

Statement of Principles

Liability for Remediation and Mitigation of Contaminated Sites

prepared by:
Public Sector Accounting Board

April 2009

Comments are requested by May 29, 2009

PSAB

Commenting on This Statement of Principles

This Statement of Principles is issued by the Public Sector Accounting Board. The members of the Board are drawn from government, public accounting, business and academe. All members serve as individuals and not as representatives of their governments, employers or organizations.

Statements of Principles propose key principles and definitions that the Board expects to include in a future Exposure Draft.

Individuals, governments and organizations are invited to send written comments to the Board on the principles and definitions set forth. Comments are requested from those who agree with this Statement of Principles as well as from those who do not.

For your convenience, a PDF response form has been posted with this document that can be downloaded [here](#). You can save the form both during and after completion for future reference. You are not restricted by the size of the interactive comment fields in the response form and there is also a general comments section.

Alternatively, you may send written comments by e-mail in Word format to:
ed.psector@cica.ca

To be considered, comments must be received by May 29, 2009, addressed to:

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Highlights

The Public Sector Accounting Board (PSAB) proposes, subject to comments received on this Statement of Principles, to expose **LIABILITY FOR REMEDIATION AND MITIGATION OF CONTAMINATED SITES**, as new CICA Public Sector Accounting Handbook material. The Section would apply to all governments and government organizations that base their accounting policies on the Handbook.

Main features

The main features of this Statement of Principles are as follows:

- A government or government organization has a liability when either the entity is directly responsible or accepts responsibility, and the contamination in question exceeds an authoritative environmental.
- Voluntary compliance with a non-authoritative policy or guidelines would not create a liability under this SOP.
- Liabilities would be measured using a discounted cash flow approach that would be reviewed at each reporting date.
- The measurement of the liability can include recoveries when it is likely that the recovery will be realized.

Each principle is stated, together with supporting commentary, to assist readers in understanding how each issue was evaluated.

Background

PSAB decided that there is a need to issue specific guidance related to environmental liabilities in order to ensure relevant and reliable information is provided and to promote uniformity and consistency of application of existing standards. Unique issues related to environmental liabilities that make it challenging to apply existing financial statement concepts include, but are not limited to, the following:

- Generally, multiple activities are required over time to deal with environmental obligations. There may be alternative courses of action each with different resource requirements and outcomes.
- The obligating event that commits the government to a course of action is not always clear. Diverse accounting practices could develop in the determination of when and how the government recognizes the obligation.
- Early in the process, there may not be an identifiable entity or third party to whom the obligation is owed nor is the timing of the settlement of the obligation always determinable.

- There may be an appropriate basis for measurement. However, the amount of the liability may not be fully estimable at any one point, may change over time and only be estimated within a range of possible outcomes.
- Costs may be allocable to and/or recoverable from other organization(s) with varying degrees of certainty. Recovery may require legal action and be protracted.
- Due to the uncertainty inherent with and characteristics of environmental liabilities, disclosure requirements related to financial statement presentation may be unique.

PSAB decided to limit the scope of the accounting standard to a liability for remediation and mitigation of contaminated sites. The term environment can be defined very broadly to include the air, water, organisms and all other external factors surrounding and affecting a given organism at any time. Further, environmental measures have been defined as steps taken by an entity, or on its behalf by others, to prevent, abate, or remediate damage to the environment or to deal with the conservation of renewable and non-renewable resources. Given these definitions, environmental obligations could be as broad as to include the protection of threatened species and their habitat or commitments to support recognized treaties, conventions or protocols related to environmental protection such as the Kyoto Protocol on climate change or the US/Canada Great Lakes water quality agreement, etc. It could also include environmental liabilities resulting from ongoing operations related to asset retirement obligations. Each of these aspects of environmental obligations presents different accounting and reporting issues.

PSAB concluded that accounting and financial reporting issues related to remediation and mitigation obligations for existing pollution and contamination were the area most in need of guidance.

An informal survey of current reporting practices suggests that there may be inconsistencies in applying the existing definitions, recognition, measurement, and presentation and disclosure requirements to remediation and mitigation obligations limiting comparability and consistency of financial statements across jurisdictions. In limiting the scope, consideration was also given to the potential materiality of a liability for remediation and mitigation of contaminated sites in relation to the financial position and results of operations of a government.

Comments requested

PSAB welcomes comments on all aspects of the Statement of Principles. Comments are most helpful if they relate to a specific principle, paragraph or group of paragraphs and, when expressing disagreement, they clearly explain the problem and indicate a suggestion, supported by specific reasoning, for alternative wording.

For your convenience, a PDF response form has been posted with this document that can be downloaded [here](#). You can save the form both during and after completion for future reference. You are not restricted by the size of the interactive comment fields in the response form and there is also a general comments section.

Alternatively, you may send written comments by e-mail in Word format to:
ed.psector@cica.ca

In particular, respondents are requested to provide responses to the following questions:

1. Do you support the need for a separate accounting standard on reporting a liability for remediation and mitigation of contaminated sites?
2. Does the limitation of the scope of the standard to a liability for remediation and mitigation of contaminated sites meet your immediate needs for guidance? If not, what other environmental obligations would you like to see dealt with in the standard?
3. For the purposes of the SOP, a liability for remediation and mitigation may result from discontinued operations of the government or a government organization or entities outside the government reporting entity for which it accepts responsibility and unexpected environmental events. Do you agree that this is a comprehensive list of existing conditions or situations (events) at the financial statement date that indicates that a government may have a liability? If not, please indicate other conditions or situations that may result in a liability.
4. Do you agree that a liability should include costs directly attributable to remediation and mitigation activities inclusive of:
 - (a) post-remediation and mitigation operation, maintenance and monitoring; and
 - (b) costs of tangible capital assets acquired as part of remediation and mitigation activities to the extent that those assets have no alternative use?
5. Do you agree that a liability for remediation and mitigation of contaminated sites should be recognized only when all of the following criteria have been met as at the financial reporting date:
 - (a) contamination exceeds an environmental standard;
 - (b) the government is directly responsible or accepts responsibility; and
 - (c) a reasonable estimate of the amount can be made?If you do not agree, please provide the criteria you think should exist for the recognition of a liability.
6. Do you agree that only legally enforceable environmental standards that exist in legislation, agreement or contract can create a liability? If you do not agree, do you think that voluntary compliance with non-regulatory environmental standards created by policy or guidelines could result in a liability? If yes, please provide suggestions as to what criteria could be included in guidance to ensure consistency in the interpretation and application of non-regulatory environmental standards that create a liability.
7. Do you agree that a government's own legislation could result in a liability for remediation and mitigation of contaminated sites?

8. Do you agree that only legally enforceable constructive and equitable obligations for remediation and mitigation of contaminated sites should be recognized?
9. Do you agree that a liability should be estimated based on information available at the financial reporting date even though the full extent of a liability may only become determinable over a continuum of events and activities as information becomes available?
10. Do you agree that the measurement of a liability should be reviewed at each reporting date and any revisions to the amount previously recognized be accounted for in the period?
11. Do you agree that a present value technique is an appropriate cost basis to measure a liability for remediation and mitigation of contaminated sites?
12. If you answered in the affirmative to Question 10, do you agree that a government should recognize changes in the liability resulting from:
 - (a) revisions to the timing and amounts of the estimate of undiscounted cash flows;
 - (b) adjustment of the discount rate used; and
 - (c) interest expense?
13. Do you agree that where a recognized liability may be mitigated by a claim against a third party, the amount of the recovery is an element of the liability and would be taken into account in measuring the amount, provided that the probability of recovery is likely?
14. Do you agree with the disclosure requirements outlined in Principle 7? If you do not agree, what changes, deletions or additions would you make to the disclosure requirements?

Liability for Remediation and Mitigation of Contaminated Sites

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PURPOSE AND SCOPE

- .01 This Statement of Principles (SOP)¹ proposes standards on how to account for and report a liability related to **remediation** and **mitigation** of **contaminated sites**. Specifically, it:
- (a) defines which activities should be included in remediation and mitigation;
 - (b) establishes when to recognize and how to measure a liability for remediation and mitigation; and
 - (c) provides the related financial statement presentation and disclosure requirements.
- .02 This SOP applies to governments and government organizations that base their accounting policies on the CICA Public Sector Accounting Handbook.
- .03 For the purposes of this SOP, **contamination** is the introduction into soil or water of a chemical, organic or radioactive material or live organism that exceeds an **environmental standard**. A contaminated site is a site at which substances occur in concentrations that exceed an environmental standard. A contaminated site does not include airborne contamination or **contaminants** unless such contaminants have been introduced into soil or water bodies.
- .04 For the purposes of this SOP, a liability for remediation and mitigation that a government is responsible for may result from:
- (a) discontinued operations of the government or government organization (for example, abandoned military installations);
 - (b) discontinued operations of entities outside the government reporting entity for which the government accepts responsibility (for example, **abandoned mine sites** on Crown lands or abandoned gas stations); or
 - (c) an unexpected environmental event (for example, accidental toxic chemical spills or leaking fuel storage tanks).
- .05 This SOP does not apply to remediation and mitigation:
- (a) costs for acquisition or betterment of tangible capital assets that are within the scope of TANGIBLE CAPITAL ASSETS, Section PS 3150, to the extent that such costs do not exceed the fair value of the asset (for example, brownfield redevelopment);
 - (b) obligations that are asset retirement obligations that result from acquisition, construction or development or normal operation of a long-lived tangible capital asset (for example, closure of a nuclear facility);
 - (c) obligations associated with the disposal or sale of long-lived tangible capital assets (for example, privatization of water utility); and

¹ Throughout this SOP, terms that appear in bold type are defined in the Glossary.

- (d) obligations related to landfill operations specifically dealt with under SOLID WASTE LANDFILL CLOSURE AND POST-CLOSURE LIABILITY, Section PS 3270.
- .06 This SOP does not deal with disclosure requirements for the following items:
- (a) Measurement uncertainty related to the estimate of a liability for remediation and mitigation recognized or disclosed in financial statements. (Refer to MEASUREMENT UNCERTAINTY, Section PS 2300, for guidance.)
 - (b) A liability for remediation and mitigation where a reasonable estimate of the amount involved cannot be made. (Refer to LIABILITIES, Section PS 3200, for guidance.)
 - (c) A contingent liability for remediation and mitigation. (Refer to CONTINGENT LIABILITIES, Section PS 3300, for guidance.)

COSTS INCLUDED

Principle 1

The estimate of a liability should include costs directly attributable to remediation and mitigation activities. Costs would include post-remediation and mitigation operation, maintenance and monitoring. The estimate would include costs of tangible capital assets acquired as part of remediation and mitigation activities to the extent those assets have no alternative use.

- .07 Directly attributable costs would include, but are not limited to, payroll and benefits, equipment and facilities, materials, and legal and other professional services. Costs related to natural resource damage (for example, revegetation outlays) are included only if incurred as part of a remediation effort.
- .08 Estimated costs should be those required to bring a site up to the minimum standard prior to contamination. For example, there may be a lower standard for land that was used for industrial purposes as opposed to residential purposes.
- .09 In some cases, the remediation or mitigation strategy for a contaminated site involves ongoing activities such as treatment of effluent from a contaminated site. These are part of the remediation or mitigation activities rather than a separate future service obligation. Where ongoing operation, maintenance and monitoring are an integral part of the remediation or mitigation strategy for a contaminated site, the estimate of the liability should include the costs for such activities.
- .10 Remediation and mitigation activities may involve the acquisition of tangible capital assets. For example, as part of the remediation and mitigation, a water treatment plant may be required to treat water effluent from an abandoned mine site.
- .11 There are two alternative treatments of expenditures for tangible capital assets that are part of remediation or mitigation activities:

- (a) include them in the estimate of the liability, however capitalize and amortize them over the estimated useful life of the asset (Dr Tangible Capital Assets, Cr Liability); or
 - (b) include them in the estimate of the liability and recognize them as an expense in the period (Dr Expense, Cr Liability).
- .12 The first option takes the perspective that tangible capital assets, regardless of whether they are acquired as part of remediation and mitigation activities, are economic resources of a government from which future economic benefits are expected to be obtained. For example, there is no difference between a water treatment plant acquired to treat effluent from an abandoned mine and a water treatment plant that is acquired to process water for consumption. It could be argued that both are an economic resource from which future economic benefits are expected to be obtained and, therefore, the costs should be allocated over the useful life of the asset.
- .13 The second option recognizes that expenditures to acquire tangible capital assets as part of remediation and mitigation activities are outlays to extinguish a liability rather than to create future economic benefits. One of the essential characteristics of an asset is that it embodies a future benefit that involves a capacity, singly or in combination with other assets, to provide future net cash flows, or to provide goods and services. Generally, the primary purpose of acquisition of tangible capital assets for remediation and mitigation activities is not to generate future cash flows or provide goods and services.
- .14 This SOP proposes that the most appropriate accounting and reporting is to include the costs for tangible capital assets that are required for remediation and mitigation activities as an expense when a liability is recognized. The tangible capital assets are not held for use in the production or supply of goods and services. There are no ongoing operations against which the costs should be allocated.
- .15 This treatment is consistent with SOLID WASTE LANDFILL CLOSURE AND POST-CLOSURE LIABILITY, Section PS 3270. Under this standard, facilities acquired as part of closure and post-closure activities when the landfill or phase stops accepting waste such as leachate treatment and monitoring, are recognized as a liability and expense. Similar to most contaminated sites, there are no ongoing operations against which to allocate the costs of tangible capital assets.
- .16 Some tangible capital assets may have a dual or future alternative use. For example, paving over a contaminated site may mitigate environmental damage as well as providing a parking lot. Since the primary purpose of the expenditure is mitigation, the cost should be included in the estimate of the liability and recognized as an expense in the period.
- .17 A tangible capital asset acquired as part of remediation and mitigation activities may have an alternative use once such activities cease. Expenditures would be capitalized only to the extent of the estimated service potential that would exist after it is no longer used in remediation and mitigation activities. For example, if a

water treatment plant is required to treat water from an abandoned mine site and there is no alternative use for the treatment plant, it would be part of the estimated liability. It would not be set up as a tangible capital asset and amortized over its useful life.

- .18 If, however, the treatment plant could also be used to process potable water for consumption, only that portion used for remediation and mitigation activities would be included in the estimate of the liability. That is, expenditures for tangible capital assets should be capitalized to the extent of the estimated service potential that would be recovered from activities other than remediation and mitigation.

RECOGNITION

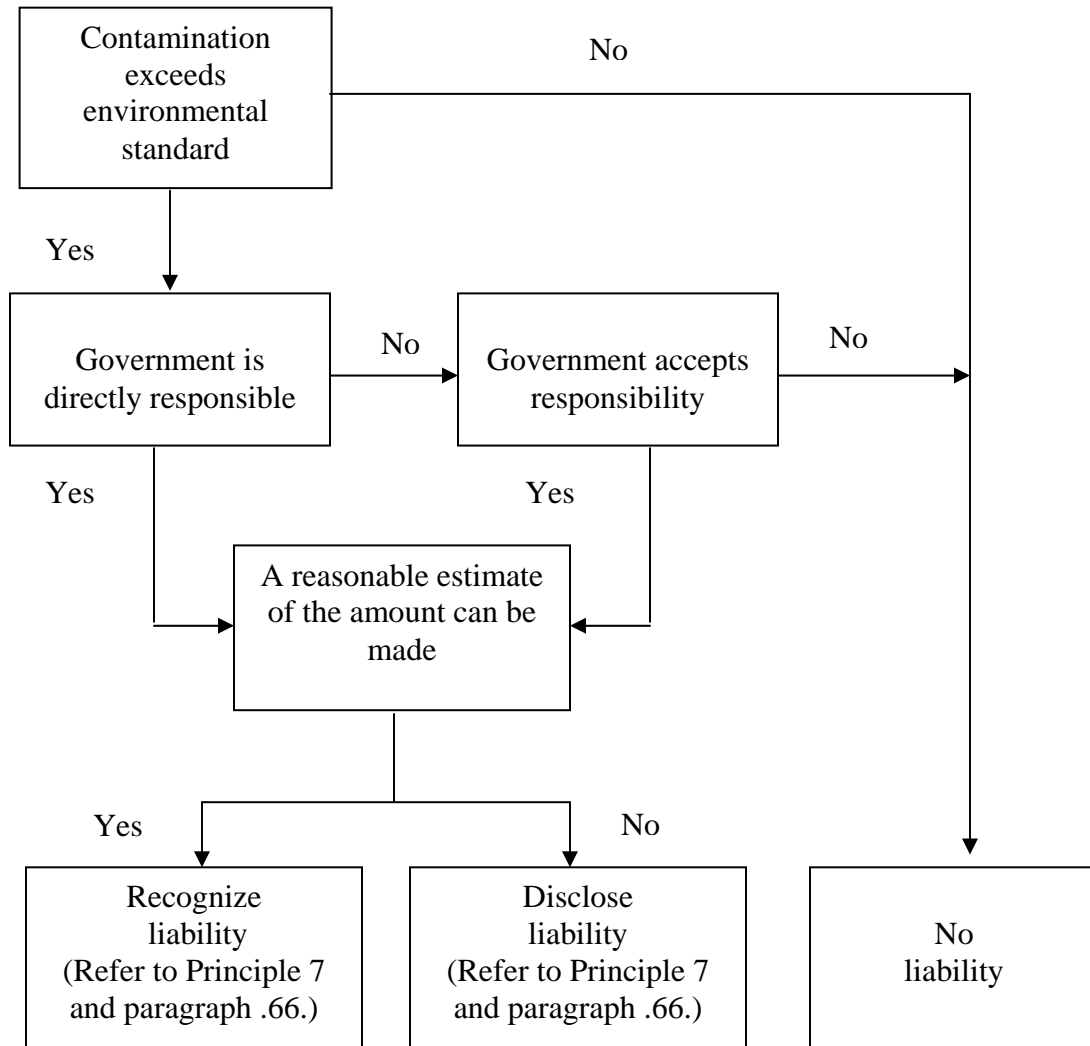
Principle 2

A liability for remediation and mitigation of contaminated sites should be recognized when, as at the financial reporting date:

- (a) contamination exceeds an environmental standard;
- (b) the government:
 - (i) is directly responsible; or
 - (ii) accepts responsibility; and
- (c) a reasonable estimate of the amount can be made.

- .19 Obligations for remediation and mitigation of contaminated sites are not liabilities unless they satisfy all criteria illustrated in the following Decision Tree.

Decision Tree Liability for Remediation and Mitigation of Contaminated Sites



Contamination exceeds environmental standard

- .20 The existence of contamination at the financial reporting date is a necessary condition for recognition of a liability. For example, a site assessment completed at the site of a discontinued mine operation on Crown land has identified **soil contamination** that imposes an obligation on the government to undertake remediation and mitigation activities. It is the occurrence of the contamination that is the past event or transaction that may result in the sacrifice of future economic benefits.
- .21 The determination of whether contamination exists at the financial statement date may be uncertain. Uncertainty about the existence or non-existence of contamination still requires the application of proper accounting treatment. Regardless of the uncertainty about the existence of contamination, a legal or

constructive and equitable obligation to perform remediation and mitigation activities may still exist. Uncertainty would not delay the recognition of a liability. Rather, that uncertainty may be factored into the measurement of the liability.

- .22 Conclusions about whether contamination exists may require the exercise of professional judgment based on all available evidence. If there is insufficient information to determine whether contamination exists, there may still be a requirement to disclose information about the existence and nature of contaminated sites and their potential impact on the financial position of the government. Recognition or disclosure would depend upon an assessment of the probability that future site assessments would confirm the existence of contamination and consideration of the potential materiality of a liability.
- .23 In these circumstances, to determine whether contamination exists and its nature and extent, it would be necessary to assemble and review all available historical and current information pertaining to the site or group of sites. Factors to consider can include, but are not limited to, the following:
 - (a) the nature of current or past activities at the site or adjacent properties;
 - (b) site location, hydrology and geology;
 - (c) results from testing and field investigations;
 - (d) similarities to and experience at other known contaminated sites;
 - (e) significance of site(s); and
 - (f) cost versus benefit of conducting detailed site assessments.
- .24 Contaminated site classification systems such as the National Classification System for Contaminated Sites could be used to assess the likelihood, nature and extent of contamination.
- .25 A government may have an inventory of abandoned mine sites within its jurisdiction. The government has completed site assessments at some of the more significant sites confirming that contamination exists. Based on the site assessment information available and the similarities in historical operations for sites in the inventory, it is suspected that all sites may be contaminated and may require remediation and mitigation. However, at the financial statement date, there may be insufficient information to determine whether or not there is contamination and its nature and extent at all sites. The government may still have a liability if it is likely the contamination exceeds an environmental standard and it is responsible or it accepts responsibility.
- .26 There must be an existing environmental standard that sets minimal acceptable levels of contamination. The environmental standard requires the remediation or mitigation of sites where concentrations of substances exceed minimal acceptable levels because of its effects on human health and safety.
- .27 For the purposes of this SOP, an environmental standard is established by governments in the form of a statute, regulation, by-law, order, permit, contract or agreement. It may also be established by courts or tribunals. The environmental standard is legally enforceable, binding and compliance is mandatory. Breaches

may be enforced through prosecution, fines, jail and similar penalties, order or loss of permit. Compliance may also be enforced through administrative proceedings.

- .28 An environmental standard may be both quantitative and qualitative. A quantitative environmental standard may stipulate an acceptable or desirable ambient concentration of substances in soil and groundwater. However, many regulatory provisions prohibit adverse environmental impacts in qualitative, not quantitative, terms. Exercise of professional judgment would be required in determining whether an environmental standard has been breached that may result in a liability.
- .29 Non-regulatory environmental standards may be created by policy or guidelines either internally by the government or externally by organizations that have no enforcement capability (for example, recognized business or industry associations, Canadian Council of Ministers of Environment (CCME)). For the purposes of this SOP, voluntary compliance with such environmental standards would not create a liability.
- .30 To illustrate, runoff from the tailings at an abandoned mine site on Crown lands may contain concentrations of arsenic that exceed accepted minimum standards set out in a Fisheries Act. The Act may require that the responsible party perform remediation or mitigation activities. This would create a liability for the responsible party for the cost of remediation or mitigation of the site.
- .31 On the other hand, a government has identified physical hazards associated with abandoned mine sites on Crown lands that could impact public safety such as mine structures and excavations (adits, shafts, stopes, pits and trenches) that are open to or near the surface. The government has announced a commitment to an abandoned mines rehabilitation program with the objective of eliminating risks to public safety. In these circumstances, there is no environmental standard and the government does not have a liability for remediation and mitigation of contaminated sites under this SOP.

Government is directly responsible

- .32 In some cases, a government is directly and legally responsible for remediation and mitigation:
 - (a) because of its own past activities that, even though they may have been consistent with the environmental requirements at the time, have caused contamination (for example, military installations, operation of transportation works yards, etc.); and
 - (b) when activities such as mining or exploration occurred on government owned land or on land that the government has since acquired and a responsible party cannot be identified or, if identifiable, lacks the means to remediate or mitigate the damage (for example, "inherited" responsibility for abandoned mines on Crown land through bankruptcy proceedings and court decisions, etc.).

- .33 A legal obligation establishes a clear duty or responsibility to another party that justifies recognition of a liability. For purposes of this SOP, a legal obligation can result from:
- (a) agreements or contracts;
 - (b) legislation of another government; or
 - (c) a government's own legislation.
- .34 An agreement or contract could take the form of a certificate of approval governing the operation of a government facility such as a solid waste landfill. The certificate of approval contains enforceable requirements for the facility's operation. Non-compliance with the terms and conditions of the certificate of approval could result in the government incurring a liability for remediation and mitigation of environmental damage. For example, a local government could be responsible for cleanup of contaminated ground water as a result of the failure of a leachate collection and control system at a solid waste landfill site that it operates under a certificate of approval.
- .35 In the event of contamination, another government's legislation may create a legally enforceable obligation for a government. For example, as a result of inventory shrinkage, a provincial ministry of environment has issued an order under petroleum storage regulations of its environmental protection act to a local government to replace petroleum storage tanks in its public works yard and cleanup contamination. The local government would recognize a liability at its financial statement date for removal and clean-up costs outstanding at its financial statement date.
- .36 Where a government's activities have resulted in contamination that exceeds an environmental standard established by that government's own legislation, it is clear that the environmental damage has occurred. In this case, the perpetrator is the regulator. This can present some challenges in meeting the three essential characteristics of a liability necessary for recognition. For example, there is generally no identifiable third party to whom the government has a duty and responsibility. The regulator may have established a past practice or policy of not enforcing the government's own legislation or negotiating compliance when government organizations are involved.
- .37 A government's own legislation that contains details of the government's policy in relation to a particular program or regulation of its activities can create a legally enforceable obligation when it or one of its organizations is non-compliant with the legislation. In these circumstances, this SOP would require that the government recognize a liability if other recognition criteria are met.
- .38 In assessing whether a legal obligation exists, an entity considers the laws and regulations in force at the financial statement date. The passing of legislation that has retroactive application after the financial statement date cannot create an existing condition or situation at the financial statement date that would result in recognition of an environmental liability. Further, elected or government officials may announce government intentions in a period following the financial statement

date but before the completion of the financial statements. If a condition or situation did not exist at the date of the financial statements, there is no liability. However, it may be a subsequent event. (Refer to SUBSEQUENT EVENTS, Section PS 2400.)

Government accepts responsibility

- .39 A government may voluntarily assume responsibility for remediation and mitigation of contaminated sites (for example, abandoned gas stations) through its own actions or promises.
- .40 LIABILITIES, Section PS 3200, recognize that present obligations do not only result from legally enforceable agreements, contracts or legislation, but may also result from constructive and equitable obligations. Constructive and equitable obligations are described, respectively, as being:
 - (a) created, inferred or construed from the facts of a particular situation; or
 - (b) based on ethical or moral considerations, rather than from contract, agreement or legislation.
- .41 Constructive and equitable obligations require the careful application of the definitions because determining when a government has such an obligation can be a matter of professional judgment. In the absence of legal enforceability, it is often difficult to determine whether a government is actually bound by an obligation to a third party. LIABILITIES, Section PS 3200, provides specific guidance on the criteria to be used in assessing whether a government has a constructive or equitable obligation.
- .42 The Accounting Standards Board (AcSB) was concerned about the subjective nature of constructive and equitable obligations when it was developing ASSET RETIREMENT OBLIGATIONS, CICA HANDBOOK – ACCOUNTING Section 3110. The AcSB noted that without improving guidance for determining whether a constructive obligation exists, inconsistent application of the asset retirement obligation standard would likely result.
- .43 In its Basis for Conclusions, the AcSB states that only legal obligations should be recognized as liabilities. Obligations that are based on intention or policy of an entity's management, and not legally enforceable, are not liabilities. Other obligations that might be commonly viewed as constructive obligations are legal obligations arising from the application of promissory estoppel.²
- .44 Promissory estoppel is the legal principle that a promise or assurance made without consideration may nonetheless be enforced to prevent injustice when:
 - (a) the promise or assurance was intended to affect a contract or other legal relationship between the promisor and the promisee, and to be acted on; and

² “Asset Retirement Obligations — Background Information and Basis for Conclusions, Section 3110,” issued by AcSB in March 2003.

- (b) the promisee acted on the promise or assurance, or in some way changed its position.
- .45 The concept of constructive and equitable obligations as described in LIABILITIES, Section PS 3200, parallels the legal doctrine of promissory estoppel. The table in Appendix compares the concepts of constructive and equitable obligations with the legal doctrine of promissory estoppel.
- .46 Professional judgment would still be required in determining whether a legally enforceable obligation exists under promissory estoppel. There may be instances where a legal obligation may exist even though it can not definitively be determined that any party has actually acted upon the promise.
- .47 Evidence that a government may have a constructive or equitable obligation for remediation and mitigation can include, but is not limited to, consideration of the following:
- (a) the government body, management board or person with the appropriate level of authority has committed the government to a remediation plan;
 - (b) the remediation plan identifies the specific location of the contaminated site;
 - (c) the remediation plan has been communicated to those directly affected (for example, residents of surrounding communities) through public consultation, information sessions, workshops or other activities in such detail as to allow those affected to determine the benefits that would accrue to them;
 - (d) the remediation plan specifically identifies the target level of reduction in risk the site poses to human health and the environment and the amount of the environmental costs to be incurred to achieve those targets;
 - (e) the time frame for implementing the plan has been identified and indicates that significant changes to the plan are not likely; and
 - (f) it is anticipated that the public are likely to rely on the promise and change their position.
- .48 The mere act of budgeting for remediation and mitigation activities does not result in incurring a liability. As well, care must be exercised in using budgeted amounts as the basis of measurement of a liability. It may or may not reflect the full extent of the liability. The amount budgeted may not reflect the total amount of a liability. Just because a government budgets for remediation and mitigation activities does not mean that a liability actually exists.
- .49 A government announcement to provide long-term funding for remediation and mitigation activities does not, on its own, necessarily result in a liability. The government maintains total discretion over the eventual disposition of the funds committed to remediation and mitigation activities. For example, a government may commit funding for remediation and mitigation for higher risk sites. There may be similar sites of lesser significance and risk that the government is not committing to remediate, nevertheless, such sites may still represent a liability for the government.

- .50 The existence of contamination, on its own, may not create a liability because the contamination is being managed in accordance with an environmental standard. For example, a government may have a storage site used for the containment of PCBs (polychlorinated biphenyls). The PCBs are safely stored and not impacting public health or the environment. There are strict regulations for the handling, storage and disposal of PCBs. Currently, the storage site is a closed, controlled, secure containment facility owned and operated by the government. As at the financial statement date the storage site meets the requirements under the regulations. There is no known health risks associated with the ongoing storage of the PCBs at this secured site.
- .51 The regulating entity has communicated its intention to proceed with a regulation to eliminate the long-term storage of PCBs. However, as at the financial statement date, a regulation has not been enacted that would create a potential legal requirement to decommission the PCB storage site. In this case, there would not be a liability at the financial reporting date for the destruction of the stored PCBs and restoration of the site.

MEASUREMENT

Principle 3

A liability for remediation and mitigation should be estimated based on information available at the financial statement date.

- .52 A government's total liability may not necessarily become determinable at a specific point in time. The amount of a liability may become determinable over a continuum of events and activities as information becomes available. For example, the estimate of costs may only become known as the government completes the various stages of assessing the extent of the contamination. In these cases, the government would recognize a liability based on management's best estimate at the time.
- .53 There may be cases where a government is able to estimate the environmental costs of all stages of remediation or mitigation activities because the situation is common. For example, the remediation activity involves removal of underground fuel storage tanks or is similar to other situations with which the government has experience. In these cases, the government should recognize the entire estimated liability.
- .54 If new information becomes available between the financial statement date and the date of completion of the financial statements that would affect the estimates of a liability, this should be accounted for in accordance with SUBSEQUENT EVENTS, Section PS 2400.

Principle 4

The measurement of a liability for remediation and mitigation should be reviewed at each reporting date and, where necessary, remeasured. Any revisions to the amount previously recognized should be accounted for in the period in which revisions are made.

- .55 A liability continues to be recognized until it is settled or otherwise extinguished. Continual assessment of the carrying amount of a liability is required. When a change in an estimate of the amount of a liability is required, it would be accounted for in accordance with ACCOUNTING CHANGES, Section PS 2120.
- .56 Governments may estimate their liability for remediation and mitigation based on an assessment of a group of contaminated sites that have typical or common characteristics such as similarities in historical land use activities. In some cases, estimates may be based on an individual site investigation taking into consideration unique site characteristics such as the specified uses, site-specific conditions and nature and extent of contamination.
- .57 Generally, a government would not complete site assessments each reporting period because of the cost of gathering and processing information required. In the years between the completion of site reassessments, a review of the estimate of the liability could be based on an extrapolation of previously completed site assessments taking into consideration such factors as changes to the remediation and mitigation strategies, technological changes, experience gained, changes to assumptions, actual expenditures, changes in legislative standards, unforeseen changes in cost estimates, etc. When the effect of any change is significant, recognition of a new estimate may be necessary.
- .58 Events that may indicate a need to do a detailed reassessment of contaminated sites upon which the estimate of the liability is based can include, but are not limited to, consideration of the following:
 - (a) significant technological developments;
 - (b) lapsed time since the last site assessments were completed;
 - (c) new information from detailed site assessments, site characterizations, technical reviews, etc. done on similar contaminated sites; and
 - (d) a change in the legislation.

Principle 5

The estimate of the liability represents the sum of the discounted future cash flows associated with remediation and mitigation activities. In periods subsequent to initial measurement, a government shall recognize changes in the liability resulting from:

- (a) revisions to the timing or the amount of the estimate of undiscounted cash flows;
- (b) adjustment of the discount rate used; and
- (c) interest expense.

- .59 The measurement technique adopted by a government would result in the best estimate of the amount required to settle the liability. Professional judgment will be required in assessing the appropriate measurement technique that results in achieving the objective.
- .60 In most cases, where the effect of the time value of money is material, the amount shall be the net present value of the estimated future cash flows associated with remediation and mitigation activities. The estimated future cash flows would be based on a single best estimate. The government's average long-term borrowing rate, determined on a consistent basis, may be appropriate to use as the discount rate. This measurement technique would be consistent with SOLID WASTE LANDFILL CLOSURE AND POST-CLOSURE LIABILITY, Section PS 3270.

Recoveries

Principle 6

A liability for remediation and mitigation of contaminated sites should be reduced by expected recoveries if:

- (a) there is an appropriate basis of measurement;
- (b) a reasonable estimate can be made of the amount involved; and
- (c) recovery is likely.

- .61 The amount of a recovery is an element of the liability and would be taken into account in measuring the amount. Recoveries would be recognized when the amount can be reasonably estimated and provided the probability of recovery is likely.
- .62 The estimate of a government's liability would include remediation and mitigation work that the government expects to perform for other parties. However, expected recoveries from those other parties, and insurance recoveries, reduce the measurement of the government's remediation and mitigation expense when reasonably estimable (and reduce associated expenditures when the recoveries are measurable and available).

DISCLOSURE

Principle 7

A financial statement should disclose information about:

- (a) the nature of the liability or contingent liability;
- (b) the event or transaction creating the liability;
- (c) the aggregate amount of payments estimated to be required in each of the next five years and thereafter to settle the liability;
- (d) the reasons, if applicable, for non-disclosure of amount;
- (e) the plans to complete assessments of those sites where there is insufficient

information at the financial statement date to determine whether contamination exists and its extent and nature;

- (f) the significant assumptions underlying the estimates that are subject to change and the impact that a change would have on the estimate; and
- (g) the estimated recoveries and basis for their estimation.

- .63 A clear and concise description of the accounting policy for a liability for remediation and mitigation of contaminated sites would be included in a government's financial statements as part of accounting policy note. The description of the accounting policy is necessary for the users' interpretation of the financial statements and when comparing them with the statements of similar entities. Information related to amounts would be included in other notes to the financial statements. (Refer to DISCLOSURE OF ACCOUNTING POLICIES, Section PS 2100, for guidance.)
- .64 The notes to the financial statements would disclose the basis of recognition and measurement of the liability. Disclosures would include the significant assumptions underlying the reported amount and the impact that a change in the assumptions would have on the estimate. If a present value technique is used to estimate the liability, the estimated total future expenditures for settlement of the liability would be disclosed.
- .65 Financial statements would disclose the aggregate amount of payments estimated to be required in each of the next five years and thereafter to settle the liability for remediation and mitigation of contaminated sites recognized in the financial statements, as well as the amounts to be recovered in each of those years and thereafter.
- .66 For an unrecognized liability, disclosing the nature of the liability would provide information about the potential effect on the government's financial statements when the liability becomes measurable. Information would include the reason(s) why a reasonable estimate cannot be made of the amount involved.

GLOSSARY

Abandoned mine sites are sites where the mine operator or exploration company has ceased or suspended indefinitely its activities, be that exploration, mining or mine production, without rehabilitating the site. Some parties make a distinction between an abandoned mine, being a mine site in the condition just described, and an orphaned mine being an abandoned mine for which an owner cannot be identified. Problems stem from both the physical hazards related to the abandoned mine, including open pits and shafts, trenches, dam collapses, and ground subsidences (when an underground mine collapses, creating new pits and openings from surface to underground), and environmental hazards, including acid mine drainage, metal leaching, and contamination from process agents, fuel and other pollutants that may have been left on site. (Source: The Boreal Below: Mining Issues and Activities in Canada's Boreal Region, A Report by MiningWatch Canada, December 2001)

Contamination is the introduction into soil, air or water of a chemical, organic or radioactive material or live organism that will adversely affect the quality of that medium. (Source: Treasury Board Secretariat of Canada, Federal Contaminated Sites Inventory Guide.)

Contaminated sites are sites at which substances occur in concentration above background levels and pose, or are likely to pose, an immediate or long-term hazard to human health or the environment, or exceed levels specified in policies and regulations. (Source: Treasury Board Secretariat of Canada, Federal Contaminated Sites Inventory Guide.)

Contaminants are any physical, chemical, biological or radiological substance in air, soil or water that has an adverse effect. Any chemical substance whose concentration exceeds background concentrations or which is not naturally occurring in the environment. (Source: Treasury Board Secretariat of Canada, Federal Contaminated Sites Inventory Guide.)

Discontinued operations refer to any part or all of a government operation (for example, closed military site).³

An **environmental standard** refers to any guidelines, objectives, criteria or other kinds of limits placed on the presence or discharge of a contaminant into the natural environment. (Source: Ontario Ministry of Environment, Fact Sheet: Air Quality Standards in Ontario.)

³ This is different from discontinued operations as defined in DISPOSAL OF LONG-LIVED ASSETS AND DISCONTINUED OPERATIONS, CICA HANDBOOK – ACCOUNTING Section 3475. Section 3475 describes discontinued operations as a component of an enterprise whose operations and cash flows can be clearly distinguished, operationally and for financial reporting purposes, from the rest of the enterprise.

Mitigation is the managing of health and environmental concerns by activities to moderate (a quality or condition) in force or intensity or alleviate the effects of contaminants or pollutants such as monitoring a contaminated site, posting warnings, restricting access to the site, changing land use patterns at or around the site, collection and treatment of contaminated water and partial remediation.

Remediation means the improvement of a contaminated site to prevent, minimize or mitigate damage to human health or the environment. Remediation involves the development and application of a planned approach that removes, destroys, contains, or otherwise reduces availability of contaminants to receptors of concern. (Source: Contaminated Sites Working Group, Site Remediation Technologies: A Reference Manual.)

Soil contamination is either a solid or liquid hazardous substance mixed with the naturally occurring soil. Usually contaminants in the soil are physically or chemically attached to soil particles or, if they are not attached, are trapped in the small spaces between soil particles. (Source: Treasury Board Secretariat of Canada, Federal Contaminated Sites Inventory Guide.)

Comparison of Promissory Estoppel with Constructive and Equitable Obligations

Legal Doctrine of Promissory Estoppel	Constructive and Equitable Obligations
<p>Legal principle that a promise or assurance made without consideration may be enforced to prevent injustice if:</p>	
<p>(a) the promisor reasonably expected the promisee to rely on the promise; and</p>	<p>A government has created a valid expectation among others and, as a result, has no realistic alternative but to settle its obligation. (PS 3200.09)</p> <p>A government has created a valid expectation when there is a preponderance of evidence that:</p> <p>(a) the government acknowledges and indicates it will act upon its decision to accept responsibility for the obligation; and</p> <p>(b) the government has sufficiently communicated its decision to the affected parties. (PS 3200.10)</p> <p>Evidence that a government has sufficiently communicated its decision to affected parties could include, but is not limited to, the following:</p> <p>(a) an announcement of the amount the government is providing;</p> <p>(b) identification of the individuals, organizations or groups affected by the decision; and</p> <p>(c) an announcement of the time frame for implementing the decision. (PS 3200.14)</p>
<p>(b) the promisee relied on the promise to his or her detriment.</p> <p>In a court, to establish promissory estoppel, either as a defence or cause for action, the promisee must show that:</p> <p>(a) he has acted or refrained from acting in reliance upon the promise to his detriment; and</p> <p>(b) the promisor induced the action or inaction, and that it would be unconscionable for the promisor not to remedy the detriment that the promisee suffered.</p>	<p>There may be situations where a government is contemplating a particular program and evidence of the program may be found in approved plans or other similar documents. However, without sufficient evidence that the government has accepted responsibility for and communicated its decision, a person may be acting on that information to his or her own detriment. (PS 3200.16)</p>