
Admirals Beach (Admirals cove)	С	2010
Aitibi Stephenville 1	U	CLOSED
Aitibi Stephenville 2	U	CLOSED
Amherst Cove	С	2010
Aspen Cove	В	2011
Avondale	U	CLOSED
Badger	В	2011
Baie Verte	A	2011
Bay Bulls	В	2010
Bay L'Argent	В	2010
Bay St. George South	С	2016
Beachside	В	CLOSED
Belleoram	С	CLOSED
Benton	U	CLOSED
Bills Pit	U	2016
Birchy Bay	В	2011
Black Tickle		
Bonavista	С	2010
Botwood Transfer Station	U	
Boyds Cove	С	2011
Branch	В	2010
Brigus	С	2010
Browns Arm	С	2011
Buchans	В	2011
Buchans Junction	В	2011
Burgeo	В	2016
Burlington	А	2011
Campbellton	В	2011
Cape Broyle	С	2010
Cape Freels	A	2011
Cape St. George	С	CLOSED
Carmanville	В	2011
Cartwright	Ā	2020
Castors River	В	2016
Catalina	В	2010
Cavendish	В	2010
Centreville Wareham Trinity (Indian Bay)	В	2011
Champney	В	2010
Chance Cove	В	2010
Change Islands		
Charlottetown	A	2020
Clarenville	A	2010

Permanently Closed Sites Active MMSB Closure Files GSC Closed, Not Verified Unclassified Active Lanfill Sites Isolated Sites (unclassified) Active Classified Sites

- A = High Risk site
- \mathbf{B} = Moderate Risk site
- **C** = Low risk site
- U = Unclassified site
- I = Isolated site

Location	Classification	Closure Date
Codroy Valley	С	2016
Colinet	С	2010
Comfort Cove	С	2011
Conception Bay South (FoxTrap)	U	CLOSED
Conche	В	CLOSED
Conne River	В	2011
Cooks Harbour	С	2016
Corner Brook (Wild Cove)	U	
Cottrell's Cove	В	2011
Cox's Cove - McIvers	С	2016
Croque	С	CLOSED
Daniel's Harbour	С	2016
Davis Inlet		CLOSED
Deer Lake	В	2016
Englee-Bide Arm-Roddickton	В	CLOSED
English Harbour East	A	2010
Epworth	В	2010
Exploits Regional	A	2011
Fairhaven	С	2010
Ferryland	C	2010
Fleur De Lys	A	CLOSED
Fogo Island Regional	1	
Forteau	В	2020
Fortune-Grand Bank	С	2010
Fox Cove-Mortier	B	2010
Fox Harbour	C	2010
Fox Island River - Point Au Mal	C	2016
Francois		
Frenchman'S Cove	C	2010
Gallants	C	2016
Gambo	B	2011
Gander	B	2011
Gander Bay		CLOSED
Garnish	C	2010
Gaskiers	B	2010
Gaultois	_	
GBWMA	C	2011
George'S Brook	B	2010
Glenwood	C	2010
Grand Bruit	- i	2011
Grand Le Pierre	B	2010
Grates Cove	C	2010
Great Harbour Deep		CLOSED
Grey River		

Permanently Closed Sites	
Active MMSB Closure Files	
GSC Closed, Not Verified	
Unclassified Active Lanfill Sites	
Isolated Sites (unclassified)	
Active Classified Sites	

- **A** = High Risk site
- **B** = Moderate Risk site
- **C** = Low risk site
- **U** = Unclassified site
- I = Isolated site

Location	Classification	Closure Date
Hampden	В	2016
Happy Valley - Goose Bay	С	2020
Harbour Breton	В	2011
Harbour Grace	С	CLOSED
Harcourt/Burgoyne'S	С	2010
Hare Bay Metal	Ŭ	CLOSED
Harry's Harbour	A	CLOSED
Hawkes Bay Regional (Port aux Choix)	C	2016
Heart's Delight	C C	2010
Hermitage - Sandyville	C	2010
Hillview	C C	2010
Hodge'S Cove	B	2010
Holyrood	B	CLOSED
Hopedale		CLOSED
Horwood	B	2011
Howley	B	2016
Jackson's Am	B	2016
Jackson's Arm Scrap Metal Site	С	CLOSED
Jamestown/Winter Brook	B	2010
King'S Cove	В	2010
King's Point	В	2011
Kippens	C	CLOSED
La Poile		
La Scie	В	2011
Labrador West, Wabush & Labrador City	В	2020
Lamaline	В	2010
Laurenceton	С	2011
Lawn	В	2010
Leading Tickles	C	2011
Lethbridge	C	2010
Lewisporte	В	2011
Little Bay Islands		
Little Burnt Bay	В	2011
Little Heart'S Éase	В	2010
Lodge Bay	A	2020
Lomond	С	2016
Long Island (unlicenced)	U	CLOSED
Lord'S Cove	В	2010
Lourdes Regional	C	2016
Lower Island Cove	C	2010
	B	2011
Lumsden	B	2011 CLOSED
	B I B	CLOSED CLOSED

Permanently Closed Sites
Active MMSB Closure Files
GSC Closed, Not Verified
Unclassified Active Lanfill Sites
Isolated Sites (unclassified)
Active Classified Sites

- A = High Risk site
- **B** = Moderate Risk site
- **C** = Low risk site
- U = Unclassified site
- I = Isolated site

Location	Classification	Closure Date
Makkovik	1	
Mary's Harbour	А	2020
Marystown	В	2010
McCallum		incin
Millertown	В	2011
Milltown	С	2011
Ming's Bight	В	2011
Monkstown	В	2010
Morrisville	В	2011
Mount Carmel	A	2010
Mud Lake		
Musgrave Harbour	A	2011
Musgravetown	В	2010
Nain		
Natuashish		
New Harbour	A	2010
New World Island	В	2011
New-Wes-Valley	В	2011
Nipper's Harbour	В	2011
Norman Bay		
Norman's Cove	С	2010
Norris Arm	В	2011
Norris Point (Rocky Harbour)	С	2016
North Boat Harbour	В	CLOSED
North Harbour	С	2010
Northern Bay	С	CLOSED
Old Perlican	С	2010
Paradise River	U	
Pasadena	B	CLOSED
Peterview	B	2011
Pinsent's Arm	U	
Placentia-Freshwater-Dunnville-Argentia	B	2010
Point Leamington	B	2011
Point May	B	2010
Point of Bay	1	2011
Pool's Cove	В	2011
Port Anson	U	CLOSED
Port au Port East	C	CLOSED
Port aux Basques Landfill/ Scrap Metal	B	2016
Port aux Basques Regional Incinerator	C	2016
Port Blandford	В	2010
Port Hope Simpson	B	2020
Postville		2020
Queens Cove	B	2010

Newfoundland and Labrador Landfill Site Listing

Permanently Closed Sites
Active MMSB Closure Files
GSC Closed, Not Verified
Unclassified Active Lanfill Sites
Isolated Sites (unclassified)
Active Classified Sites

- A = High Risk site
- **B** = Moderate Risk site
- **C** = Low risk site
- U = Unclassified site
- I = Isolated site

Location	Classification	Closure Date
Ramea		
Random Island	В	2010
Rattling Brook	U	CLOSED
Red Bay	В	2020
Rencontre East		
Renews-Cappahayden	В	2010
Rigolet		
Robert's Arm	U	CLOSED
Robin Hood Bay (St. John's)	A	2010
Rose Blanche	В	2016
Rushoon	В	2010
Seal Cove (Fortune Bay)	В	2011
Seal Cove (White Bay)	A	2011
Sheppardville	U	CLOSED
Ship Cove	В	CLOSED
Small Point	В	2010
Snook's Arm	В	2011
Sop's Arm - Pollard's Point	В	2016
South Branch	C	2016
South Brook	U	CLOSED
Southern Bay	A	2010
Southern Harbour	В	2010
Springdale	U	CLOSED
St Lawrence	B	2010
St. Alban's	C	2011
St. Anthony	B	2016
St. Barbe	A	2016
St. Brendans		
St. Brides (Cuslett Site)	В	2010
St. Georges	B	2016
St. Jacques - Coomb's Cove	A	2011
St. Joseph's	A	2010
St. Lewis	В	2020
St. Lunaire-Griquet-Raleigh	A	CLOSED
St. Mary's	В	2010
St. Stephen's	C	2010
Stephenville	B	2016
Stoneville	C	2010
Strait Of Belle Isle	C C	2016
Sunnyside-Come By Chance	C C	2010
Swift Current	В	2010
Terra Nova Regional	B	2010
Terra Nova Village		CLOSED
Terrenceville	B	2010

Newfoundland and Labrador Landfill Site Listing

Permanently Closed Sites
Active MMSB Closure Files
GSC Closed, Not Verified
Unclassified Active Lanfill Sites
Isolated Sites (unclassified)
Active Classified Sites

- A = High Risk site
- **B** = Moderate Risk site
- **C** = Low risk site
- U = Unclassified site
- I = Isolated site

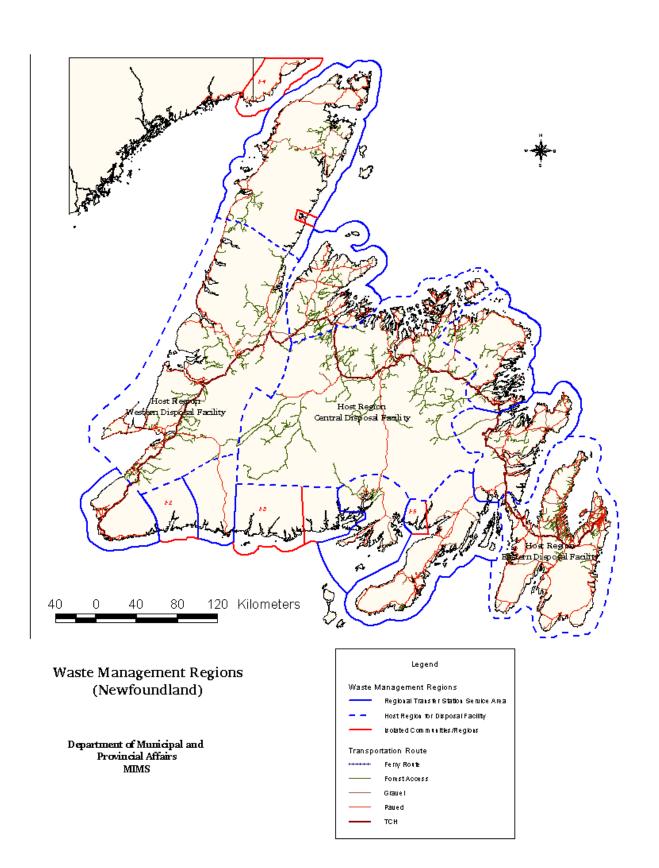
Location	Classification	Closure Date
Trepassey	С	2010
Triton	U	CLOSED
Trout River	С	2016
Twillingate	В	2011
Wabana	I	
Western Bay	U	CLOSED
Westport	С	2011
Whitbourne	С	CLOSED
Wild Cove	В	2011
William's Harbour	I	
Winterland	С	2010
Winterton	В	2010
Woodstock	A	2011

PRIVATE/COMMERCIAL INDUSTRIAL		
SITES	Classification	Closure Date
Abitibi Industrial Landfill (Central - Gander)	U	N/A
Anaktalak Bay (Voiseys Bay) (Labrador)	U	CLOSED
Anaktalik Bay (Voiseys Bay) (Labrador)	U	CLOSED
Churchill Falls Summer Site (Labrador)	С	N/A
Churchill Falls Winter Site (Labrador)	В	N/A
Corner Brook P & P (Western)	А	CLOSED
Easter Forest Products (Western)	U	N/A
Eastport Liquid/Septic (Central - Gander)	С	N/A
FPI St. Barbe (Western)	U	N/A
IOCC (Labrador)	U	N/A
Jamestown Lumber Company (Eastem-	U	N/A
Labrador Fishermans Union Shrimp	U	N/A
Voisey's Bay (Labrador)	U	N/A
Wabush Mines (Labrador)	U	N/A

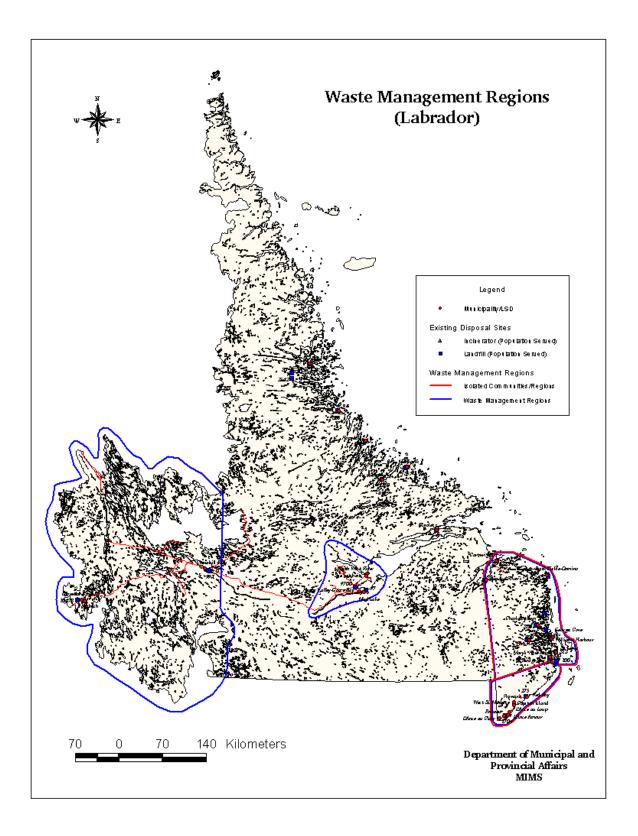
SCRAP METAL SITES	Classification	Closure Date
	Classification	
Avondale Access Rd. Scrap (St. John's)	U	CLOSED
Baie Verte Scrap Metal (Central - Gander)	C	N/A
Churchill Falls Scrap Metal (Labrador)	U	N/A
Fogo Island Regional (Central - Gander)	I	N/A
Robin Hood Bay Salvage Yard (St. John's)		N/A
St. Brendan's Metallic (Central - Gander)	I	N/A
St. Jacques-Coomb's Cove (Central -	В	N/A

Active Classified Sites	Total Total Sites	173 252
Isolated Sites (unclassified)	Total	24
Unclassified Active Lanfill Sites	Total	12
GSC Closed, Not Verified	Total	7
Active MMSB Closure Files	Total	10
Permanently Closed Sites	Total	26

Total Sites



Map of Newfoundland and Labrador Waste Management Zones



Map of Newfoundland and Labrador Waste Management Zones

Closure Costs

A Municipality is currently operating a landfill for the purpose of disposing of solid waste. The landfill was opened 9 years ago and was designed with a capacity of 100,000 tons. Currently there is an incinerator in operation at the site which substantially reduces the amount of solid waste going into the landfill. The landfill currently contains approximately 36,000 tons of solid waste.

The closure costs for the landfill include: final cover and vegetation and the construction of facilities for drainage control features, leachate monitoring, water quality monitoring and monitoring and recovery of gas. The total of these costs is estimated to be \$25,000.

The municipality must determine the amount of liability to be recorded in its year-end financial statements.

First, a determination must be made of when the landfill is expected to close.

The landfill contains 36,000 tons of solid waste and has been in operation of 9 years. That calculates to approximately 4,000 tons of solid waste per year being added to the landfill.

36,000 tons / 9 years = 4,000 tons / year

At a rate of 4,000 tons per year the landfill will be in operation for 25 years.

The landfill has currently been in operation for 9 years so there are 16 years of useful life remaining on the landfill.

To calculate the current liability for landfill closure costs the closure costs must be discounted back to the current date using the Municipality's long-term borrowing rate.

The Municipality can currently borrow at a fixed rate of 6.00%. Therefore, the \$25,000 closure costs must be discounted at 6.00% for 16 years to calculate the present value of the future amount in today's dollars.

Estimated Costs	x	Discount Factor	=	Present Value
\$25,000	х	0.39365 (see Appendix 12)	=	\$9,841

The next step is to calculate the percentage of these costs that must be recorded in the current year's financial statements. This will be based upon the percentage of the landfill that has currently been filled.

NPV of Estimated	X	Cumulative Capacity Used
Total Expenditures		Total Estimated Capacity

Examples: Landfills

\$9,841		х	(36,000 tons / 100,000 tons)
\$9,841		Х	36.00%
	=	\$3,54	3

The journal entry to record the closure costs for the landfill at year end is:

Dr	Landfill Closure Costs	\$	3,543	
Cr	Accrued Liabilities - Landfill Closure Co	osts		\$ 3,543

The journal entry for all subsequent years will have to take into account the amount of the liability that was recorded in the prior year. For example, the journal entry next year assuming another 4,000 tons of solid waste is deposited into the site is as follows:

The landfill will have been in operation for 10 years, with 15 years of useful life remaining.

Therefore, the \$25,000 closure costs must be discounted at 6.00% for 15 years to calculate the present value of the future amount in today's dollars.

Estimated Costs x Discount Factor = Present Value

\$25,000	Х	0.41726	=	\$10,432
		(see Appendix 12)		

The next step is to calculate the percentage of these costs that must be recorded in the current year's financial statements. This will be based upon the percentage of the landfill that has currently been filled.

NPV of Estimated Total Expenditures	x	Cumulative Capacity Used Total Estimated Capacity
\$10,432	х	((36,000 + 4,000) tons / 100,000 tons)
\$10,432	х	(40,000 tons / 100,000 tons)
\$10,432	х	40.00%
=	\$4,17	73

The journal entry to record the closure costs for the landfill at year end is:

Dr	Landfill Closure Costs	\$	630	
	(\$4,173 - \$3,543)			
Cr	Accrued Liabilities - Landfill Closure Co	osts		\$ 630

Examples: Landfills

Post-Closure Costs

For the same landfill as discussed in the previous example, the Municipality is also responsible for the accrual of post-closure landfill costs. Post-closure costs include: acquisition of any land for buffer zones, treatment and monitoring of leachate, monitoring ground water and surface water, gas monitoring and recovery and on-going maintenance of various control and drainage systems and final cover.

To recap, the Municipality is currently operating a landfill for the purpose of disposing of solid waste. The landfill was opened 9 years ago and was designed with a capacity of 100,000 tons. There currently is an incinerator in operation at the site which substantially reduces the amount of solid waste going into the landfill. The landfill currently contains approximately 36,000 tons of solid waste.

The post-closure costs for the landfill are estimated to be \$6,000 per year and to last for 20 years.

The municipality must determine the amount of liability to be recorded in its year-end financial statements.

First, a determination must be made of when the landfill is expected to close.

The landfill contains 36,000 tons of solid waste and has been in operation of 9 years. That calculates to approximately 4,000 tons of solid waste per year being added to the landfill.

36,000 tons / 9 years = 4,000 tons / year

At a rate of 4,000 tons per year, the landfill will be in operation for 25 years.

100,000 ton capacity / 4,000 tons / year = 25 years

The landfill has been in operation for 9 years so there are 16 years of useful life remaining on the landfill.

To calculate the current liability for landfill post-closure costs, the post-closure costs must be discounted back to the current date using the Municipality's long-term borrowing rate.

Care must be taken when discounting costs associated with post-closure costs. Post-closure costs are annual costs that do not begin until after the landfill has closed. Therefore, for operating landfills, two discounting calculations are required: the first to discount the costs to the closure date and the second to discount the value at the closure date back to today. If the landfill is already closed, the payment of post-closure costs has already commenced and only a single discounted amounted has to be calculated - the remaining numbers of years that the post-closure costs will be incurred.

The Municipality can currently borrow at a fixed rate of 6.00%. Therefore, the \$6,000 annual post-closure costs must be discounted at 6.00% for 20 years to calculate the present value of the future amount on the closure date of the landfill.

Examples: Landfills

The present value of an annuity of \$6,000 for 20 years, discounted at 6.00% is:

Annual Costs	X	Discount Factor	=	Present Value
\$6,000	х	11.4699 (see Appendix 12)	=	\$68,820

This amount must then be discounted at 6% for an additional 16 years to determine the amount in today's dollars.

Estimated Costs x		Discount Factor	=	Present Value
\$68,820	х	0.39365 (see Appendix 12)	=	\$27,091

The next step is to calculate the percentage of these costs that must be recorded in the current year's financial statements. This will be based upon the percentage of the landfill that has currently been filled.

NPV of Estimated Total Expenditures	X	Cumulative Capacity Used Total Estimated Capacity
\$27,091	х	(36,000 tons / 100,000 tons)
\$27,091	х	36.00%
=	\$9,75	3

The journal entry to record the closure costs for the landfill at year end is:

Dr	Landfill Post-Closure Costs	\$	9,753	
Cr	Accrued Liabilities - Landfill Pos	t-Closure C	osts	\$ 9,753

The journal entry for all subsequent years will have to take into account the amount of the liability that was recorded in the prior year. For example, the journal entry next year, assuming another 4,000 tons of solid waste is deposited into the site, is as follows:

The landfill will have been in operation for 10 years, with 15 years of useful life remaining.

Therefore, the \$68,820 post-closure costs must be discounted at 6.00% for 15 years to calculate the present value of the future amount in today's dollars.

Estimated Costs x Discount Factor = Present Value

\$68,820 x 0.41726 = \$28,739 (see Appendix 12)

Examples: Landfills

The next step is to calculate the percentage of these costs that must be recorded in the current year's financial statements. This will be based upon the percentage of the landfill that has currently been filled.

NPV of Estimated Total Expenditures	x	<u>Cumulative Capacity Used</u> Total Estimated Capacity
\$28,739	х	((36,000 + 4,000) tons / 100,000 tons)
\$28,739	Х	(40,000 tons / 100,000 tons)
\$28,739	Х	40.00%
=	\$11,	496

The journal entry to record the closure costs for the landfill at year end is:

Dr	Landfill Closure Costs \$		1,743	
	(\$11,496 - \$9,753)			
Cr	Accrued Liabilities - Landfill Closure Cost	ts		\$ 1,743

Examples: Landfills

Amortization of Landfill Land Costs

Land is a tangible capital asset that is not normally amortized. <u>However, land associated with a landfill has a finite useful life.</u> Once the landfill has reached capacity, the land has no future benefit to the Municipality. The cost of the land must therefore be reduced over the operating period of the landfill to recognize the reduction in the future benefit of the land.

In the previous example, the Municipality is currently operating a landfill for the purpose of disposing of solid waste. The landfill was opened 9 years ago and was designed with a capacity of 100,000 tons. Currently, there is an incinerator in operation at the site which substantially reduces the amount of solid waste going into the landfill. The landfill currently contains approximately 36,000 tons of solid waste.

The Municipality originally purchased the land upon which the landfill is located for \$25,000.

First, a determination must be made of when the landfill is expected to close.

The landfill contains 36,000 tons of solid waste and has been in operation of 9 years. That calculates to approximately 4,000 tons of solid waste per year being added to the landfill.

36,000 tons / 9 years = 4,000 tons / year

At a rate of 4,000 tons per year, the landfill will be in operation for 25 years.

100,000 ton capacity / 4,000 tons / year = 25 years

The annual amortization of the landfill land cost is:

\$25,000 / 25 years = \$1,000 / year

The initial recording of amortization will result in recording amortization for the 9 years that the landfill has been in use.

Dr	Amortization	\$	1,000	
Dr	Accumulated Surplus	\$	8,000	
	(8 years @ \$1,000 / year)			
Cr	Accumulated Amortization - Landfill	Land		\$ 9,000

In every subsequent year, the journal entry will be for the amortization of the land costs for that year only.

Dr	Amortization	\$	1,000	
Cr	Accumulated Amortization - La	andfill Land		\$ 1,000

Town of Hamilton - Example 1: Closed Landfill Discounted Future Cash Flows - Landfill Liabilities December 31, 2007, 2008 & 2009

Discount Rate:

6.50%

Discounted Future Cash Flows

	31-Dec-07			31-Dec-08		31-Dec-09
	\$ 46,134	_	\$	43,133	_	\$ 39,937
	 Cash Flow	_		Cash Flow		 Cash Flow
2008	\$ 6,000	2009	\$	6,000	2010	\$ 6,000
2009	\$ 6,000	2010	\$	6,000	2011	\$ 6,000
2010	\$ 6,000	2011	\$	6,000	2012	\$ 6,000
2011	\$ 6,000	2012	\$	6,000	2013	\$ 6,000
2012	\$ 6,000	2013	\$	6,000	2014	\$ 6,000
2013	\$ 6,000	2014	\$	6,000	2015	\$ 6,000
2014	\$ 6,000	2015	\$	6,000	2016	\$ 6,000
2015	\$ 6,000	2016	\$	6,000	2017	\$ 6,000
2016	\$ 6,000	2017	\$	6,000	2018	\$ 6,000
2017	\$ 6,000	2018	\$	6,000	2019	\$ -
2018	\$ 6,000	2019	\$	-	2020	\$ -
2019	\$, -	2020	\$	-	2021	\$ -
2020	\$ -	2021	\$	-	2022	\$ -
2021	\$ -	2022	\$ \$	-	2023	\$ -
2022	\$ -	2023	\$	-	2024	\$ -
2023	\$ -	2024	\$	-	2025	\$ -
2024	\$ -	2025	\$	-	2026	\$ -
2025	\$ -	2026	\$	-	2027	\$ -
2026	\$ -	2027	\$	-	2028	\$ -
2027	\$ -	2028	\$	-	2029	\$ -
2028	\$ -	2029	\$	-	2030	\$ -
2029	\$ -	2030	\$	-	2031	\$ -
2030	\$ -	2031	\$	-	2032	\$ -
2031	\$ -	2032	\$	-	2033	\$ -
2032	\$ -	2033	\$	-	2034	\$ -
2033	\$ -	2034	\$	-	2035	\$ -
2034	\$ -	2035	\$	-	2036	\$ -
2035	\$ -	2036	\$	-	2037	\$ -
2036	\$ -	2037	\$	-	2038	\$ -

		Discounted	Future C	ash I	ples 2 & 4: Flows - Land 007, 2008 &	dfill Liab		
Discou	ınt Ra	ite:						6.50%
Discou	inted	Future Cash	Flows					
		31-Dec-07			31-Dec-08			31-Dec-09
	\$	157,372	_	\$	167,601	_	\$	178,495
		Cash Flow	_		Cash Flow			Cash Flow
2008	\$	-	2009	\$	-	2010	\$	_
2009	\$	-	2010	\$	-	2011	\$	-
2010	\$	-	2011	\$	-	2012	\$	-
2011	\$	-	2012	\$	-	2013	\$	-
2012	\$	-	2013	\$	-	2014	\$	-
2013	\$	-	2014	\$ \$	-	2015	\$	-
2014	\$	-	2015		-	2016	\$	-
2015	\$	-	2016	\$	-	2017	\$	231,000
2016	\$	-	2017	\$	231,000	2018	\$	6,000
2017	\$	231,000	2018	\$	6,000	2019	\$	6,000
2018	\$ ¢	6,000	2019	\$	6,000	2020	\$ ¢	6,000
2019 2020	\$ \$	6,000 6,000	2020 2021	\$ \$	6,000 6,000	2021 2022	\$ \$	6,000 6,000
2020	ֆ \$	6,000	2021	գ \$	6,000	2022	ֆ \$	6,000
2022	\$	6,000	2023	\$	6,000	2023	\$	6,000
2023	\$	6,000	2024	\$	6,000	2025	\$	6,000
2024	\$	6,000	2025	\$	6,000	2026	\$	6,000
2025	\$	6,000	2026	\$	6,000	2027	\$	6,000
2026	\$	6,000	2027	\$	6,000	2028	\$	6,000
2027		6,000	2028	\$	6,000	2029	\$	6,000
2028	\$ \$	6,000	2029	\$	6,000	2030	\$	6,000
2029	\$	6,000	2030	\$	6,000	2031	\$	6,000
2030	\$	6,000	2031	\$	6,000	2032	\$	6,000
2031	\$	6,000	2032	\$	6,000	2033	\$	6,000
2032	\$	6,000	2033	\$	6,000	2034	\$	6,000
2033	\$	6,000	2034	\$	6,000	2035	\$	6,000
2034	\$	6,000	2035	\$	6,000	2036	\$	6,000
2035	\$	6,000	2036	\$	6,000	2037	\$	-
2036	\$	6,000	2037	\$	-	2038	\$	-

		vn of Hamilt Discounted	Future Ca	sh Fl	-			tes
Discou	unt Ra	ite:						6.50%
Discou	inted	Future Cash F	lows					
		31-Dec-10			31-Dec-11		3	1-Dec-12
	\$	238,360		\$	-	=	\$	-
		Cash Flow	_	(Cash Flow	-	C	ash Flow
2011	\$	-	2012	\$	-	2013	\$	-
2012	\$	-	2013	\$	-	2014	\$	-
2013	\$	-	2014	\$	-	2015	\$	-
2014	\$	-	2015	\$	-	2016	\$	-
2015	\$	-	2016	\$	-	2017	\$	-
2016	\$	-	2017	\$	-	2018	\$	-
2017	\$	306,000	2018	\$	-	2019	\$	-
2018	\$	6,000	2019	\$	-	2020	\$	-
2019	\$	6,000	2020	\$	-	2021	\$	-
2020	\$	6,000	2021	\$	-	2022	\$	-
2021	\$	6,000	2022	\$	-	2023	\$	-
2022	\$	6,000	2023	\$	-	2024	\$	-
2023	\$	6,000	2024	\$	-	2025	\$	-
2024	\$	6,000	2025	\$	-	2026	\$	-
2025	\$	6,000	2026	\$	-	2027	\$	-
2026	\$	6,000	2027	\$	-	2028	\$	-
2027	\$	6,000	2028	\$	-	2029	\$	-
2028	\$	6,000	2029	\$	-	2030	\$	-
2029 2030	\$ \$	6,000 6,000	2030 2031	\$	-	2031 2032	\$	-
2030	ъ \$	6,000	2031	\$ \$ \$	-	2032	\$ \$	-
2031	ъ \$	6,000	2032	ф Ф	-	2033	ъ \$	-
2032	φ \$	6,000	2033	ф Ф	-	2034		-
2033 2034	ъ \$	6,000	2034 2035	\$ \$	-	2035	\$ \$	-
2034 2035	ъ \$	6,000	2035	ъ \$	-	2030	ъ \$	-
2035	φ \$	6,000	2030	ф \$	-	2037	ф \$	-
2030	φ \$	-	2037	φ \$	-	2030	Ψ \$	-
2038	φ \$	-	2030	\$	-	2039	Ψ \$	-
2039	Ψ \$	-	2033	Ψ \$	-	2040	Ψ \$	-
2000	Ψ		LUTU	Ψ		2071	Ψ	

Town of Hamilton - Example 5 Discounted Future Cash Flows - Landfill Liabilities December 31, 2010

Discount Rate:

6.50%

Discounted Future Cash Flows

31-Dec-10	31-Dec-11	31-Dec-12
\$ 171,607	\$ -	\$ -

	 Cash Flow		 Cash Flow		Cash Flow
2011	\$ -	2012	\$ -	2013	\$ -
2012	\$ -	2013	\$ -	2014	\$ -
2013	\$ -	2014	\$ -	2015	\$ -
2014	\$ -	2015	\$ -	2016	\$ -
2015	\$ -	2016	\$ -	2017	\$ -
2016	\$ -	2017	\$ -	2018	\$ -
2017	\$ -	2018	\$ -	2019	\$ -
2018	\$ -	2019	\$ -	2020	\$ -
2019	\$ -	2020	\$ -	2021	\$ -
2020	\$ 256,000	2021	\$ -	2022	\$ -
2021	\$ 6,000	2022	\$ -	2023	\$ -
2022	\$ 6,000	2023	\$ -	2024	\$ -
2023	\$ 6,000	2024	\$ -	2025	\$ -
2024	\$ 6,000	2025	\$ -	2026	\$ -
2025	\$ 6,000	2026	\$ -	2027	\$ -
2026	\$ 6,000	2027	\$ -	2028	\$ -
2027	\$ 6,000	2028	\$ -	2029	\$ -
2028	\$ 6,000	2029	\$ -	2030	\$ -
2029	\$ 6,000	2030	\$ -	2031	\$ -
2030	\$ 6,000	2031	\$ -	2032	\$ -
2031	\$ 6,000	2032	\$ -	2033	\$ -
2032	\$ 6,000	2033	\$ -	2034	\$ -
2033	\$ 6,000	2034	\$ -	2035	\$ -
2034	\$ 6,000	2035	\$ -	2036	\$ -
2035	\$ 7,000	2036	\$ -	2037	\$ -
2036	\$ 7,000	2037	\$ -	2038	\$ -
2037	\$ 7,000	2038	\$ -	2039	\$ -
2038	\$ 7,000	2039	\$ -	2040	\$ -
2039	\$ 7,000	2040	\$ -	2041	\$ -

Present Value and Future Value Tables

Present value interest factor of \$1 per period at i% for n periods, PVIF(i,n)

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%
1	0.990	0.980	0.971	0.962	0.952	0.943	0.935	0.926	0.917	0.909	0.901	0.893	0.885	0.877	0.870	0.862	0.855	0.847	0.840	0.833
2	0.980	0.961	0.943	0.925	0.907	0.890	0.873	0.857	0.842	0.826	0.812	0.797	0.783	0.769	0.756	0.743	0.731	0.718	0.706	0.694
3	0.971	0.942	0.915	0.889	0.864	0.840	0.816	0.794	0.772	0.751	0.731	0.712	0.693	0.675	0.658	0.641	0.624	0.609	0.593	0.579
4	0.961	0.924	0.888	0.855	0.823	0.792	0.763	0.735	0.708	0.683	0.659	0.636	0.613	0.592	0.572	0.552	0.534	0.516	0.499	0.482
5	0.951	0.906	0.863	0.822	0.784	0.747	0.713	0.681	0.650	0.621	0.593	0.567	0.543	0.519	0.497	0.476	0.456	0.437	0.419	0.402
6	0.942	0.888	0.837	0.790	0.746	0.705	0.666	0.630	0.596	0.564	0.535	0.507	0.480	0.456	0.432	0.410	0.390	0.370	0.352	0.335
7	0.933	0.871	0.813	0.760	0.711	0.665	0.623	0.583	0.547	0.513	0.482	0.452	0.425	0.400	0.376	0.354	0.333	0.314	0.296	0.279
8	0.923	0.853	0.789	0.731	0.677	0.627	0.582	0.540	0.502	0.467	0.434	0.404	0.376	0.351	0.327	0.305	0.285	0.266	0.249	0.233
9	0.914	0.837	0.766	0.703	0.645	0.592	0.544	0.500	0.460	0.424	0.391	0.361	0.333	0.308	0.284	0.263	0.243	0.225	0.209	0.194
10	0.905	0.820	0.744	0.676	0.614	0.558	0.508	0.463	0.422	0.386	0.352	0.322	0.295	0.270	0.247	0.227	0.208	0.191	0.176	0.162
11	0.896	0.804	0.722	0.650	0.585	0.527	0.475	0.429	0.388	0.350	0.317	0.287	0.261	0.237	0.215	0.195	0.178	0.162	0.148	0.135
12	0.887	0.788	0.701	0.625	0.557	0.497	0.444	0.397	0.356	0.319	0.286	0.257	0.231	0.208	0.187	0.168	0.152	0.137	0.124	0.112
13	0.879	0.773	0.681	0.601	0.530	0.469	0.415	0.368	0.326	0.290	0.258	0.229	0.204	0.182	0.163	0.145	0.130	0.116	0.104	0.093
14	0.870	0.758	0.661	0.577	0.505	0.442	0.388	0.340	0.299	0.263	0.232	0.205	0.181	0.160	0.141	0.125	0.111	0.099	0.088	0.078
15	0.861	0.743	0.642	0.555	0.481	0.417	0.362	0.315	0.275	0.239	0.209	0.183	0.160	0.140	0.123	0.108	0.095	0.084	0.074	0.065
16	0.853	0.728	0.623	0.534	0.458	0.394	0.339	0.292	0.252	0.218	0.188	0.163	0.141	0.123	0.107	0.093	0.081	0.071	0.062	0.054
17	0.844	0.714	0.605	0.513	0.436	0.371	0.317	0.270	0.231	0.198	0.170	0.146	0.125	0.108	0.093	0.080	0.069	0.060	0.052	0.045
18	0.836	0.700	0.587	0.494	0.416	0.350	0.296	0.250	0.212	0.180	0.153	0.130	0.111	0.095	0.081	0.069	0.059	0.051	0.044	0.038
19	0.828	0.686	0.570	0.475	0.396	0.331	0.277	0.232	0.194	0.164	0.138	0.116	0.098	0.083	0.070	0.060	0.051	0.043	0.037	0.031
20	0.820	0.673	0.554	0.456	0.377	0.312	0.258	0.215	0.178	0.149	0.124	0.104	0.087	0.073	0.061	0.051	0.043	0.037	0.031	0.026
25	0.780	0.610	0.478	0.375	0.295	0.233	0.184	0.146	0.116	0.092	0.074	0.059	0.047	0.038	0.030	0.024	0.020	0.016	0.013	0.010
30	0.742	0.552	0.412	0.308	0.231	0.174	0.131	0.099	0.075	0.057	0.044	0.033	0.026	0.020	0.015	0.012	0.009	0.007	0.005	0.004
35	0.706	0.500	0.355	0.253	0.181	0.130	0.094	0.068	0.049	0.036	0.026	0.019	0.014	0.010	0.008	0.006	0.004	0.003	0.002	0.002
40	0.672	0.453	0.307	0.208	0.142	0.097	0.067	0.046	0.032	0.022	0.015	0.011	0.008	0.005	0.004	0.003	0.002	0.001	0.001	0.001
50	0.608	0.372	0.228	0.141	0.087	0.054	0.034	0.021	0.013	0.009	0.005	0.003	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000

Present Value and Future Value Tables

Future value interest factor of \$1 per period at i% for n periods, FVIF(i,n)

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%
1	1.010	1.020	1.030	1.040	1.050	1.060	1.070	1.080	1.090	1.100	1.110	1.120	1.130	1.140	1.150	1.160	1.170	1.180	1.190	1.200
2	1.020	1.040	1.061	1.082	1.103	1.124	1.145	1.166	1.188	1.210	1.232	1.254	1.277	1.300	1.323	1.346	1.369	1.392	1.416	1.440
3	1.030	1.061	1.093	1.125	1.158	1.191	1.225	1.260	1.295	1.331	1.368	1.405	1.443	1.482	1.521	1.561	1.602	1.643	1.685	1.728
4	1.041	1.082	1.126	1.170	1.216	1.262	1.311	1.360	1.412	1.464	1.518	1.574	1.630	1.689	1.749	1.811	1.874	1.939	2.005	2.074
5	1.051	1.104	1.159	1.217	1.276	1.338	1.403	1.469	1.539	1.611	1.685	1.762	1.842	1.925	2.011	2.100	2.192	2.288	2.386	2.488
6	1.062	1.126	1.194	1.265	1.340	1.419	1.501	1.587	1.677	1.772	1.870	1.974	2.082	2.195	2.313	2.436	2.565	2.700	2.840	2.986
7	1.072	1.149	1.230	1.316	1.407	1.504	1.606	1.714	1.828	1.949	2.076	2.211	2.353	2.502	2.660	2.826	3.001	3.185	3.379	3.583
8	1.083	1.172	1.267	1.369	1.477	1.594	1.718	1.851	1.993	2.144	2.305	2.476	2.658	2.853	3.059	3.278	3.511	3.759	4.021	4.300
9	1.094	1.195	1.305	1.423	1.551	1.689	1.838	1.999	2.172	2.358	2.558	2.773	3.004	3.252	3.518	3.803	4.108	4.435	4.785	5.160
10		1.219	1.344	1.480	1.629	1.791	1.967	2.159	2.367	2.594	2.839	3.106	3.395	3.707	4.046	4.411	4.807	5.234	5.695	6.192
11	1.116	1.243	1.384	1.539	1.710	1.898	2.105	2.332	2.580	2.853	3.152	3.479	3.836	4.226	4.652	5.117	5.624	6.176	6.777	7.430
12	1.127	1.268	1.426	1.601	1.796	2.012	2.252	2.518	2.813	3.138	3.498	3.896	4.335	4.818	5.350	5.936	6.580	7.288	8.064	8.916
13	1.138	1.294	1.469	1.665	1.886	2.133	2.410	2.720	3.066	3.452	3.883	4.363	4.898	5.492	6.153	6.886	7.699	8.599	9.596	10.699
14	1.149	1.319	1.513	1.732	1.980	2.261	2.579	2.937	3.342	3.797	4.310	4.887	5.535	6.261	7.076	7.988	9.007	10.147	11.420	12.839
15		1.346	1.558	1.801	2.079	2.397	2.759	3.172	3.642	4.177	4.785	5.474	6.254	7.138	8.137	9.266	10.539	11.974	13.590	15.407
16		1.373	1.605	1.873	2.183	2.540	2.952	3.426	3.970	4.595	5.311	6.130	7.067	8.137	9.358	10.748	12.330	14.129	16.172	18.488
17	1.184	1.400	1.653	1.948	2.292	2.693	3.159	3.700	4.328	5.054	5.895	6.866	7.986	9.276	10.761	12.468	14.426	16.672	19.244	22.186
18	1.196	1.428	1.702	2.026	2.407	2.854	3.380	3.996	4.717	5.560	6.544	7.690	9.024	10.575	12.375	14.463	16.879	19.673	22.901	26.623
19	1.208	1.457	1.754	2.107	2.527	3.026	3.617	4.316	5.142	6.116	7.263	8.613	10.197	12.056	14.232	16.777	19.748	23.214	27.252	31.948
20	1.220	1.486	1.806	2.191	2.653	3.207	3.870	4.661	5.604	6.727	8.062	9.646	11.523	13.743	16.367	19.461	23.106	27.393	32.429	38.338
25	1.282	1.641	2.094	2.666	3.386	4.292	5.427	6.848	8.623	10.835	13.585	17.000	21.231	26.462	32.919	40.874	50.658	62.669	77.388	95.396
30	1.348	1.811	2.427	3.243	4.322	5.743	7.612	10.063	13.268	17.449	22.892	29.960	39.116	50.950	66.212	85.850	111.06	143.37	184.68	237.38
35	1.417	2.000	2.814	3.946	5.516	7.686	10.677	14.785	20.414	28.102	38.575	52.800	72.069	98.100	133.2	180.3	243.5	328.0	440.7	590.7
40	1.489	2.208	3.262	4.801	7.040	10.286	14.974	21.725	31.409	45.259	65.001	93.051	132.78	188.88	267.9	378.7	533.9	750.4	1,052	1,470
50	1.645	2.692	4.384	7.107	11.467	18.420	29.457	46.902	74.358	117.39	184.56	289.00	450.74	700.23	1,084	1,671	2,566	3,927	5,989	9,100

Present Value and Future Value Tables

Present value interest factor of an (ordinary) annuity of \$1 per period at i% for n periods, PVIFA(i,n)

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%
1	0.990	0.980	0.971	0.962	0.952	0.943	0.935	0.926	0.917	0.909	0.901	0.893	0.885	0.877	0.870	0.862	0.855	0.847	0.840	0.833
2	1.970	1.942	1.913	1.886	1.859	1.833	1.808	1.783	1.759	1.736	1.713	1.690	1.668	1.647	1.626	1.605	1.585	1.566	1.547	1.528
3	2.941	2.884	2.829	2.775	2.723	2.673	2.624	2.577	2.531	2.487	2.444	2.402	2.361	2.322	2.283	2.246	2.210	2.174	2.140	2.106
4	3.902	3.808	3.717	3.630	3.546	3.465	3.387	3.312	3.240	3.170	3.102	3.037	2.974	2.914	2.855	2.798	2.743	2.690	2.639	2.589
5	4.853	4.713	4.580	4.452	4.329	4.212	4.100	3.993	3.890	3.791	3.696	3.605	3.517	3.433	3.352	3.274	3.199	3.127	3.058	2.991
6	5.795	5.601	5.417	5.242	5.076	4.917	4.767	4.623	4.486	4.355	4.231	4.111	3.998	3.889	3.784	3.685	3.589	3.498	3.410	3.326
7	6.728	6.472	6.230	6.002	5.786	5.582	5.389	5.206	5.033	4.868	4.712	4.564	4.423	4.288	4.160	4.039	3.922	3.812	3.706	3.605
8	7.652	7.325	7.020	6.733	6.463	6.210	5.971	5.747	5.535	5.335	5.146	4.968	4.799	4.639	4.487	4.344	4.207	4.078	3.954	3.837
9	8.566	8.162	7.786	7.435	7.108	6.802	6.515	6.247	5.995	5.759	5.537	5.328	5.132	4.946	4.772	4.607	4.451	4.303	4.163	4.031
10	9.471	8.983	8.530	8.111	7.722	7.360	7.024	6.710	6.418	6.145	5.889	5.650	5.426	5.216	5.019	4.833	4.659	4.494	4.339	4.192
11	10.368	9.787	9.253	8.760	8.306	7.887	7.499	7.139	6.805	6.495	6.207	5.938	5.687	5.453	5.234	5.029	4.836	4.656	4.486	4.327
12	11.255	10.575	9.954	9.385	8.863	8.384	7.943	7.536	7.161	6.814	6.492	6.194	5.918	5.660	5.421	5.197	4.988	4.793	4.611	4.439
13	12.134	11.348	10.635	9.986	9.394	8.853	8.358	7.904	7.487	7.103	6.750	6.424	6.122	5.842	5.583	5.342	5.118	4.910	4.715	4.533
14	13.004	12.106	11.296	10.563	9.899	9.295	8.745	8.244	7.786	7.367	6.982	6.628	6.302	6.002	5.724	5.468	5.229	5.008	4.802	4.611
15	13.865	12.849	11.938	11.118	10.380	9.712	9.108	8.559	8.061	7.606	7.191	6.811	6.462	6.142	5.847	5.575	5.324	5.092	4.876	4.675
16	14.718	13.578	12.561	11.652	10.838	10.106	9.447	8.851	8.313	7.824	7.379	6.974	6.604	6.265	5.954	5.668	5.405	5.162	4.938	4.730
17	15.562	14.292	13.166	12.166	11.274	10.477	9.763	9.122	8.544	8.022	7.549	7.120	6.729	6.373	6.047	5.749	5.475	5.222	4.990	4.775
18	16.398	14.992	13.754	12.659	11.690	10.828	10.059	9.372	8.756	8.201	7.702	7.250	6.840	6.467	6.128	5.818	5.534	5.273	5.033	4.812
19	17.226	15.678	14.324	13.134	12.085	11.158	10.336	9.604	8.950	8.365	7.839	7.366	6.938	6.550	6.198	5.877	5.584	5.316	5.070	4.843
20	18.046	16.351	14.877	13.590	12.462	11.470	10.594	9.818	9.129	8.514	7.963	7.469	7.025	6.623	6.259	5.929	5.628	5.353	5.101	4.870
25	22.023	19.523	17.413	15.622	14.094	12.783	11.654	10.675	9.823	9.077	8.422	7.843	7.330	6.873	6.464	6.097	5.766	5.467	5.195	4.948
30	25.808	22.396	19.600	17.292	15.372	13.765	12.409	11.258	10.274	9.427	8.694	8.055	7.496	7.003	6.566	6.177	5.829	5.517	5.235	4.979
35	29.409	24.999	21.487	18.665	16.374	14.498	12.948	11.655	10.567	9.644	8.855	8.176	7.586	7.070	6.617	6.215	5.858	5.539	5.251	4.992
40	32.835	27.355	23.115	19.793	17.159	15.046	13.332	11.925	10.757	9.779	8.951	8.244	7.634	7.105	6.642	6.233	5.871	5.548	5.258	4.997
50	39.196	31.424	25.730	21.482	18.256	15.762	13.801	12.233	10.962	9.915	9.042	8.304	7.675	7.133	6.661	6.246	5.880	5.554	5.262	4.999

Present Value and Future Value Tables

Future value interest factor of an (ordinary) annuity of \$1 per period at i% for n periods, FVIFA(i,n)

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%
1	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2	2.010	2.020	2.030	2.040	2.050	2.060	2.070	2.080	2.090	2.100	2.110	2.120	2.130	2.140	2.150	2.160	2.170	2.180	2.190	2.200
3	3.030	3.060	3.091	3.122	3.153	3.184	3.215	3.246	3.278	3.310	3.342	3.374	3.407	3.440	3.473	3.506	3.539	3.572	3.606	3.640
4	4.060	4.122	4.184	4.246	4.310	4.375	4.440	4.506	4.573	4.641	4.710	4.779	4.850	4.921	4.993	5.066	5.141	5.215	5.291	5.368
5	5.101	5.204	5.309	5.416	5.526	5.637	5.751	5.867	5.985	6.105	6.228	6.353	6.480	6.610	6.742	6.877	7.014	7.154	7.297	7.442
6	6.152	6.308	6.468	6.633	6.802	6.975	7.153	7.336	7.523	7.716	7.913	8.115	8.323	8.536	8.754	8.977	9.207	9.442	9.683	9.930
7	7.214	7.434	7.662	7.898	8.142	8.394	8.654	8.923	9.200	9.487	9.783	10.089	10.405	10.730	11.067	11.414	11.772	12.142	12.523	12.916
8	8.286	8.583	8.892	9.214	9.549	9.897	10.260	10.637	11.028	11.436	11.859	12.300	12.757	13.233	13.727	14.240	14.773	15.327	15.902	16.499
9	9.369	9.755	10.159	10.583	11.027	11.491	11.978	12.488	13.021	13.579	14.164	14.776	15.416	16.085	16.786	17.519	18.285	19.086	19.923	20.799
10	10.462	10.950	11.464	12.006	12.578	13.181	13.816	14.487	15.193	15.937	16.722	17.549	18.420	19.337	20.304	21.321	22.393	23.521	24.709	25.959
11	11.567	12.169	12.808	13.486	14.207	14.972	15.784	16.645	17.560	18.531	19.561	20.655	21.814	23.045	24.349	25.733	27.200	28.755	30.404	32.150
12	12.683	13.412	14.192	15.026	15.917	16.870	17.888	18.977	20.141	21.384	22.713	24.133	25.650	27.271	29.002	30.850	32.824	34.931	37.180	39.581
13	13.809	14.680	15.618	16.627	17.713	18.882	20.141	21.495	22.953	24.523	26.212	28.029	29.985	32.089	34.352	36.786	39.404	42.219	45.244	48.497
14	14.947	15.974	17.086	18.292	19.599	21.015	22.550	24.215	26.019	27.975	30.095	32.393	34.883	37.581	40.505	43.672	47.103	50.818	54.841	59.196
15	16.097	17.293	18.599	20.024	21.579	23.276	25.129	27.152	29.361	31.772	34.405	37.280	40.417	43.842	47.580	51.660	56.110	60.965	66.261	72.035
16	17.258	18.639	20.157	21.825	23.657	25.673	27.888	30.324	33.003	35.950	39.190	42.753	46.672	50.980	55.717	60.925	66.649	72.939	79.850	87.442
17	18.430	20.012	21.762	23.698	25.840	28.213	30.840	33.750	36.974	40.545	44.501	48.884	53.739	59.118	65.075	71.673	78.979	87.068	96.022	105.93
18	19.615	21.412	23.414	25.645	28.132	30.906	33.999	37.450	41.301	45.599	50.396	55.750	61.725	68.394	75.836	84.141	93.406	103.74	115.27	128.12
19	20.811	22.841	25.117	27.671	30.539	33.760	37.379	41.446	46.018	51.159	56.939	63.440	70.749	78.969	88.212	98.603	110.28	123.41	138.17	154.74
20	22.019	24.297	26.870	29.778	33.066	36.786	40.995	45.762	51.160	57.275	64.203	72.052	80.947	91.025	102.44	115.38	130.03	146.63	165.42	186.69
25	28.243	32.030	36.459	41.646	47.727	54.865	63.249	73.106	84.701	98.347	114.41	133.33	155.62	181.87	212.79	249.21	292.10	342.60	402.04	471.98
30	34.785	40.568	47.575	56.085	66.439	79.058	94.461	113.28	136.31	164.49	199.02	241.33	293.20	356.79	434.75	530.31	647.44	790.95	966.71	1,181.9
35	41.660	49.994	60.462	73.652	90.320	111.43	138.24	172.32	215.71	271.02	341.59	431.66	546.68	693.57	881.17	1,120.7	1,426.5	1,816.7	2,314.2	2,948.3
40	48.886	60.402	75.401	95.026	120.80	154.76	199.64	259.06	337.88	442.59	581.83	767.09	1,013.7	1,342.0	1,779.1	2,360.8	3,134.5	4,163.2	5,529.8	7,343.9
50	64.463	84.579	112.80	152.67	209.35	290.34	406.53	573.77	815.08	1,163.9	1,668.8	2,400.0	3,459.5	4,994.5	7,217.7	10,436	15,090	21,813	31,515	45,497