

# Federal - Provincial Environmental Protection Laws

Course Workbook



 **FIRST NATIONS  
LAND MANAGEMENT  
RESOURCE CENTRE**

 **Training, Mentorship &  
PD Professional Development**

Last updated: 2018

## Federal – Provincial Environmental Protection

### Welcome

Welcome to the [Framework Agreement on First Nation Land Management](https://labrc.com/public/courselet/Federal-Provincial%20Environmental%20Protection%20Laws-Presenter%20output/presentation%20content/external%20files/frameworkagreementexecutivesummary.pdf) [https://labrc.com/public/courselet/Federal-Provincial Environmental Protection Laws-Presenter output/presentation content/external files/frameworkagreementexecutivesummary.pdf](https://labrc.com/public/courselet/Federal-Provincial%20Environmental%20Protection%20Laws-Presenter%20output/presentation%20content/external%20files/frameworkagreementexecutivesummary.pdf) (*Framework Agreement*) and federal/provincial Environmental Protection (EP) Laws courselet. [https://labrc.com/public/courselet/Federal-Provincial Environmental Protection Laws-Presenter output/presentation content/external files/frameworkagreementexecutivesummary.pdf](https://labrc.com/public/courselet/Federal-Provincial%20Environmental%20Protection%20Laws-Presenter%20output/presentation%20content/external%20files/frameworkagreementexecutivesummary.pdf)

The courselets:

- Purpose is for the Land Governance Directors (LGD) to be aware of the federal and provincial laws when developing and enacting EP laws for their reserve
- Focus is federal/provincial EP laws, regulations and guidelines that relate to contaminated sites and contaminants. These laws apply to numerous categories of contaminants, each with often different levels of regulatory tolerance and enforcement

The material provided in this courselet is current to the date of this courselet. Thank you to the environmental experts to the Lands Advisory Board Resource Centre (LABRC) <https://labrc.com/>, for aiding in the development of this courselet.

### Overview

#### **Federal Environmental Protection Laws**



LGDs need to be aware that most federal EP laws continue to apply to reserve lands after adoption of a Land Code (LC) because the title to reserve land continues to be held by the crown. <http://www.labrc.com/wp-content/uploads/2015/01/Land-Code-Summary.pdf>

Once a First Nation (FN) has a LC in effect the FN may replace some of these federal EP laws with their own as long as the FN meets the requirements stipulated in the *Framework Agreement*, which is that FN environmental laws must “meet or beat” the current federal

standards and in some circumstances, provincial laws, regulations, standards, or guidelines. Definitions of these and other terms are presented later in this courselet.

See the “[Introduction to Environmental Protection](http://labrc.com/public/courselet/Introduction%20to%20Environmental%20Protection/player.html)” courselet for more information on EP.  
[http://labrc.com/public/courselet/Introduction to Environmental Protection/player.html](http://labrc.com/public/courselet/Introduction%20to%20Environmental%20Protection/player.html)



This courselet includes:

- *Framework Agreement* and EP laws
- A brief discussion of the terms that are commonly used in EP laws
- Categories and Canada wide environmental standards
- Contaminated sites management on reserve lands
- Federal and provincial EP laws and guidelines

This courselet does not attempt to interpret differences between federal and provincial guidelines or standards, nor does it discuss the derivation of guidelines or standards for particular contaminants.

Readers should recognize that guidelines and standards are regularly amended by federal and provincial agencies, so this document only provides a ‘snapshot’ of current regulations.

### Big Picture



## Developing Laws

*Framework Agreement* FNs, when developing their FN EP laws, will need to be aware of:

- Federal and provincial guidelines applicable to their reserves
- EP issues they face,
- Federal and provincial regulatory systems



EP laws will be an important part of the FN environmental regime, and should be studied during preparation of a FN's Environmental Management Plan (EMP). See the "Environmental Management Plan" courselet for more information on the EMP.

[http://labrc.com/public/courselet/EMP\\_Preparation\\_Courselet\\_Final/player.html](http://labrc.com/public/courselet/EMP_Preparation_Courselet_Final/player.html)



## Developing Standards

The technical complexity and high costs of setting and enforcing contaminant standards suggests that most FNs may find it appropriate to adopt applicable provincial and federal standards for use in administering an EP function on their reserve Lands.

## **Adapting Others' Laws and Standards**

### Issues to Consider

If a FN is studying the adoption of provincial or federal EP laws for use on its reserves, several issues need to be considered:



- Senior government laws are designed to be administered by bureaucracies that are far larger than a FN could support,
- Provincial and federal EP laws are quite broad in application, because the laws must be applicable to a wider variety of circumstances than a FN is likely to require,
- Other governments can amend their laws and regulations at will, without consultation with FNs,
- Questions exist about how a FN would administer or enforce a law drafted by another government.

### **Adopting Law**

A FN should adopt an EP law that targets issues prevailing or expected to occur on FN land. The administration and enforcement of the EP law should be consistent with the FN's governance structure and staff capacity. A FN's EP law should be designed to fit the broader EP regime that also includes policies, permits, outreach, education, and monitoring. A FN-specific EP law can target conditions, issues, and priorities that exist in FN communities and that can be administered by FN staff (with support from consultants or other governments as needed).



### **Adopting or Adapting Standards**

Adopting federal or provincial EP **laws** may be inadvisable, adopting or adapting prevailing environmental quality **standards** is sensible. Such EP standards are typically referenced in EP laws and included in EP regulations. EP standards (or guidelines or objectives) included in provincial and federal regulations generally have been based on scientific study and are intended to protect human health or ecosystems from risks posed by specified concentrations of contaminants. It would be technically challenging and exceedingly costly for a FN to repeat the process of identifying acceptable contaminant standard for their lands.

Hence, a FN should determine whether provincial and federal EP standards are suitable for its circumstances. If so, those standards should be referenced in EP laws and regulations. Some adjustments to the standards could be made if deemed necessary (FNs have total discretion in this regard), without unduly complicating the process of law enforcement or environmental monitoring.

## **First Nation EP Laws**



Under sections 18.1 and 23(1) of the *Framework Agreement*, <http://labrc.com/wp-content/uploads/2014/03/Framework-Agreement-Amendment-5-edited.pdf> FNs with their own LC may pass laws respecting “development, conservation, protection, management, use and possession of First Nation Lands” and respecting “EP”.

Under section 24.4 of the *Framework Agreement*, if there is any inconsistency or conflict between a FN’s EP law and a federal EP law, the federal EP law applies.

Incorporating the laws of other jurisdictions has legal considerations that require careful thought such as enforcement, monitoring and testing. Provincial legislative mechanisms and involvement of provincial staff for law implementation cannot always be extended to reserve lands. Hence, FNs should carefully consider the implications of referentially incorporating provincial EP laws on reserves.

## **First Nation EP Standards and Guidelines**



Under Section 24.3 of the *Framework Agreement*, standards and punishments for operational [http://www.labrc.com/public/userfiles/files/Operational%20Phase%20Chart%20v\\_March%202012.png](http://www.labrc.com/public/userfiles/files/Operational%20Phase%20Chart%20v_March%202012.png) FN EP laws must meet or beat the standards and punishments in the provincial EP laws of the province in which the FN is situated.

Standards and guidelines are important tools in EP. They represent the concentrations or levels of a contaminant or other substance that is considered safe or otherwise acceptable for humans or the environment. Detailed definitions and descriptions of standards, guidelines, criteria, and objectives are provided later in this courselet.

## Framework Agreement Adequate Resources



### Resources

The original signatory Chiefs understood that human and financial resources would be required to create and implement an EP regime. When the FA was being drafted, the Chiefs knew that EP of reserve lands under the *Indian Act* was minimal or non-existent. The development, implementation and ongoing administration of EP and Environmental Assessment (EA) laws, EMPs and associated environmental management actions require significant time, effort and resources. For more information on EAs go to the LABRC courselet page.



<http://labrc.com/resources/courselets/>

### Funding



The Government of Canada should provide a significant amount of the funding needed for preparing and implementing FNs' EP Regimes. However, Canada has been reluctant to provide adequate funding for environmental management of FNs' land. For more information on developing an EP regime, please go to the "Considerations in Developing an EP Regime" courselet.

[http://labrc.com/public/courselet/Considerations in Developing an Environmental Protection Regime/presentation.html](http://labrc.com/public/courselet/Considerations%20in%20Developing%20an%20Environmental%20Protection%20Regime/presentation.html)

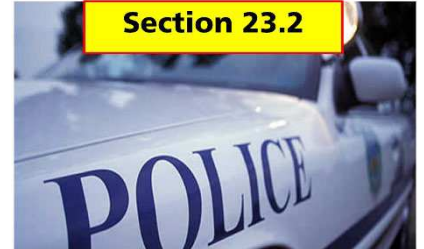
Through Section 27 and 30 of the *Framework Agreement*, the Chiefs ensured that for a FN's obligation to prepare an EP regime depends on adequate financial resources and expertise being available to the FN. Canada is supposed to provide this funding through operational

funding agreements, as identified in the FN approved Individual Agreement and negotiated between Canada and operational FNs. In negotiations with FNs, Canada has refused to include adequate levels of environmental funding in operational agreements.

<http://www.labrc.com/wp-content/uploads/2015/01/Individual-Agreement-Summary.pdf>

Go to the "Individual Agreement"

[https://labrc.com/public/courselet/Individual Agreement-Presenter output/presentation.html](https://labrc.com/public/courselet/Individual%20Agreement-Presenter%20output/presentation.html) courselet for more information on operational funding.



### **Authority to enact FN EP Laws**

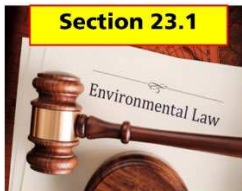
#### **Authority to Enact Laws**

Part V of the *Framework Agreement* specifies the authority of operational FNs to develop and enact environmental laws for their reserves.



#### **Section 23.1**

Sec. 23.1 states that a FN with a LC in effect will have the power to make environmental laws relating to First Nation Land.



#### **Section 23.2**

Sec. 23.2 states that there should be both an EA and an EP regime for each FN. The EP regime will include laws that will require regulation and enforcement. LGDs should understand the EP issues that are applicable to on-reserve and actively participate in the process to develop and implement EP laws.

## Section 24.3 and 24.4

### Section 24.3 and 24.4



Sec. 24.3 of the *Framework Agreement* states that FN EP standards and punishments will have at least the same effect as those of the province in which the FN is situated. However, Sec. 24.4 states that in the event that there is inconsistency between a FN EP law and the equivalent federal law, the federal EP law will apply.

## Section 27.1

Finally, and maybe most importantly, section 27 of the *Framework Agreement* must also be considered, as it states: 27.1: The Parties understand that the obligation of a FN to establish EA and EP regimes depends on adequate financial resources and expertise being available to the FN.



## What does this mean?



**What  
Does  
This  
Mean  
?**

These *Framework Agreement* clauses mean that the FN has the power and authority to develop an EP regime, and that EP laws that are part of that regime must meet or beat the provincial and federal environmental standards relating to contamination and pollution. The obligation to develop and implement an EP regime, however, is contingent on a FN having adequate levels of funding and other resources (whether from Canada or other sources).

### Section 27.1



## Terminology

### Introduction

Terminology is important to the creation and application of EP standards and EP laws. LGDs should participate in the process of developing EP laws.

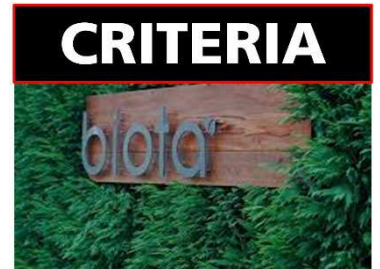
### Terminology

Before drafting FN EP laws, it is important for the LGD to understand the various terms commonly used in EP law and regulations. There are 4 key EP terms that are common in federal, provincial, and municipal EP laws and regulations. These key terms that are associated with EP standards across Canada include:

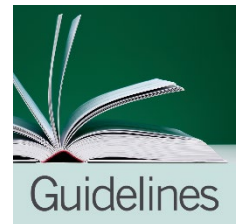
- Criteria

- Guidelines
- Objectives
- Standards

**Criteria:** Numerical value(s) or narrative statements for a physical, chemical, or biological characteristic of water, biota, soil, or sediment that must not be exceeded to protect, maintain, and improve the specific uses of soil, sediment, and water (Canadian Council of Ministers of the Environment (CCME), 1999).



**Guidelines:** Generic numerical concentrations or narrative statements recommended as being the upper limits necessary to protect and maintain the specified uses of air, water, sediment, soil, or wildlife. These values are not legally binding (CCME, 1999).



**Objectives:** Numerical concentrations or narrative statements that have been established after considering site-specific conditions. Objectives are intended to protect and maintain a specified use of a resource, such as water, soil, or sediment, at a particular site (CCME, 1999). Objectives are not enforceable.

**Standards:** A legally enforceable numerical limit, i.e., parts per billion of contaminant allowed in water or soil, or a narrative statement, such as in a regulation, statute, contract, or other legally binding document, that has been adopted from a criterion or an objective (CCME, 1999).

### Air Quality Examples

Air quality **objectives**, based on scientific studies, have been completed for:

- Carbon monoxide (CO)
- Hydrogen sulphide (H<sub>2</sub>S)
- Nitrogen dioxide (NO<sub>2</sub>)
- Ozone (O<sub>3</sub>)
- Sulphur dioxide (SO<sub>2</sub>)
- Particulate matter (PM)



These objectives are commonly used to help characterize air quality in Canadian cities and other airsheds.

Federal standards have been set for ozone and PM 2.5 (suspended particles smaller than 2.5  $\mu\text{m}$  (micro meters)), which become permanently lodged in the lungs. These ozone and PM 2.5 standards are enforceable under the *Canadian Environmental Protection Act (CEPA 1999)*. <http://laws-lois.justice.gc.ca/eng/acts/c-15.31/>

## Categories of Environmental Standards

### Introduction



An environmental standard is intended to regulate the effect of human activity on the environment. Standards may specify a desired state (e.g., less than 140 mg of lead in a kilogram of soil, or less than 50 mg of arsenic per litre of water). Different standards may be established for different human activities or environmental conditions, and it is important for the LGD understand the categories of environmental standards.

### Evaluating Contamination



In Canada, a contaminated site is defined as a site at which substances occur at concentrations:

1. Above background levels and pose or are likely to pose an immediate or long-term hazard to human health or the environment, or
2. Exceeding levels specified in policies and regulations.

Contaminated site policies and regulations across Canada link standards for the concentration of substances that pose a threat to human health and the environment to the medium in which they are found (i.e.: soil, water, sediment) as well as the existing or intended land or water use (ie: ground water, drinking water, residential land use, industrial land use, etc.).

Because under the *Framework Agreement*, the FN EP laws must meet or beat provincial and federal standards, it is important that the LGD be familiar with the categorization of standards used by the regulators.

### **Categories of Environmental Standards**



The following sections provide an overview of the management categories for contaminated land, sediment, water, and air pollution:

- Land Use Categories and Soil Texture
- Sediment Use Categories
- Water Use Categories
- Air quality

## **Land Use Categories**

Contaminated soil guidelines are organized into several land use categories for purposes of determining toxicological effects of contaminants, potential exposure pathways and remedial responses. Consequently, guideline values for contaminants often differ among land use categories. Common land use categories include:

- Agriculture
- Residential
- Parkland
- Commercial
- Cultural Heritage
- Industrial.

Some provincial jurisdictions have separate land use categories in addition to those in the foregoing list. For instance, British Columbia (BC) has an urban park category, Alberta has a natural areas category, and Saskatchewan a forested category.

## **Soil Texture**

Soil texture affects the transport and bioavailability of a contaminant. The CCME, Alberta, and Manitoba standards and guidelines link soil texture to quality to minimize the effect of soil variability on chemical analysis (CCME, 2006). Saskatchewan has a category for subsoil.



## **Sediment Use Categories**

Sediment quality guidelines for the protection of aquatic life support protection and management strategies for freshwater, estuarine, and marine ecosystems.



## WATER USE

Sediments make up an important part of aquatic ecosystems and provided habitat for a wide range of organisms. Chemicals or substances released into the environment through natural processes or human activities may enter aquatic ecosystems and be deposited into sediment. Exposure to certain substances in sediment represents a potentially significant hazard to the health of aquatic organisms.



Sediment quality guidelines are therefore developed by looking at the relationship between concentrations of sediment-associated chemicals and the occurrence of adverse biological effects. (CCME, 1995)

### Water use categories

Guidelines objectives, and standards are set managing contaminants in the following categories of water use:

- Groundwater
- Drinking water
- Aquatic life (freshwater and marine)
- Irrigation
- Livestock.

The CCME guidelines for Canadian water quality are based on scientific research into the health effects, aesthetic effects (e.g. taste and odour), and operational effects (e.g. need for water treatment) of contaminants. Currently, CCME is working with provinces to harmonize federal and provincial standards.

### Air quality

In 2012, ministers of the environment, with the exception of Quebec, agreed to implement a Canada-wide Air Quality Management System (AQMS)

<https://www.ccme.ca/en/resources/air/aqms.html>. AQMS is a comprehensive, collaborative approach for examining all significant sources of air pollution in Canada, thereby contributing to improved human health and environmental benefits.

The AQMS uses the Canadian Ambient Air Quality Standards (CAAQS) as the driver for air quality management across the country. The CAAQS are health- and environment-based numerical values of outdoor air concentrations of pollutants. Their purpose is to drive continuous improvement in air quality. Standards have been developed for Sulphur dioxide link to



<https://www.ccme.ca/en/resources/air/air/sulphur-dioxide.html>, fine PM, and ozone  
[https://www.ccme.ca/en/resources/air/pm\\_ozone.html](https://www.ccme.ca/en/resources/air/pm_ozone.html), and work is underway to develop standards for nitrogen dioxide. The CAAQS are established as objectives under *CEPA 1999*.



## Canada Wide Standards

### Introduction



The federal guidelines used for soil, water and air contamination have been developed by the CCME and are collectively as part of the Canadian Environmental Quality Guidelines (CEQG). These levels of contamination are called Canada Wide Standards (CWS).

[http://www.ccme.ca/en/resources/canadian\\_environmental\\_quality\\_guidelines/index.html](http://www.ccme.ca/en/resources/canadian_environmental_quality_guidelines/index.html)

### What is the CCME?



The CCME is an intergovernmental forum comprised of Environmental Ministers from federal, provincial and territorial governments.

The ministers in the CCME develop national strategies, norms, and guidelines for use by provincial and territorial environment ministries across the country (CCME, 2009).

### What is the Objective of CCME?

One of the main objectives of the CCME is to propose nationally consistent environmental guidelines and standards, such as the CEQG. More specifically, the CEQG are nationally endorsed science-based goals for the quality of atmospheric, aquatic and terrestrial ecosystems (CCME, 2001).





### **What does a CCME Member do?**

Each CCME member, representing each province and Canada is responsible for implementing the CWS in their respective jurisdictions, with the goal of effective, efficient, and harmonized implementation.



However, not all CWS are adopted in their entirety by individual jurisdictions. Rather, a government can use discretion in applying specific measures to regulate a particular contaminant addressed by a CWS.

### **What are the limits to CCME authority?**

The CCME has no authority to implement or enforce legislation, so it is up to provincial, territorial, municipal, or FNs governments to adopt and enforce CCME guidelines and standards.



## **Contaminated Site Management on Reserve Lands**

### **Contaminated Sites Management on Reserve**

LGDs should know that the main national program for contaminated sites management on reserve lands is the Contaminated Sites Management Program (CSMP) <https://www.aadnc-aandc.gc.ca/eng/1100100034640/1100100034641>, administered by Indigenous and Northern Affairs Canada (INAC). The CSMP manages contaminated sites on more than 800 inhabited reserves in Canada.

To determine the extent and severity of contaminated sites on reserve lands, INAC uses the CCME National Classification System for Contaminated Sites (NCSCS) <http://www.labrc.com/wp-content/uploads/2015/01/nationalclassificationsystemforcontaminated-sites.pdf>. INAC typically requires conduct of an NCSCS assessment of contaminated sites before making decisions about remediation or other management actions.

The CSMP <https://www.aadnc-aandc.gc.ca/eng/1100100034643/1100100034644> of INAC provides direction for the management of contaminated sites on reserve lands and on any other lands under INAC 's custodial responsibility (INAC, 2009).

### **Land Code FNs and NCSCS**

If a FN's land was determined to be contaminated using the NCSCS scoring system during the developmental phase <http://www.labrc.com/public/userfiles/files/Developmental%20Phase%20Chart%20v%20Marc%20H%202012.png%20>, management of those lands may remain the responsibility of INAC after the FN adopts its LC. INAC has responsibility for contamination <https://labrc.com/wp-content/uploads/2017/08/canadaresponsibilityprevotechart-2017.pdf> that happened while they made land management decisions on reserve lands. Such potentially contaminated lands should be identified in the Individual Agreement environmental workplan.

If a FN identifies contaminated sites after a LC is in effect and INAC was responsible for those land management decision that caused this contamination, INAC may still be responsible for remediation or other management of those lands.

## **LABRC- Cross Jurisdictional Inventory**

### **Introduction**



This section is based on a document prepared by LABRC titled Inventory of Contaminated Site Guidelines and Standards in Selected Canadian Jurisdictions, November 5, 2009. <http://www.labrc.com/wp-content/uploads/2015/01/lab-contaminate-site-guidelines-inventory-2009.pdf>. The document examines federal, BC, Alberta, Saskatchewan, Manitoba and Ontario guidelines and standards that were in place in late 2009. Readers should be aware that since that time, changes may have occurred in provincial and federal guidelines and standards.

This inventory was compiled to help developmental and operational FNs understand the kinds of standards and guidelines applied in Canada. This information is intended to aid FNs in making decisions about how to proceed with EP actions as part of environmental management of their reserves.

Because guidelines, objectives, criteria, and standards are regularly amended by federal and provincial agencies, the inventory only provided a 'snapshot' of current guidelines (as of 2009).

### **Categories Covered**

The inventory provides a comprehensive description of the rules applied to various kinds of contaminants as they affect:

- Soil (based on the following land use categories: agricultural and natural area, residential, commercial and industrial)
- Sediment (freshwater and marine)
- Water (drinking, aquatic life, irrigation, livestock watering)
- Air



### **How to use the 2009 Guidelines Chart**



The inventory is presented in Microsoft Excel spreadsheets that are colour coded to indicate differing federal and provincial guidelines and standards for various contaminants based on the categories listed in the previous section of this courselet (soil, sediment, water, and air). The spreadsheet has been designed so that guidelines can be compared among jurisdictions included in the inventory.

To view the inventory, click [here](http://www.labrc.com/wp-content/uploads/2015/01/lab-contaminate-site-guidelines-inventory-2009.pdf). <http://www.labrc.com/wp-content/uploads/2015/01/lab-contaminate-site-guidelines-inventory-2009.pdf> Note that the Guidelines Chart was prepared in 2009, and FNs should regularly contact provincial or federal staff involved in managing contaminated sites to obtain the latest versions of laws, regulations, standards, and guidelines.

To determine the applicable guideline or standard for a particular contaminant, find the appropriate spreadsheet based on where the contaminant is located (i.e., agricultural soil, freshwater sediment, drinking water, etc.), and search for the contaminant guideline used in the relevant province.

## Cross Jurisdictional Scan of EP laws and Guidelines



### **Federal and Provincial EP Laws and Guidelines**

This section outlines federal and provincial EP legislation.

A LGD and other Land Governance staff working on EP issues need to be aware of the federal and relevant provincial laws.

Although the regulation of contaminants varies between federal and provincial jurisdictions, under the *Framework Agreement* EP laws of Operational FNs must meet or beat both federal and provincial laws.

### **Most Current Guidelines and Standards**

Consequently, a FN's EP regime will be designed to achieve the most applicable guidelines and standards for regulating contaminants and pollution on reserve. The Considerations in Developing an EP Regime

[http://labrc.com/public/courselet/Considerations in Developing an Environmental Protection Regime/presentation.html](http://labrc.com/public/courselet/Considerations_in_Developing_an_Environmental_Protection_Regime/presentation.html) courselet discusses options for FN EP regimes in more detail.

LGDs should be aware that federal and provincial guidelines and standards for contaminants are often revised to reflect updated scientific knowledge of risks from particular substances or to respond to legal decisions or changes in government policy. This knowledge will be important if the FN's EP regime is harmonized with other jurisdictions and is designed to reflect current EP regulations.

The cross jurisdictional scan of EP laws and guidelines will cover:

- Federal EP legislation
- Provincial (BC, Alberta, Saskatchewan, Manitoba and Ontario)

## **Federal Environmental Protection Legislation and Guidelines**

## Introduction

The *CEPA 1999* is the federal government's primary EP legislation (Canadian Environmental Network, 2010). *CEPA 1999* <http://laws-lois.justice.gc.ca/eng/acts/C-15.31/page-1.html> is defined as "An Act respecting pollution prevention and the protection of the environment and human health in order to contribute to sustainable development."

## CEPA 1999 Issues

*CEPA 1999* addresses such issues as:

- Controlling toxic substances
- Vehicle emissions
- Biotechnology
- Hazardous waste
- Land-based sources of marine pollution
- International air and water pollution
- Disposal at sea
- Governmental operations respecting federal and aboriginal lands
- Enforcement
- Environmental emergencies
- Other matters

## Contaminated Sites Management Policy

In 2002, Canada adopted a CSMP, <https://www.aadnc-aandc.gc.ca/eng/1100100034643/1100100034644> which is applied on reserves.

The policy seeks to achieve the following objectives:

- To meet federal and departmental policy requirements and legal obligations regarding the management of contaminated sites
- To require that, where a suspected contaminated site has been identified, the site be assessed in a timely, consistent and cost-effective manner
- To provide a scientifically valid, risk management based framework for setting priorities, planning, implementing and reporting on the management of contaminated sites

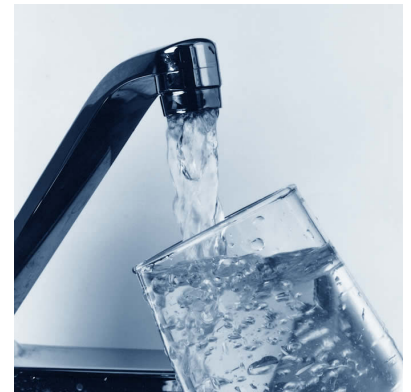


- To remediate, based on approved resource levels, all National Classification System (NCS) Class 1 contaminated sites in the North, and Class 1 and 2 contaminated sites on reserve, on a priority basis, unless it can be demonstrated that for a specific site an alternative form of management is appropriate
- To promote the social and economic benefits that may accrue to FNs, Inuit and northerners when carrying out activities required by this policy
- To promote the federal "polluter pay" principle"

### **Safe Drinking Water for First Nations Act**

*Safe Drinking Water for First Nations Act (SDWFNA)* <http://laws-lois.justice.gc.ca/eng/acts/S-1.04/index.html> is intended to ensure that residents on reserve have:

- Health and safety protections for drinking water
- Effective treatment of Wastewater
- Speedy actions to ensure all FN communities have safe drinking water.



Canada, in 2017, is engaging with FNs on their concerns regarding the *SDWFNA*. LC FNs should ensure that ownership and management of water on FNs land is recognized as residing with the FN. FNs should carefully consider proposed wording on management, liability and enforcement associated with water.

Problems with water contamination and inadequate infrastructure and staffing often pre-date the adoption of LCs in many communities. Canada should retain its responsibility to rectify such problems. Finally, Canada or the provinces need to provide adequate funding to FNs to cover necessary investments in infrastructure, equipment maintenance, staffing, and ongoing training (*SDWFNA* Summary). <http://labrc.com/wp-content/uploads/2015/03/SDWFNA-Summary-March-2015-Final.pdf> *SDWFNA* allows Canada and FNs to develop federal regulations. <https://www.aadnc-aandc.gc.ca/eng/1330528512623/1330528554327>



## British Columbia EP Law and Guidelines

### Introduction



The management of contaminated sites in BC. is regulated by the *Environmental Management Act (EMA)*  
[http://www.bclaws.ca/EPLibraries/bclaws\\_new/document/ID/freeside/03053\\_00](http://www.bclaws.ca/EPLibraries/bclaws_new/document/ID/freeside/03053_00) (through the Ministry of Environment & Climate Change  
<https://www2.gov.bc.ca/gov/content/governments/organizational-structure/ministries-organizations/ministries/environment-climate-change> and the associated Contaminated Sites Regulation (CSR)  
[http://www.bclaws.ca/EPLibraries/bclaws\\_new/document/ID/freeside/375\\_96\\_00](http://www.bclaws.ca/EPLibraries/bclaws_new/document/ID/freeside/375_96_00)>

*EMA* combines the *Waste Management Act* and the *EMA* into one piece of legislation. The new *EMA* provides for innovative tools for EP such as Area Based Planning and Administrative Monetary Penalties.

### Contaminated Sites Regulation

Environmental quality standards for specific contaminants are set out in the CSR  
[http://www.bclaws.ca/EPLibraries/bclaws\\_new/document/ID/freeside/375\\_96\\_00](http://www.bclaws.ca/EPLibraries/bclaws_new/document/ID/freeside/375_96_00) and are used to:

- Determine if a site is contaminated
- Determine when a site has been adequately remediated
- Determine when soil relocation may occur
- Identify potential safety hazards

The CSR categorizes standards using:

- Numerical standards: Acceptable concentrations of substances in soil, surface water, groundwater, vapour and sediments
- Risk-based standards: Acceptable risk levels from exposure to substances at sites

Under the CSR, generic numerical soil standards and “matrix” numerical standards are listed for specific contaminants.

The generic numerical standards are single values for substances, and are intended to protect human health and the environment regardless of unique or unusual site-specific features (BC Ministry of Environment, 2009).



Matrix numerical standards are ranges of concentrations of substances that could affect environmental and human health. The BC CSR lists generic numerical criteria for freshwater, marine, and estuarine sediments. The CSR also lists numerical water standards in the categories of aquatic life, irrigation, livestock, and drinking water.

### **Air Quality**

Air quality in BC is managed through a range of provincial acts and regulations. The BC *EMA* provides the Ministry of Environment with the authority to develop objectives to manage air quality in BC. Air quality objectives are non-statutory (i.e. not legally binding) and set limits on the acceptable presence of contaminants in the atmosphere to protect human health and the environment. They are generally expressed in terms of a concentration measured over a specific period of time.



For more information on air quality in BC, click here <https://www2.gov.bc.ca/gov/content/environment/air-land-water/air>

## **Water Sustainability Act**

In 2016 the provincial government made changes to the rules governing the use of water and groundwater. BC's new *Water Sustainability Act (WSA)* <http://www.bclaws.ca/civix/document/id/complete/statreg/14015> and an initial set of regulations <https://engage.gov.bc.ca/watersustainabilityact/regulations/> came into effect on February 29, 2016.

The purpose of the *WSA* is to ensure a sustainable supply of fresh, clean water that meets the needs of BC residents today and in the future. One of the significant changes introduced by the new *WSA* is that government authorization is now required to extract groundwater for anything other than domestic use.



Much of the detail about how the general principles of the *WSA* are to be applied will be provided in regulations. Due to the complexity of the *WSA* and the number of proposed regulations and polices, government is taking a phased approach to their development and work in these areas continues.

## **Groundwater**

The BC Groundwater Protection Regulation (GWPR) [http://www.bclaws.ca/civix/document/id/complete/statreg/39\\_2016](http://www.bclaws.ca/civix/document/id/complete/statreg/39_2016) ensures that activities related to wells and groundwater are performed in ways intended to reduce the risk of water contamination. Under the new *WSA*, the GWPR:

- Regulates minimum standards for well construction, maintenance, deactivation and decommissioning, and
- Recognizes the qualifications required by people certified to drill wells, install well pumps and perform related services



## **Drinking Water**

The BC *Drinking Water Protection Act* [http://www.bclaws.ca/EPLibraries/bclaws\\_new/document/ID/freeside/00\\_01009\\_01](http://www.bclaws.ca/EPLibraries/bclaws_new/document/ID/freeside/00_01009_01) and Regulation cover all water systems other than those serving single detached dwellings. The Act outlines requirements for water suppliers in terms of ensuring that the water supplied to their users is potable and meets additional requirements established by the Drinking

Water Protection Regulation

[http://www.bclaws.ca/civix/document/id/loo72/loo72/200\\_2003](http://www.bclaws.ca/civix/document/id/loo72/loo72/200_2003) or by the water supply system's operating permit, as set by the local drinking water officer.

## Alberta EP Law and Guidelines



### **Environmental Protection and Enhancement Act and Water Act**

Alberta's *Environmental Protection and Enhancement Act* (EPEA)

<http://www.gp.alberta.ca/documents/Acts/E12.pdf> aims to protect air, land and water and contains regulatory requirements related to substance release, remediation, and reclamation.

The *Water Act*



<http://www.gp.alberta.ca/documents/Acts/w03.pdf> regulates the use and allocation of water, including the measures intended to protect Alberta's groundwater, rivers, streams, lakes and wetlands.

Together, these two Acts provide the legislative basis for the management of contaminated soil and groundwater in Alberta, in combination with Alberta's EA and Approval processes.

For more information on *EPEA* and the *Water Act*, go to Alberta Environment and Parks

<http://aep.alberta.ca/Default.aspx>

## **Surface and Drinking Water**

The Environmental Quality Guidelines for Alberta Surface Waters

<http://aep.alberta.ca/water/education-guidelines/documents/EnvironmentalQualitySurfaceWaters-2014.pdf> (Guidelines) contains science-based guidelines to provide guidance in evaluating water quality and aquatic conditions in Alberta, as well as to provide scientific support for water quality management and contaminated site remediation. The Guidelines do not apply to drinking water but include guidelines (developed by the Government of Alberta, CCME, the USA (US EPA) and other provinces) for the following water use categories:

- Aquatic Life
- Agricultural (irrigation and livestock watering)
- Recreation and aesthetics
- Raw water for drinking water supply
- Industrial water supply

The Environmental Quality Guidelines for Alberta Surface Waters do not apply to drinking water.

In accordance with Alberta's Potable Water Regulation

[http://www.qp.alberta.ca/1266.cfm?page=2003\\_277.cfm&leg\\_type=Regs&isbncIn=0779723023](http://www.qp.alberta.ca/1266.cfm?page=2003_277.cfm&leg_type=Regs&isbncIn=0779723023), drinking water in a waterworks system must meet, at a minimum, Health Canada's Guidelines for Canadian Drinking Water Quality <https://www.canada.ca/en/health-canada/services/environmental-workplace-health/reports-publications/water-quality/guidelines-canadian-drinking-water-quality-summary-table-health-canada-2012.html>.

## **Soil and Groundwater**

The Contaminated Sites Policy Framework <http://aep.alberta.ca/land/land-industrial/documents/ContaminatedSitesPolicy-C-Oct31-2014.pdf> sets out guidelines for soil and groundwater quality, and applies when developing and accessing options for management of contaminated lands in Alberta. The Framework is designed to achieve three policy outcomes: pollution prevention, health protection, and productive use.

The Framework uses a risk management approach to determine which one of the three soil and groundwater remediation guidelines should be used for a specific site:

- Alberta Tier 1 <http://aep.alberta.ca/land/land-industrial/inspections-and-compliance/documents/AlbertaTier1Guidelines-Feb02-2016A.pdf> : generic remediation guidelines, expected to be applicable to most sites. These are calculated by determining



the amount (dose or concentration) of a substance to which a receptor can be safely exposed, and then making a conservative estimate of the concentration of the substance in soil or groundwater that will protect the receptor from exposure exceeding the safe amount

- Alberta Tier 2 <http://aep.alberta.ca/land/land-industrial/inspections-and-compliance/documents/AlbertaTier2Guidelines-Feb02-2016C.pdf>: site-specific remediation guidelines based on the modification of Alberta Tier 1 Guidelines (i.e. the acceptable standard for a particular substance may need to be adjusted or removed because the particular site conditions are substantially different from the generic conditions that were used to determine the acceptable level in the Tier 1 guidelines)
- Exposure Control <http://aep.alberta.ca/land/land-industrial/documents/ExposureControlGuide-May03-2016.pdf> : risk management through exposure barriers or administrative controls (may be based on site-specific risk assessment). This is an interim step until remediation guidelines can be met, or where remediation is not an immediately viable option or is not in the best interest of the environment. Remediation may be accomplished by physical or chemical barriers to prevent exposure to receptors or by implementing environmental controls on a property. These options require continued care and control by responsible parties and may limit land uses

All three options seek to achieve the same target level of human health and ecological protection.

### **Air Quality Objectives and Guidelines**

Under the *EPEA*, Alberta Environment and Parks has developed ambient air quality objectives and guidelines to protect air quality (Alberta Environment, 2008). Click [here](http://aep.alberta.ca/air/legislation-and-policy/ambient-air-quality-objectives/documents/AAQO-Summary-Jun29-2017.pdf) for a summary <http://aep.alberta.ca/air/legislation-and-policy/ambient-air-quality-objectives/documents/AAQO-Summary-Jun29-2017.pdf>. Some of Alberta's objectives are intended to provide protection of the environment and human health. These objectives are equivalent to, or more stringent than, the Canadian Ambient Air Quality Standards.



### **Saskatchewan EP Law and Guideline**





## **Environmental Management and Protection Act 2010**

Saskatchewan's *Environmental Management and Protection Act 2010 (EMPA 2010)* <http://www.qp.gov.sk.ca/documents/english/Statutes/Statutes/e10-22.pdf> protects air, land, water resources and ecosystems by managing and regulating potentially harmful activities and substances. *EMPA 2010* prohibits discharges that may adversely affect the environment, requires notification of such discharges, and allows the Minister to investigate discharges and issue Environmental Protection Orders.



## **Saskatchewan Environmental Code**

Developed under *EMPA 2010* and the *Forest Resources and Management Act*, the Saskatchewan Environmental Code (the Code) <http://publications.gov.sk.ca/documents/66/86816-Z%20Consolidated%20Code%20Chapters.pdf> is a results-based or outcomes-based regulatory approach to EP that incorporates the required outcomes into regulations, and leave the specific methods on how to achieve that outcome to the proponent. The Code contains 16 chapters referencing five regulations and 28 environmental standards (7 external, 1 internal, 7 new) and is organized into the following five divisions:

- a) General
- b) Land Management and Protection
- c) Water Management and Protection
- d) Natural Resource Management and EP
- e) Air Management and Protection.

The activities covered include: impacted sites, forest resource management, water mains, sewage mains, hydrostatic testing, halocarbon control, and industrial source air quality.

New or existing activities not covered in the code will continue to be regulated by existing regulations and processes. The Code does not replace the existing EA process required by the *Environmental Assessment Act*.

### **Saskatchewan Environmental Quality Standard and Guidelines**

Saskatchewan Environmental Quality Standard (SEQS), which was adopted under the Code, prescribes concentrations of substances in the environment that are protective of the applicable pathway and land use. The standard contains all media (air, soils, sediments, and water) and the four CCME land use categories: agricultural, residential/parkland, commercial and industrial. SEQS values are amalgamated from the CCME, Environment Canada, Health Canada, and the Province of Alberta. There are tables that pull the most conservative values from the exposure pathways and will be used as tier one endpoints and a second set of tables that have pathway specific values (tier two endpoints).

The SEQS <https://envrbrportal.crm.saskatchewan.ca/segg/> is a searchable database of the SEQS and other environmental standards for Saskatchewan. The values in the database are provincial benchmarks or indicators of environmental quality and they become legally binding when referenced in Saskatchewan legislation, permits or code.

### **Impacted Sites**

Saskatchewan uses the term “impacted sites” to describe areas of land or water that contain a substance that may cause or is causing an adverse effect. Applicable legislation, code, and standards for the management of impacted sites are the *EMPA, 2010*, The Saskatchewan Environmental Code, and standards adopted under the Code (including the SEQS).

Impacted sites are managed using a risk-based approach with tiered endpoints intended to establish acceptable levels of environmental quality to protect human health and the ecosystems.

The three tiered “endpoints”, with each successive “endpoint” requiring a greater level of technical detail and expertise to plan and carry out remediation are:

- Tier 1: generic guidelines - the tier 1 values of the SEQS. These endpoints are more restrictive and conservative, and are most used on sites of low complexity and smaller scale. They allow remediation to proceed with no

analysis other than determining the contaminant, its extent, and the land use and soil texture of the site.

- Tier 2: exposure scenario based – the tier 2 values of the SEQS. These are applied if physical, engineering, or administrative controls are implemented to eliminate exposure pathways or to control receptors. These controls prevent the contaminant and receptor from interacting (i.e., capping contaminated soil restricting site access or water use, implementing ground disturbance policies, etc.).
- Tier 3: site-specific – endpoints are determined by preparing:
  - a human health risk assessment
  - an ecological risk assessment
  - site specific environmental quality guidelines.

For more information, see Saskatchewan Ministry of the Environment Guidance Document: Impacted Sites <http://publications.gov.sk.ca/documents/66/86827-Impacted%20Sites%20Guidance%20Document.pdf>.

### **Petroleum Hydro Carbon Canada Wide Standards**

The 2008 Petroleum Hydro Carbon Canada Wide Standards (PHCCWS) [http://www.ccme.ca/en/resources/contaminated\\_site\\_management/phc\\_cws\\_in\\_soil.html](http://www.ccme.ca/en/resources/contaminated_site_management/phc_cws_in_soil.html) have been applied to all contaminated sites in Saskatchewan, but no specific regulations have been adopted to support the implementation of the PHCCWS.

Soil, Subsoil and the PHCCWS is a 3-tiered remedial standard for soil and subsoil protection of human and environmental health under four generic land uses – agriculture, residential/parkland, commercial and industrial (CCME, 2009).



## Air Quality

The Saskatchewan air quality regulatory requirements

<http://www.environment.gov.sk.ca/air/> are mandated through:

- The *Clean Air Act*, Chapter C-12.1 of the Statutes of Saskatchewan, 1986-87-88 (effective November 1, 1989) as amended by the Statutes of Saskatchewan, 1989-90, c.30 and 31; 1992, c.22; 1995, c.A-12.1; 2000, c.50; 2002, c.C-11.1; and 2003, c.29;  
<http://www.publications.gov.sk.ca/details.cfm?p=410>
- The Clean Air Regulations,  
<http://www.publications.gov.sk.ca/details.cfm?p=1000> C-12.1 Reg;
- The *EMPA, 2010*;  
<http://www.publications.gov.sk.ca/details.cfm?p=31893&cl=5>



The Saskatchewan Environmental Code <http://www.environment.gov.sk.ca/Code>

## Manitoba EP Laws and Guidelines



## Contaminated Sites

The Manitoba *Contaminated Sites Remediation Act*

<https://web2.gov.mb.ca/laws/statutes/ccsm/c205e.php> and Contaminated Sites

Remediation Regulation [http://web2.gov.mb.ca/laws/regs/current/pdf-](http://web2.gov.mb.ca/laws/regs/current/pdf-regs.php?reg=105/97)

[regs.php?reg=105/97](http://web2.gov.mb.ca/laws/regs/current/pdf-regs.php?reg=105/97) provide for the remediation of contaminated and impacted sites.



Manitoba has adopted a three-tiered approach to contaminated site remediation standards as follows:

- Primary Standards: CCME Environmental Quality Guidelines, 1999; CCME Canada-Wide Standards for Petroleum Hydrocarbons (PHC) in soil, 2008; and Health Canada, Guidelines for Canadian Drinking Water Quality – Summary Table, 212
- Secondary Standard: Ontario Ministry of the Environment, Soil, Groundwater and Sediment Standard for Use Under Part XV.1 of the *Environmental Protection Act*, 2011
- Tertiary Standard: Government of Alberta, Alberta Tier 1 Soil and Groundwater Remediation Guidelines 2010

Three rules determine which standard is to be used:

1. Rule 1: If a standard for a contaminant in relation to the applicable site condition is provided in a primary standard, that is the standard to be used.
2. Rule 2: If a contaminant is not listed in a primary standard or if none of the primary standards address the applicable site conditions, the secondary standard is to be used if the secondary standard addresses the specific contaminant and the applicable site conditions.
3. Rule 3: If a contaminant is not listed in the primary or secondary standards or if the primary and secondary standards do not address the applicable site conditions, the tertiary standard is to be used if the tertiary standard addresses the specific contaminant and the applicable site conditions.

### **Water and Drinking Water**

The *Water Protection Act* <http://web2.gov.mb.ca/laws/statutes/ccsm/w065e.php> provides for the protection and stewardship of Manitoba's water resources and aquatic ecosystems. It allows for the creation of regulations respecting water quality standards, objectives and guidelines.





### **The Manitoba Water Quality Standards, Objectives and Guidelines**

[https://www.gov.mb.ca/waterstewardship/water\\_quality/quality/pdf/mb\\_water\\_quality\\_standard\\_final.pdf](https://www.gov.mb.ca/waterstewardship/water_quality/quality/pdf/mb_water_quality_standard_final.pdf) set out water quality conditions for more than 100 compounds to protect water quality for various uses including fish and other aquatic life, sources of drinking water, irrigation and livestock watering, and recreation.

- Tier I – Water Quality Standards – contains minimum standards for common classes of discharges; in the future may contain Canada Wide Standards developed and negotiated by the CCME under the Canada Wide Accord on Environmental Harmonization,
- Tier II – Water Quality Objectives - for a limited number of common pollutants that are routinely controlled through licensing under the *Manitoba Environment Act*; used when additional restrictions are needed to protect important uses of ground or surface waters in addition to those defined in Tier I,
- Tier III – Water Quality Guidelines – includes a large number of variables derived by the CCME for general application across Canada (i.e., water, sediment, residue in aquatic life tissue for the protection of wildlife), tissue residue guidelines derived by Health Canada to protect human consumers of fish or other aquatic life, and narrative water quality guidelines for use when numerical guidelines have not been developed.

The *Drinking Water Safety Act* <http://web2.gov.mb.ca/laws/statutes/2002/c03602e.php>

addresses the construction, operation and monitoring of drinking water systems in Manitoba. The supporting Drinking Water Safety Regulation

<http://web2.gov.mb.ca/laws/regs/current/pdf-regs.php?reg=40/2007> and the Drinking

Water Quality Standards Regulation

<http://web2.gov.mb.ca/laws/regs/current/pdf-regs.php?reg=41/2007> set out water system approval requirements, water treatment and quality standards, and monitoring and reporting requirements. The regulations establish Manitoba-specific standards for some



parameters and systems and adopt Health Canada's Guidelines for Drinking Water Quality for others.

### **Aquatic Life**

Manitoba differs from other provincial jurisdictions in that it has unique guidelines for the consumption of aquatic life (e.g., fish) tissues that could contain chemical residues such as poly-chlorinated biphenyls (PCBs) and the pesticide dichlorodiphenyltrichloroethane (DDT).



### **Air Quality**

Provincial air quality management falls under the *Environment Act*.

Manitoba's Ambient Air Quality Criteria Table

[http://www.gov.mb.ca/sd/envprograms/airquality/pdf/criteria\\_table\\_update\\_july\\_2005.pdf](http://www.gov.mb.ca/sd/envprograms/airquality/pdf/criteria_table_update_july_2005.pdf)

lists maximum time-based pollutant concentration levels for the protection and preservation of ambient air quality in Manitoba. Each criterion is classified as an objective, guideline, or Canada Wide Standard, depending on several factors. The concentration of given contaminants in outside ambient air during a time period specified in the schedule shall not exceed the maximum tolerable, acceptable, or desirable level. The selection of the appropriate concentration category depends on the degree of protection to be afforded to the affected receptors.



### **Ontario EP Law and Guidelines**



## **Contaminated Sites**

Ontario's *Environmental Protection Act*

<https://www.ontario.ca/laws/statute/90e19> provides for the protection and conservation of the natural environment.

O. Reg. 153/04: Ontario Records of Site Condition – Part XV.1 of The *Environmental Protection Act*

<https://www.ontario.ca/laws/regulation/040153> sets out the requirements for the assessment and cleanup of contaminated properties in Ontario. The Act provides for two standards to be met by site remediation:



1. Generic standards (based on intended land use and certain physical characteristics of the property); or
2. Property-specific standards (developed through a risk assessment)

The Generic Standards have been established by the Ministry of the Environment and Climate Change and are contained in the document titled *Soil, Groundwater and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act*

<https://www.ontario.ca/page/soil-ground-water-and-sediment-standards-use-under-part-xv1-environmental-protection-act>.

The property-specific approach uses information about the conditions and characteristics of a property when calculating risk. The risk assessment must propose property-specific standards that offer the same level of protection for human health and the environment as specified in the Ministry's generic standards.

## **Soil, Sediment and Groundwater Standards**

Soil, Groundwater and Sediment Standards for use under Part XV.1 of the *Environmental Protection Act* <https://www.ontario.ca/page/soil-ground-water-and-sediment-standards-use-under-part-xv1-environmental-protection-act> consists of 9 tables that set out the prescribed standards for contaminants in soil, groundwater and sediment. The soil and groundwater standards have been organized to reflect the following property use classifications:

- Agricultural or Other Property Use;
- Residential / Parkland / Institutional Property Use; and
- Industrial / Commercial / Community Property Use.



If a property involves mixed uses, the most sensitive use category applies.

### **Drinking Water**

Ontario's *Clean Water Act, 2006* <https://www.ontario.ca/laws/statute/06c22> protects existing and potential future sources of drinking water.

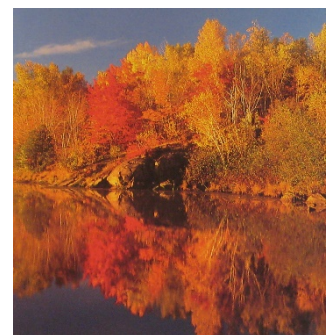
The *Safe Drinking Water Act, 2002* <https://www.ontario.ca/laws/statute/02s32> provides for the protection of human health and the prevention of drinking water health hazards through the control and regulation of drinking water systems and conduct of drinking water testing.

O. Reg. 169/03: Ontario Drinking Water Quality Standards <https://www.ontario.ca/laws/regulation/030169>, developed under the Safe Drinking Water Act, contains the minimum requirements that must be met for water to be considered potable.



### **Surface and Ground Water**

Ontario's Provincial Water Quality Objectives (PWQO's) <https://www.ontario.ca/page/water-management-policies-guidelines-provincial-water-quality-objectives> are numerical and narrative criteria that serve as chemical and physical indicators for surface waters (lakes and rivers) and, where it discharges to the surface, ground water. The objectives are intended to protect aquatic life throughout their life cycles, and to protect public health and aesthetics of recreational waters.



## Air Quality

Ontario's Ambient Air Quality Criteria <https://www.ontario.ca/page/ontarios-ambient-air-quality-criteria-sorted-chemical-abstracts-service-registry-number> list the desirable concentration of chemicals in air, based on protection against adverse effects on health or the environment. They reflect the general air quality independent of location or source of a contaminant. The criteria are used in EAs, special studies using ambient air monitoring data, assessment of general air quality in a community, and annual reporting on air quality across the province.

O. Reg. 419/05: Air Pollution – Local Air Quality

<https://www.ontario.ca/laws/regulation/050419>, regulate contaminants released into the air by various sources, including local industrial and commercial facilities. The Regulation includes three compliance approaches for industry to demonstrate environmental performance, and to make improvements when necessary. These approaches are:

1. Meeting a provincial air standard by the specified phase-in date, which is generally 5 years; or
2. Requesting and meeting a site-specific standard; or
3. Registering and meeting the requirements under a sector-based technical standard (if applicable).



Summary



### **Federal and Provincial EP Laws and Guidelines**

This section outlines federal and provincial EP legislation.

A LGD and other Land Governance staff working on EP issues need to be aware of the federal and relevant provincial laws.

Although the regulation of contaminants varies between federal and provincial jurisdictions, under the *Framework Agreement* EP laws of Operational FNs must meet or beat both federal and provincial laws.

### **Most Current Guidelines and Standards**

Consequently, a FN's EP regime will be designed to achieve the most applicable guidelines and standards for regulating contaminants and pollution on reserve. The Considerations in Developing an EP Regime

[http://labrc.com/public/courselet/Considerations in Developing an Environmental Protection Regime/presentation.html](http://labrc.com/public/courselet/Considerations_in_Developing_an_Environmental_Protection_Regime/presentation.html) courselet discusses options for FN EP regimes in more detail.

LGDs should be aware that federal and provincial guidelines and standards for contaminants are often revised to reflect updated scientific knowledge of risks from particular substances or to respond to legal decisions or changes in government policy. This knowledge will be important if the FN's EP regime is harmonized with other jurisdictions and is designed to reflect current EP regulations.

The cross jurisdictional scan of EP laws and guidelines will cover:

- Federal EP legislation
- Provincial (BC, Alberta, Saskatchewan, Manitoba and Ontario)



## 1. Federal Environmental Protection Legislation and Guidelines

### Introduction

The *CEPA 1999* is the federal government's primary EP legislation (Canadian Environmental Network, 2010). *CEPA 1999* <http://laws-lois.justice.gc.ca/eng/acts/C-15.31/page-1.html> is defined as "An Act respecting pollution prevention and the protection of the environment and human health in order to contribute to sustainable development."

### CEPA 1999 Issues

*CEPA 1999* addresses such issues as:

- Controlling toxic substances
- Vehicle emissions
- Biotechnology
- Hazardous waste
- Land-based sources of marine pollution
- International air and water pollution
- Disposal at sea
- Governmental operations respecting federal and aboriginal lands
- Enforcement
- Environmental emergencies
- Other matters



### Contaminated Sites Management Policy

In 2002, Canada adopted a CSMP, <https://www.aadnc-aandc.gc.ca/eng/1100100034643/1100100034644> which is applied on reserves.

The policy seeks to achieve the following objectives:

- To meet federal and departmental policy requirements and legal obligations regarding the management of contaminated sites
- To require that, where a suspected contaminated site has been identified, the site be assessed in a timely, consistent and cost-effective manner

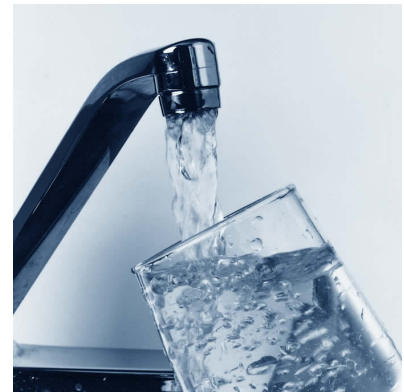


- To provide a scientifically valid, risk management based framework for setting priorities, planning, implementing and reporting on the management of contaminated sites
- To remediate, based on approved resource levels, all National Classification System (NCS) Class 1 contaminated sites in the North, and Class 1 and 2 contaminated sites on reserve, on a priority basis, unless it can be demonstrated that for a specific site an alternative form of management is appropriate
- To promote the social and economic benefits that may accrue to FNs, Inuit and northerners when carrying out activities required by this policy
- To promote the federal "polluter pay" principle"

### **Safe Drinking Water for First Nations Act**

*Safe Drinking Water for First Nations Act (SDWFNA)* <http://laws-lois.justice.gc.ca/eng/acts/S-1.04/index.html> is intended to ensure that residents on reserve have:

- Health and safety protections for drinking water
- Effective treatment of Wastewater
- Speedy actions to ensure all FN communities have safe drinking water.



Canada, in 2017, is engaging with FNs on their concerns regarding the *SDWFNA*. LC FNs should ensure that ownership and management of water on FNs land is recognized as residing with the FN. FNs should carefully consider proposed wording on management, liability and enforcement associated with water.

Problems with water contamination and inadequate infrastructure and staffing often pre-date the adoption of LCs in many communities. Canada should retain its responsibility to rectify such problems. Finally, Canada or the provinces need to provide adequate funding to FNs to cover necessary investments in infrastructure, equipment maintenance, staffing, and ongoing training (*SDWFNA* Summary). <http://labrc.com/wp-content/uploads/2015/03/SDWFNA-Summary-March-2015-Final.pdf> *SDWFNA* allows Canada and FNs to develop federal regulations. <https://www.aadnc-aandc.gc.ca/eng/1330528512623/1330528554327>

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## 2. British Columbia EP Law and Guidelines

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## **Introduction**



The management of contaminated sites in BC. is regulated by the *Environmental Management Act (EMA)* [http://www.bclaws.ca/EPLibraries/bclaws\\_new/document/ID/freeside/03053\\_00](http://www.bclaws.ca/EPLibraries/bclaws_new/document/ID/freeside/03053_00) (through the Ministry of Environment & Climate Change <https://www2.gov.bc.ca/gov/content/governments/organizational-structure/ministries-organizations/ministries/environment-climate-change> and the associated Contaminated Sites Regulation (CSR) [http://www.bclaws.ca/EPLibraries/bclaws\\_new/document/ID/freeside/375\\_96\\_00](http://www.bclaws.ca/EPLibraries/bclaws_new/document/ID/freeside/375_96_00)>

*EMA* combines the *Waste Management Act* and the *EMA* into one piece of legislation. The new *EMA* provides for innovative tools for EP such as Area Based Planning and Administrative Monetary Penalties.

## **Contaminated Sites Regulation**

Environmental quality standards for specific contaminants are set out in the CSR [http://www.bclaws.ca/EPLibraries/bclaws\\_new/document/ID/freeside/375\\_96\\_00](http://www.bclaws.ca/EPLibraries/bclaws_new/document/ID/freeside/375_96_00) and are used to:

- Determine if a site is contaminated
- Determine when a site has been adequately remediated
- Determine when soil relocation may occur
- Identify potential safety hazards

The CSR categorizes standards using:

- Numerical standards: Acceptable concentrations of substances in soil, surface water, groundwater, vapour and sediments
- Risk-based standards: Acceptable risk levels from exposure to substances at sites

Under the CSR, generic numerical soil standards and “matrix” numerical standards are listed for specific contaminants.

The generic numerical standards are single values for substances, and are intended to protect human health and the environment regardless of unique or unusual site-specific features (BC Ministry of Environment, 2009).



Matrix numerical standards are ranges of concentrations of substances that could affect environmental and human health. The BC CSR lists generic numerical criteria for freshwater, marine, and estuarine sediments. The CSR also lists numerical water standards in the categories of aquatic life, irrigation, livestock, and drinking water.

### **Air Quality**

Air quality in BC is managed through a range of provincial acts and regulations. The BC *EMA* provides the Ministry of Environment with the authority to develop objectives to manage air quality in BC. Air quality objectives are non-statutory (i.e. not legally binding) and set limits on the acceptable presence of contaminants in the atmosphere to protect human health and the environment. They are generally expressed in terms of a concentration measured over a specific period of time.



For more information on air quality in BC, click here <https://www2.gov.bc.ca/gov/content/environment/air-land-water/air>

## **Water Sustainability Act**

In 2016 the provincial government made changes to the rules governing the use of water and groundwater. BC's new *Water Sustainability Act (WSA)* <http://www.bclaws.ca/civix/document/id/complete/statreg/14015> and an initial set of regulations <https://engage.gov.bc.ca/watersustainabilityact/regulations/> came into effect on February 29, 2016.

The purpose of the *WSA* is to ensure a sustainable supply of fresh, clean water that meets the needs of BC residents today and in the future. One of the significant changes introduced by the new *WSA* is that government authorization is now required to extract groundwater for anything other than domestic use.



Much of the detail about how the general principles of the *WSA* are to be applied will be provided in regulations. Due to the complexity of the *WSA* and the number of proposed regulations and polices, government is taking a phased approach to their development and work in these areas continues.

## **Groundwater**

The BC Groundwater Protection Regulation (GWPR) [http://www.bclaws.ca/civix/document/id/complete/statreg/39\\_2016](http://www.bclaws.ca/civix/document/id/complete/statreg/39_2016) ensures that activities related to wells and groundwater are performed in ways intended to reduce the risk of water contamination. Under the new *WSA*, the GWPR:

- Regulates minimum standards for well construction, maintenance, deactivation and decommissioning, and
- Recognizes the qualifications required by people certified to drill wells, install well pumps and perform related services



## **Drinking Water**

The BC *Drinking Water Protection Act* [http://www.bclaws.ca/EPLibraries/bclaws\\_new/document/ID/freeside/00\\_01009\\_01](http://www.bclaws.ca/EPLibraries/bclaws_new/document/ID/freeside/00_01009_01) and Regulation cover all water systems other than those serving single detached dwellings. The Act outlines requirements for water suppliers in terms of ensuring that the water supplied to their users is potable and meets additional requirements established by the Drinking Water Protection Regulation [http://www.bclaws.ca/civix/document/id/loo72/loo72/200\\_2003](http://www.bclaws.ca/civix/document/id/loo72/loo72/200_2003) or by the water supply system's operating permit, as set by the local drinking water officer.

### 3. Alberta EP Law and Guidelines

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#### **Environmental Protection and Enhancement Act and Water Act**

Alberta's *Environmental Protection and Enhancement Act* (EPEA)

<http://www.qp.alberta.ca/documents/Acts/E12.pdf> aims to protect air, land and water and contains regulatory requirements related to substance release, remediation, and reclamation.

The *Water Act* <http://www.qp.alberta.ca/documents/Acts/w03.pdf> regulates the use and allocation of water, including the measures intended to protect Alberta's groundwater, rivers, streams, lakes and wetlands.

Together, these two Acts provide the legislative basis for the management of contaminated soil and groundwater in Alberta, in combination with Alberta's EA and Approval processes.

For more information on *EPEA* and the *Water Act*, go to Alberta Environment and Parks <http://aep.alberta.ca/Default.aspx>

#### **Surface and Drinking Water**

The Environmental Quality Guidelines for Alberta Surface Waters

<http://aep.alberta.ca/water/education->



<http://aep.alberta.ca/water/education-guidelines/documents/EnvironmentalQualitySurfaceWaters-2014.pdf> (Guidelines) contains science-based guidelines to provide guidance in evaluating water quality and aquatic conditions in Alberta, as well as to provide scientific support for water quality management and contaminated site remediation. The Guidelines do not apply to drinking water but include guidelines (developed by the Government of Alberta, CCME, the USA (US EPA) and other provinces) for the following water use categories:



- Aquatic Life
- Agricultural (irrigation and livestock watering)
- Recreation and aesthetics
- Raw water for drinking water supply
- Industrial water supply

The Environmental Quality Guidelines for Alberta Surface Waters do not apply to drinking water.

In accordance with Alberta's Potable Water Regulation

[http://www.qp.alberta.ca/1266.cfm?page=2003\\_277.cfm&leg\\_type=Regs&isbncln=0779723023](http://www.qp.alberta.ca/1266.cfm?page=2003_277.cfm&leg_type=Regs&isbncln=0779723023), drinking water in a waterworks system must meet, at a minimum, Health Canada's Guidelines for Canadian Drinking Water Quality <https://www.canada.ca/en/health-canada/services/environmental-workplace-health/reports-publications/water-quality/guidelines-canadian-drinking-water-quality-summary-table-health-canada-2012.html>.

### **Soil and Groundwater**

The Contaminated Sites Policy Framework <http://aep.alberta.ca/land/land-industrial/documents/ContaminatedSitesPolicy-C-Oct31-2014.pdf> sets out guidelines for soil and groundwater quality, and applies when developing and accessing options for management of contaminated lands in Alberta. The Framework is designed to achieve three policy outcomes: pollution prevention, health protection, and productive use.

The Framework uses a risk management approach to determine which one of the three soil and groundwater remediation guidelines should be used for a specific site:

- Alberta Tier 1 <http://aep.alberta.ca/land/land-industrial/inspections-and-compliance/documents/AlbertaTier1Guidelines-Feb02-2016A.pdf> : generic remediation guidelines, expected to be applicable to most sites. These are calculated by determining the amount (dose or concentration) of a substance to which a receptor can be safely exposed, and then making a conservative estimate of the concentration of the substance in soil or groundwater that will protect the receptor from exposure exceeding the safe amount
- Alberta Tier 2 <http://aep.alberta.ca/land/land-industrial/inspections-and-compliance/documents/AlbertaTier2Guidelines-Feb02-2016C.pdf>: site-specific remediation guidelines based on the modification of Alberta Tier 1 Guidelines (i.e. the acceptable standard for a particular substance may need to be adjusted or removed because the particular site conditions are substantially different from the generic conditions that were used to determine the acceptable level in the Tier 1 guidelines)
- Exposure Control <http://aep.alberta.ca/land/land-industrial/documents/ExposureControlGuide-May03-2016.pdf> : risk management through



exposure barriers or administrative controls (may be based on site-specific risk assessment). This is an interim step until remediation guidelines can be met, or where remediation is not an immediately viable option or is not in the best interest of the environment. Remediation may be accomplished by physical or chemical barriers to prevent exposure to receptors or by implementing environmental controls on a property. These options require continued care and control by responsible parties and may limit land uses

All three options seek to achieve the same target level of human health and ecological protection.

### **Air Quality Objectives and Guidelines**

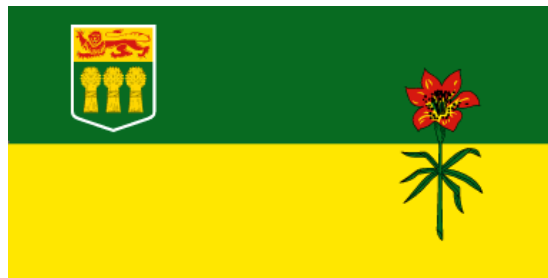
Under the *EPEA*, Alberta Environment and Parks has developed ambient air quality objectives and guidelines to protect air quality (Alberta Environment, 2008). Click [here](http://aep.alberta.ca/air/legislation-and-policy/ambient-air-quality-objectives/documents/AAQO-Summary-Jun29-2017.pdf) for a summary <http://aep.alberta.ca/air/legislation-and-policy/ambient-air-quality-objectives/documents/AAQO-Summary-Jun29-2017.pdf>. Some of Alberta's objectives are intended to provide protection of the environment and human health. These objectives are equivalent to, or more stringent than, the Canadian Ambient Air Quality Standards.



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## 4. Saskatchewan EP Law and Guideline

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### **Environmental Management and Protection Act 2010**

Saskatchewan's *Environmental Management and Protection Act 2010* (*EMPA 2010*) <http://www.qp.gov.sk.ca/documents/english/Statutes/Statutes/e10-22.pdf> protects air, land, water resources and ecosystems by managing and regulating potentially harmful activities and substances. *EMPA 2010* prohibits discharges that may adversely affect the environment, requires notification of such discharges, and allows the Minister to investigate discharges and issue Environmental Protection Orders.



### **Saskatchewan Environmental Code**

Developed under *EMPA 2010* and the *Forest Resources and Management Act*, the Saskatchewan Environmental Code (the Code) <http://publications.gov.sk.ca/documents/66/86816-Z%20Consolidated%20Code%20Chapters.pdf> is a results-based or outcomes-based regulatory approach to EP that incorporates the required outcomes into regulations, and leave the specific methods on how to achieve that outcome to the proponent. The Code contains 16 chapters referencing five regulations and 28 environmental standards (7 external, 1 internal, 7 new) and is organized into the following five divisions:

- f) General
- g) Land Management and Protection
- h) Water Management and Protection
- i) Natural Resource Management and EP
- j) Air Management and Protection.

The activities covered include: impacted sites, forest resource management, water mains, sewage mains, hydrostatic testing, halocarbon control, and industrial source air quality.

New or existing activities not covered in the code will continue to be regulated by existing regulations and processes. The Code does not replace the existing EA process required by the *Environmental Assessment Act*.

### **Saskatchewan Environmental Quality Standard and Guidelines**

Saskatchewan Environmental Quality Standard (SEQS), which was adopted under the Code, prescribes concentrations of substances in the environment that are protective of the applicable pathway and land use. The standard contains all media (air, soils, sediments, and water) and the four CCME land use categories: agricultural, residential/parkland, commercial and industrial. SEQS values are amalgamated from the CCME, Environment Canada, Health Canada, and the Province of Alberta. There are tables that pull the most conservative values from the exposure pathways and will be used as tier one endpoints and a second set of tables that have pathway specific values (tier two endpoints).

The SEQS <https://envrbrportal.crm.saskatchewan.ca/seqg/> is a searchable database of the SEQS and other environmental standards for Saskatchewan. The values in the database are provincial benchmarks or indicators of environmental quality and they become legally binding when referenced in Saskatchewan legislation, permits or code.

### **Impacted Sites**

Saskatchewan uses the term “impacted sites” to describe areas of land or water that contain a substance that may cause or is causing an adverse effect. Applicable legislation, code, and standards for the management of impacted sites are the *EMPA, 2010*, The Saskatchewan Environmental Code, and standards adopted under the Code (including the SEQS).

Impacted sites are managed using a risk-based approach with tiered endpoints intended to establish acceptable levels of environmental quality to protect human health and the ecosystems.

The three tiered “endpoints”, with each successive “endpoint” requiring a greater level of technical detail and expertise to plan and carry out remediation are:

- Tier 1: generic guidelines - the tier 1 values of the SEQS. These endpoints are more restrictive and conservative, and are most used on sites of low complexity and smaller scale. They allow remediation to proceed with no analysis other than determining the contaminant, its extent, and the land use and soil texture of the site.
- Tier 2: exposure scenario based – the tier 2 values of the SEQS. These are applied if physical, engineering, or administrative controls are implemented to eliminate exposure pathways or to control receptors. These controls prevent the contaminant and receptor from interacting (i.e., capping contaminated soil restricting site access or water use, implementing ground disturbance policies, etc.).
- Tier 3: site-specific – endpoints are determined by preparing:
  - a human health risk assessment
  - an ecological risk assessment
  - site specific environmental quality guidelines.

For more information, see Saskatchewan Ministry of the Environment Guidance Document: Impacted Sites <http://publications.gov.sk.ca/documents/66/86827-Impacted%20Sites%20Guidance%20Document.pdf>.

### **Petroleum Hydro Carbon Canada Wide Standards**

The 2008 Petroleum Hydro Carbon Canada Wide Standards (PHCCWS) [http://www.ccme.ca/en/resources/contaminated\\_site\\_management/phc\\_cws\\_in\\_soil.html](http://www.ccme.ca/en/resources/contaminated_site_management/phc_cws_in_soil.html) have been applied to all contaminated sites in Saskatchewan, but no specific regulations have been adopted to support the implementation of the PHCCWS.

Soil, Subsoil and the PHCCWS is a 3-tiered remedial standard for soil and subsoil protection of human and environmental health under four generic land uses – agriculture, residential/parkland, commercial and industrial (CCME, 2009).



### Air Quality

The Saskatchewan air quality regulatory requirements <http://www.environment.gov.sk.ca/air/> are mandated through:

- The *Clean Air Act*, Chapter C-12.1 of the Statutes of Saskatchewan, 1986-87-88 (effective November 1, 1989) as amended by the Statutes of Saskatchewan, 1989-90, c.30 and 31; 1992, c.22; 1995, c.A-12.1; 2000, c.50; 2002, c.C-11.1; and 2003, c.29; <http://www.publications.gov.sk.ca/details.cfm?p=410>
- The Clean Air Regulations, <http://www.publications.gov.sk.ca/details.cfm?p=1000> C-12.1 Reg;
- The *EMPA, 2010*;



<http://www.publications.gov.sk.ca/details.cfm?p=31893&cl=5>

- The Saskatchewan Environmental Code <http://www.environment.gov.sk.ca/Code>

## 5. Manitoba EP Laws and Guidelines



### Contaminated Sites

The Manitoba *Contaminated Sites Remediation Act*

<https://web2.gov.mb.ca/laws/statutes/ccsm/c205e.php> and Contaminated Sites Remediation Regulation <http://web2.gov.mb.ca/laws/regs/current/pdf-regs.php?reg=105/97> provide for the remediation of contaminated and impacted sites.



Manitoba has adopted a three-tiered approach to contaminated site remediation standards as follows:

- Primary Standards: CCME Environmental Quality Guidelines, 1999; CCME Canada-Wide Standards for Petroleum Hydrocarbons (PHC) in soil, 2008; and Health Canada, Guidelines for Canadian Drinking Water Quality – Summary Table, 212
- Secondary Standard: Ontario Ministry of the Environment, Soil, Groundwater and Sediment Standard for Use Under Part XV.1 of the *Environmental Protection Act*, 2011
- Tertiary Standard: Government of Alberta, Alberta Tier 1 Soil and Groundwater Remediation Guidelines 2010

Three rules determine which standard is to be used:

4. Rule 1: If a standard for a contaminant in relation to the applicable site condition is provided in a primary standard, that is the standard to be used.



5. Rule 2: If a contaminant is not listed in a primary standard or if none of the primary standards address the applicable site conditions, the secondary standard is to be used if the secondary standard addresses the specific contaminant and the applicable site conditions.
6. Rule 3: If a contaminant is not listed in the primary or secondary standards or if the primary and secondary standards do not address the applicable site conditions, the tertiary standard is to be used if the tertiary standard addresses the specific contaminant and the applicable site conditions.

### **Water and Drinking Water**

The *Water Protection Act* <http://web2.gov.mb.ca/laws/statutes/ccsm/w065e.php> provides for the protection and stewardship of Manitoba's water resources and aquatic ecosystems. It allows for the creation of regulations respecting water quality standards, objectives and guidelines.



### **The Manitoba Water Quality Standards, Objectives and Guidelines**

[https://www.gov.mb.ca/waterstewardship/water\\_quality/quality/pdf/mb\\_water\\_quality\\_standard\\_final.pdf](https://www.gov.mb.ca/waterstewardship/water_quality/quality/pdf/mb_water_quality_standard_final.pdf) set out water quality conditions for more than 100 compounds to protect water quality for various uses including fish and other aquatic life, sources of drinking water, irrigation and livestock watering, and recreation.

- Tier I – Water Quality Standards – contains minimum standards for common classes of discharges; in the future may contain Canada Wide Standards developed and negotiated by the CCME under the Canada Wide Accord on Environmental Harmonization,
- Tier II – Water Quality Objectives - for a limited number of common pollutants that are routinely controlled through licensing under the *Manitoba Environment Act*; used when additional restrictions are needed to protect important uses of ground or surface waters in addition to those defined in Tier I,
- Tier III – Water Quality Guidelines – includes a large number of variables derived by the CCME for general application across Canada (i.e., water, sediment, residue in aquatic life tissue for the protection of wildlife), tissue residue guidelines derived by Health Canada to protect



human consumers of fish or other aquatic life, and narrative water quality guidelines for use when numerical guidelines have not been developed.

The *Drinking Water Safety Act* <http://web2.gov.mb.ca/laws/statutes/2002/c03602e.php> addresses the construction, operation and monitoring of drinking water systems in Manitoba. The supporting Drinking Water Safety Regulation <http://web2.gov.mb.ca/laws/regs/current/pdf-regs.php?reg=40/2007> and the Drinking Water Quality Standards Regulation <http://web2.gov.mb.ca/laws/regs/current/pdf-regs.php?reg=41/2007> set out water system approval requirements, water treatment and quality standards, and monitoring and reporting requirements. The regulations establish Manitoba-specific standards for some parameters and systems and adopt Health Canada's Guidelines for Drinking Water Quality for others.

### **Aquatic Life**

Manitoba differs from other provincial jurisdictions in that it has unique guidelines for the consumption of aquatic life (e.g., fish) tissues that could contain chemical residues such as poly-chlorinated biphenyls (PCBs) and the pesticide dichlorodiphenyltrichloroethane (DDT).



### **Air Quality**

Provincial air quality management falls under the *Environment Act*.

Manitoba's Ambient Air Quality Criteria Table

[http://www.gov.mb.ca/sd/envprograms/airquality/pdf/criteria\\_table\\_update\\_july\\_2005.pdf](http://www.gov.mb.ca/sd/envprograms/airquality/pdf/criteria_table_update_july_2005.pdf) lists maximum time-based pollutant concentration levels for the protection and preservation of ambient air quality in Manitoba. Each criterion is classified as an objective, guideline, or Canada Wide Standard, depending on several factors. The concentration of given contaminants in outside ambient air during a time period specified in the schedule shall not exceed the maximum tolerable, acceptable, or desirable level. The selection of the appropriate concentration category depends on the degree of protection to be afforded to the affected receptors.



## 6. Ontario EP Law and Guidelines



### **Contaminated Sites**

Ontario's *Environmental Protection Act* <https://www.ontario.ca/laws/statute/90e19> provides for the protection and conservation of the natural environment.

O. Reg. 153/04: Ontario Records of Site Condition – Part XV.1 of The *Environmental Protection Act* <https://www.ontario.ca/laws/regulation/040153> sets out the requirements for the assessment and cleanup of contaminated properties in Ontario. The Act provides for two standards to be met by site remediation:



3. Generic standards (based on intended land use and certain physical characteristics of the property); or
4. Property-specific standards (developed through a risk assessment)

The Generic Standards have been established by the Ministry of the Environment and Climate Change and are contained in the document titled *Soil, Groundwater and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act* <https://www.ontario.ca/page/soil-ground-water-and-sediment-standards-use-under-part-xv1-environmental-protection-act>.

The property-specific approach uses information about the conditions and characteristics of a property when calculating risk. The risk assessment must propose property-specific standards that offer the same level of protection for human health and the environment as specified in the Ministry's generic standards.

### **Soil, Sediment and Groundwater Standards**

Soil, Groundwater and Sediment Standards for use under Part XV.1 of the *Environmental Protection Act* <https://www.ontario.ca/page/soil-ground-water-and-sediment-standards-use-under-part-xv1-environmental-protection-act> consists of 9 tables that set out the prescribed standards for contaminants in soil, groundwater and sediment. The soil and groundwater standards have been organized to reflect the following property use classifications:

- Agricultural or Other Property Use;
- Residential / Parkland / Institutional Property Use; and
- Industrial / Commercial / Community Property Use.

If a property involves mixed uses, the most sensitive use category applies.



## **Drinking Water**

Ontario's *Clean Water Act, 2006* <https://www.ontario.ca/laws/statute/06c22> protects existing and potential future sources of drinking water.

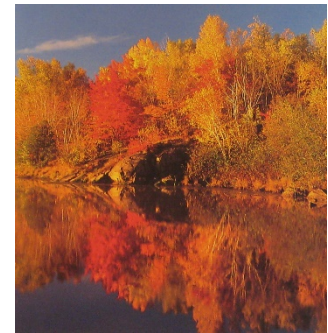
The *Safe Drinking Water Act, 2002* <https://www.ontario.ca/laws/statute/02s32> provides for the protection of human health and the prevention of drinking water health hazards through the control and regulation of drinking water systems and conduct of drinking water testing.

O. Reg. 169/03: Ontario Drinking Water Quality Standards <https://www.ontario.ca/laws/regulation/030169>, developed under the Safe Drinking Water Act, contains the minimum requirements that must be met for water to be considered potable.



## **Surface and Ground Water**

Ontario's Provincial Water Quality Objectives (PWQO's) <https://www.ontario.ca/page/water-management-policies-guidelines-provincial-water-quality-objectives> are numerical and narrative criteria that serve as chemical and physical indicators for surface waters (lakes and rivers) and, where it discharges to the surface, ground water. The objectives are intended to protect aquatic life throughout their life cycles, and to protect public health and aesthetics of recreational waters.



## **Air Quality**

Ontario's Ambient Air Quality Criteria <https://www.ontario.ca/page/ontarios-ambient-air-quality-criteria-sorted-chemical-abstracts-service-registry-number> list the desirable concentration of chemicals in air, based on protection against adverse effects on health or the environment. They

reflect the general air quality independent of location or source of a contaminant. The criteria are used in EAs, special studies using ambient air monitoring data, assessment of general air quality in a community, and annual reporting on air quality across the province.

O. Reg. 419/05: Air Pollution – Local Air Quality <https://www.ontario.ca/laws/regulation/050419>, regulate contaminants released into the air by various sources, including local industrial and commercial facilities. The Regulation includes three compliance approaches for industry to demonstrate environmental performance, and to make improvements when necessary. These approaches are:

4. Meeting a provincial air standard by the specified phase-in date, which is generally 5 years; or
5. Requesting and meeting a site-specific standard; or
6. Registering and meeting the requirements under a sector-based technical standard (if applicable).



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## 7. Summary

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This courselet provided a brief overview of federal and provincial laws, regulations, standards and guidelines that relate to EP and contaminants.

LGDs should ensure that they have the most recent versions of federal and provincial regulations, standards, guidelines, etc., because those documents are amended from time to time. This courselet is only a starting guide.

When developing EP laws, *Framework Agreement* FNs will need to be aware of the federal and provincial regulations, standards, and guidelines that could be applicable to their reserves, and the EP issues they face.

An inventory of federal and provincial contaminant regulations shows how a guideline for a single substance can differ, depending on the local jurisdiction.

Each FN will need to determine how best to meet its EP obligations as prescribed by the *Framework Agreement*. This courselet's purpose is to summarize other jurisdiction's laws, regulations, standards and guidelines to aid FNs in developing EP regimes that are appropriate for the community's environmental issues and governance capacity.



**ACRONYM LIST**  
**Federal/Provincial Environmental Protection Laws Courselet**

AQMS	-	Air Quality Management System
B.C.	-	British Columbia
CAAQS	-	Canadian Ambient Air Quality Standards
CCME	-	Council of Ministers of the Environment
<i>CEPA 1999</i>	-	<i>Canadian Environmental Protection Act 1999</i>
CEQG	-	Canadian Environmental Quality Guidelines
CSMP	-	Contaminated Sites Management Program
CSR	-	Contaminated Sites Regulation
CWS	-	Canada Wide Standards
DDT	-	Dichlorodiphenyltrichloroethane
EA	-	Environmental Assessment
<i>EMA</i>	-	<i>Environmental Management Act</i>
EMP	-	Environmental Management Plan
<i>EMPA 2010</i>	-	<i>Environmental Management and Protection Act, 2010</i>
EP	-	Environmental Protection
<i>EPEA</i>	-	<i>Environmental Protection and Enhancement Act</i>
FN	-	First Nation
<i>FRAMEWORK AGREEMENT</i>	-	<i>Framework Agreement on First Nation Land Management</i>





GWPR	-	Ground Water Protection Regulation
INAC	-	Indigenous and Northern Affairs Canada
LABRC	-	Lands Advisory Board Resource Centre
LC	-	Land Code
LGD	-	Land Governance Director
NCS	-	National Classification System
NCSCS	-	National Classification System for Contaminated Sites
PCB	-	Poly-chlorinated biphenyls
PHCCWS	-	Petroleum Hydro Carbon Canada Wide Standards
PM	-	Particulate Matter
PWQO	-	Provincial Water Quality Objectives
SDWFNA	-	Safe Drinking Water for First Nations Act
SEQS	-	Saskatchewan Environmental Quality Standard
WSA	-	<i>Water Sustainability Act</i>



## GLOSSARY OF TERMS

### Federal/Provincial Environmental Protection Laws

#### **CONTAMINANT**

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.

#### **CONTAMINATED SITES**

A contaminated site is defined as a site at which substances occur at concentrations: (1) above background levels and pose or are likely to pose an immediate or long-term hazard to human health or the environment, or (2) exceeding levels specified in policies and regulations.

#### **CONTAMINATION**

Contamination: 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.

#### **CRITERIA**

**Criteria:** Numerical value(s) or narrative statements for a physical, chemical, or biological characteristic of water, biota, soil, or sediment that must not be exceeded to protect, maintain, and improve the specific uses of soil, sediment, and water (Canadian Council of Ministers of the Environment (CCME), 1999).

#### **DEVELOPMENTAL**

When referring to the *Framework Agreement* “developmental” means those First Nations who are signatories to the Framework Agreement and who are developing a Land Code, an Individual Agreement with Canada, and a community approval process to ratify the *Framework Agreement*, Land Code and Individual Agreement through a vote of the eligible voters.

#### **ENVIRONMENTAL ASSESSMENT**

According to the International Association of Impact Assessments, an EA is



“the process of identifying, predicting, evaluating and mitigating the biophysical, social and other relevant effects of development proposals prior to major decisions being taken and commitments made.”

An EA examines effects of proposed projects on soil, air quality, water quality and supply, fisheries, wildlife, traffic, noise, community health, economic development, archaeology and a variety of other social, economic and environmental topics. A well-designed EA assesses the “cumulative effects” of a proposed project combined with other past and proposed future human activities. Ways of avoiding or reducing impacts are identified in an EA.

An EA is a planning tool, a means of reviewing the effects of proposed development, a process of community engagement and an instrument for complying with regulatory requirements. After considering federal and provincial environmental assessment processes, an operational First Nation can design an efficient EA regime that is beneficial to the environment and to the quality of development occurring on reserves.

### **ENVIRONMENTAL MANAGEMENT PLAN (EMP)**

An Environmental Management Plan defines a First Nation’s approach to important environmental issues and organizes actions to achieve specified environmental goals.

### **ENVIRONMENTAL PROTECTION**

Environmental protection is defined as the efforts made to identify, remediate and prevent contamination of soil, water and air, and to reduce attendant risks to environmental and human health and safety. The adverse effects of exposure to contaminants may result from direct or indirect contamination of soils, water, and air from hazardous materials and uncontrolled exposure to those contaminants.

### **FIRST NATION LAND**

"First Nation land", in respect of a First Nation, means all or part of a reserve that the First Nation describes in its land code.

### ***FRAMEWORK AGREEMENT ON FIRST NATION LAND MANAGEMENT***

The *Framework Agreement on First Nation Land Management* is a government-to-government agreement. The Framework Agreement is an initiative for First Nations to opt out of the land management sections of the *Indian Act* and take over responsibility for the management and control of their reserve lands and resources. The Framework Agreement sets out the principal components of this new land management process.



The *Framework Agreement* provides First Nations with the option to manage their reserve lands under their own Land Codes. Until a First Nation community develops and approves a Land Code to take control of its reserve lands and resources, federal administration of their reserve lands continues under the Indian Act. The Framework Agreement is not a treaty and does not affect treaty rights or other constitutional rights of the First Nations.

## **GROUNDWATER**

Groundwater means all subsurface water that occurs beneath the water table in rocks and geologic formations that are fully saturated.

## **GUIDELINE**

Generic numerical concentrations or narrative statements recommended as being the upper limits necessary to protect and maintain the specified uses of air, water, sediment, soil, or wildlife. These values are not legally binding (CCME, 1999).

## **INDIAN ACT**

The *Indian Act* is Canadian federal legislation, first passed in 1876, and amended several times since. It sets out certain federal government obligations and regulates the management of Indian reserve lands, Indian moneys and other resources. Among its many provisions, the *Indian Act* currently requires the Minister of Indian Affairs and Northern Development to manage certain moneys belonging to First Nations and Indian lands and to approve or disallow First Nations by-laws.

## **INDIVIDUAL AGREEMENT**

An Individual Agreement between each community and Canada will be negotiated to deal with such matters as: the reserve lands to be managed by the First Nation, the specifics of the transfer of the administration of land from Canada to the First Nation, e.g. the interests in land held by Canada that are to be transferred to the First Nation, the transfer of revenues and an interim environmental assessment process, and the funding to be provided by Canada to the First Nation for land management.

## **LAND CODE**

A Land Code will be the basic land law of the First Nation and will replace the land management provisions of the Indian Act. The Land Code will be drafted by the First Nation and will make provision for the following matters: identifying the reserve lands to be managed by the First Nation (called “First Nation land”), the general rules and procedures for the use and occupation of these lands by First Nation members and others, financial accountability for revenues from the lands (except oil and gas revenues,



which continue under federal law), the making and publishing of First Nation land laws, the conflict of interest rules, a community process to develop rules and procedures applicable to land on the breakdown of a marriage, a dispute resolution process, procedures by which the First Nation can grant interests in land or acquire lands for community purposes, the delegation of land management responsibilities, and the procedure for amending the Land Code.

## LANDS ADVISORY BOARD RESOURCE CENTRE

Under the *Framework Agreement*, the First Nations have established a LABRC to assist the First Nations in implementing their own land management regimes. The LABRC is the technical body intended to support First Nations in the developmental and operational phases implementing the *Framework Agreement*

The LABRC's functions are:

- Developing model land codes, laws and land management systems
- Developing model agreements for use between First Nations and other authorities and institutions, including public utilities and private organizations
- On request of a First Nation, assisting the First Nation in developing and implementing its land code, laws, land management systems and environmental assessment and protection regimes -assisting a verifier when requested by the verifier
- Establishing a resource centre, curricula and training programs for managers and others who perform functions pursuant to a land code
- On request of a First Nation encountering difficulties relating to the management of its First Nation lands, helping the First Nation in obtaining the expertise necessary to resolve the difficulty
- Proposing regulations for First Nation land registration

## OBJECTIVE

Numerical concentrations or narrative statements that have been established after considering site-specific conditions. Objectives are intended to protect and maintain a specified use of a resource, such as water, soil, or sediment, at a particular site (CCME, 1999). Objectives are not enforceable.

## OPERATIONAL

When referring to the *Framework Agreement* "operational" means a First Nation which has ratified its Land Code and the Land Code is in **force**.

## REMEDIATION

Remediation is defined by Environment Canada as 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 the availability of contaminants to receptors of concern. Remediation may involve clean-up of contaminants, or “risk management” that limits exposure to contaminants that are not or cannot be removed.

## RESERVE

The *Constitution Act of 1867 Section 91 (24)* - "Indians and lands reserved for Indians":

- Creates a distinction between Indian reserve lands and other lands in Canada
- Provides that Indians and reserve lands are a federal responsibility
- Gives the federal government exclusive jurisdiction over reserve lands
- Provides that only Parliament can legislate with regard to the use of reserve lands

The basic legal framework underlying reserves is:

- The underlying legal title to reserves belongs to the federal Crown
- How the reserve was created (e.g. before or after Confederation in 1867)
- Pursuant to section 2 of the *Indian Act*, reserves are set aside by the Crown in Right of Canada for the use and benefit of a First Nation

The *Framework Agreement* (see Section 4) clarifies that reserve lands under a Land Code will continue to be reserves within the meaning of the *Indian Act* and that any reserve, title to which is vested in Canada, and managed by a First Nation under a Land Code, will continue to be vested in Canada for the use and benefit of the respective First Nation for which it was set apart.

## RISK MANAGEMENT

Risk management is the selection and implementation of a strategy of control of risk, followed by monitoring and evaluation of the effectiveness of that strategy.

Risk management may include direct remedial actions or other strategies that reduce the probability, intensity, frequency or duration of the exposure to contamination. The latter may include institutional controls such as zoning designations, land use restrictions, or orders. The decision to select a particular strategy may involve considering the information obtained from a risk assessment. Implementation typically involves a commitment of resources and communication with affected parties. Monitoring and evaluation may include environmental sampling, post-remedial surveillance, protective epidemiology, and analysis of new health risk information, as well as ensuring compliance.

## SEDIMENT



Any particulate matter that can be transported by fluid flow and which eventually is deposited as a layer of solid particles on the bed or bottom of a body of water or other liquid. (source: <https://www.sciencedaily.com/terms/sediment.htm>)

## **STANDARDS**

A legally enforceable numerical limit, i.e., parts per billion of contaminant allowed in water or soil, or a narrative statement, such as in a regulation, statute, contract, or other legally binding document, that has been adopted from a criterion or an objective (CCME, 1999).

## **SURFACE WATER**

Surface water flows on the surface of the ground. Surface water includes the water in lakes, rivers and wetlands.

## Canada's Responsibility for Contamination Before the Land Code Vote

Inventory of Contaminated Land	Liability
<p>Section 6.3 of the Framework Agreement</p> <ul style="list-style-type: none"> <li>• Before a First Nation develops its land code, Canada is supposed to provide a First Nation, at its request, with “all existing information, in Canada’s possession, respecting any potential or actual environmental problems with the proposed First Nation land” (Framework Agreement s. 6.3)</li> </ul>	<p>Canada may be liable for any environmental damages to First Nation Land before the Land Code comes into effect. This will depend on the facts or circumstances of each case.</p>
<p>Phase I Environmental Site Assessment</p> <ul style="list-style-type: none"> <li>• Such existing information may be inadequate to fully describe the condition of reserve lands, so Canada’s policy is to fund the preparation of Phase I Environmental Site Assessments (ESAs), which: <ul style="list-style-type: none"> <li>➤ review reports on previous use of land to identify potential sources of contamination</li> <li>➤ conduct site inspections</li> <li>➤ interview knowledgeable First Nations members about land use and contamination</li> </ul> </li> </ul>	<p>Canada’s liability for such “legacy” contamination does not end when a First Nation adopts a Land Code.</p>
<p>Individual Agreement</p> <ul style="list-style-type: none"> <li>• Before approving an <u>Individual Agreement</u>, a First Nations should meet with Indigenous and Northern Affairs Canada (INAC) to resolve responsibility for contamination and remediation.</li> <li>• It is imperative that the nature and scope of further environmental work be included in the Individual Agreement work plan before a First Nation signs off on its Individual Agreement.</li> <li>• Because Phase 1 ESA’s do not identify the entire extent of contamination on reserve land, a First Nation ideally should ensure that it’s Individual Agreement and work plan contain a commitment by Canada to assist the First Nation in identifying contaminated sites on reserve and a timeline to remediate them.</li> </ul>	<p>Canada will not necessarily remediate identified contaminated sites. A variety of studies and ratings must be conducted, and funding must be available.</p> <p>For Canada’s official policy on site remediation, go to: <a href="https://www.aadnc-aandc.gc.ca/eng/1100100034643/110010034644">https://www.aadnc-aandc.gc.ca/eng/1100100034643/110010034644</a></p>

**Text of the Framework  
Agreement on First Nation Land  
Management**

(signed in 1996)

Includes modifications resulting from

**Amendment #1 1998**  
**Amendment #2 1998**  
**Amendment #3 2002**  
**Amendment #4 2007**  
**Amendment #5 2011**

**Texte de l'Accord-Cadre relatif  
à la Gestion des Terres de  
Premières Nations**

(signé en 1996)

Comprend les changements apportés par  
les modifications suivantes

**Modification #1 1998**  
**Modification #2 1998**  
**Modification #3 2002**  
**Modification #4 2007**  
**Modification #5 2011**

Framework Agreement on First  
Nation Land Management

Accord-cadre relatif à la Gestion  
des Terres de Premières Nations

FRAMEWORK AGREEMENT ON  
FIRST NATION LAND  
MANAGEMENT

ACCORD-CADRE RELATIF À LA  
GESTION DES TERRES DE  
PREMIÈRES NATIONS

BETWEEN:

ENTRE :

THE FOLLOWING FIRST NATIONS:

LES PREMIÈRES NATIONS  
SUIVANTES :

WESTBANK, MUSQUEAM, LHEIDLI  
T'ENNEH (formerly known as "LHEIT-  
LIT'EN"), N'QUATQUA, SQUAMISH,  
SIKSIKA, MUSKODAY, COWESSESS,  
OPASKWAYAK CREE, NIPISSING,  
MISSISSAUGAS OF SCUGOG ISLAND,  
CHIPPEWAS OF MNJIKANING,  
CHIPPEWAS OF GEORGINA ISLAND,  
SAINT MARY'S, as represented by their  
Chiefs and all other First Nations that  
have adhered to the Agreement

WESTBANK, MUSQUEAM, LHEIDLI  
T'ENNEH (autrefois connue sous le  
nom de "LHEIT-LIT'EN"),  
N'QUATQUA, SQUAMISH, SIKSIKA,  
MUSKODAY, COWESSESS,  
OPASKWAYAK CREE, NIPISSING,  
MISSISSAUGAS OF SCUGOG  
ISLAND, CHIPPEWAS OF  
MNJIKANING, CHIPPEWAS OF  
GEORGINA ISLAND, SAINT  
MARY'S, représentées par leurs chefs  
et toutes les autres Premières Nations  
qui se sont jointes à l'Entente

AND

ET

HER MAJESTY THE QUEEN IN  
RIGHT OF CANADA, as represented by  
the Minister of Indian Affairs and Northern  
Development

SA MAJESTÉ LA REINE DU CHEF  
DU CANADA, représentée par le ministre  
des Affaires indiennes et du Nord  
canadien

WHEREAS:

ATTENDU QUE :

The First Nations have a profound  
relationship with the land that is rooted in  
respect for the Spiritual value of the Earth  
and the gifts of the Creator and have a deep  
desire to preserve their relationship with the  
land;

Les premières nations entretiennent une  
relation profonde avec la terre, basée sur la  
valeur spirituelle qu'elles attribuent à la  
Terre et aux dons du Créateur et qu'elles  
ont le désir de préserver cette relation;

The First Nations should have the option of

Les premières nations devraient avoir la  
possibilité de soustraire leurs terres aux



withdrawing their lands from the land management provisions of the Indian Act in order to exercise control over their lands and resources for the use and benefit of their members;

The Parties wish to enter into a government to government agreement, within the framework of the constitution of Canada, to deal with the issues of land management;

The Parties understand that this Agreement must be ratified;

NOW THEREFORE,

In consideration of the exchange of promises contained in this Agreement and subject to its terms and conditions, the Parties agree that the First Nations shall have the option of exercising control over their lands and resources.

## PART I PRELIMINARY MATTERS

### 1. INTERPRETATION

1.1 In this Agreement,

"Canada" or "Crown" means Her Majesty the Queen in right of Canada; ("Canada")

"eligible voter" means a member of a First Nation who is eligible, pursuant to clause 7.2, to vote under this Agreement; ("électeurs")

"federal law" means a law enacted by

dispositions de la Loi sur les Indiens concernant la gestion des terres de façon à exercer un contrôle sur leurs terres et sur leurs ressources à l'usage et au profit de leurs membres;

Les parties souhaitent conclure un accord de gouvernement à gouvernement, dans le cadre de la constitution du Canada, concernant des questions touchant la gestion des terres;

Les parties reconnaissent que le présent accord doit être ratifié;

PAR CONSÉQUENT,

En contrepartie de l'échange des promesses figurant dans le présent accord et sous réserve de ses modalités, les Parties conviennent que les premières nations doivent avoir la possibilité d'exercer un contrôle sur leurs terres et sur leurs ressources.

## PARTIE I QUESTIONS PRÉLIMINAIRES

### 1. INTERPRÉTATION

1.1 Les définitions qui suivent s'appliquent au présent accord.

« Canada » ou « Couronne » Sa Majesté la Reine du chef du Canada; (« Canada »)

« code foncier » Code adopté par une première nation conformément au présent accord contenant les dispositions générales relatives à l'exercice des droits et pouvoirs de la première nation sur ses terres de

Canada and does not include a land code or a First Nation law; ("loi fédérale")

"federal legislation" means the legislation to be enacted by Canada under Part X; ("loi de ratification")

"First Nation" means a band that is a Party to this Agreement; ("première nation")

"First Nation land", in respect of a First Nation, means all or part of a reserve that the First Nation describes in its land code; ("terres de première nation")

"First Nation Lands Register" means the register established pursuant to clause 51 to register interests or land rights in First Nation land; ("registre des terres de premières nations")

"First Nation law" means a law enacted by a First Nation in accordance with its land code; ("texte législative de la Première nation")

"interest", in relation to First Nation land in any province or territory other than Québec, means any interest, right or estate of any nature in or to that land, including a lease, easement, right of way, servitude, or profit à prendre, but does not include title to that land; ("intérêt")

"land code" means a code, approved by a First Nation in accordance with this Agreement, that sets out the basic provisions regarding the exercise of the First Nation's rights and powers over its First Nation land (although each First Nation can select its own name for the land code); ("code

première nation (les premières nations peuvent néanmoins donner l'appellation de leur choix à ce code foncier). (« land code »)

« Conseil consultatif des terres » Le conseil visé à l'article 38. (« Land Advisory Board »)

« droit foncier » Relativement aux terres de première nation dans la province de Québec, tout droit de quelque nature qu'il soit portant sur ces terres, à l'exclusion du titre de propriété; y sont assimilés les droits du locataire. (« land right »)

« électeurs » Les membres d'une première nation qui ont le droit de voter en vertu de l'article 7.2 du présent accord. (« eligible voters »)

« intérêt » Relativement aux terres de première nation situées dans toute province ou territoire autre que le Québec, tout intérêt, droit ou domaine de quelque nature qu'il soit portant sur ces terres, notamment un bail, une servitude, un droit de passage, un service foncier ou un profit à prendre, à l'exclusion du titre sur ces terres. (« interest »)

« loi de ratification » La loi adoptée par le Canada aux termes de la Partie X. (« federal legislation »)

« loi fédérale » Loi adoptée par le Canada mais ne comprend pas un code foncier ou un texte législatif d'une première nation. (« federal law »)

« membre » À l'égard d'une première

foncier")

"land right", in relation to First Nation land in the Province of Québec, means any right of any nature in or to that land excluding title, and includes the rights of a lessee; ("droit foncier")

"Lands Advisory Board" means the board referred to in clause 38; ("Conseil consultatif des terres")

"licence", in relation to First Nation land, ("permis")

(a) in a province or territory other than Québec, means any right of use or occupation of First Nation land, other than an interest in that land;

(b) in the Province of Québec, any right to use or occupy First Nation land, other than a land right in that land;

"member", in respect of a First Nation, means ("membre")

(a) a person whose name appears on the Band List, or

(b) a person who is entitled to have his or her name appear on the Band List;

"Minister" means the Minister of Indian Affairs and Northern Development, or such other member of the Queen's Privy Council as is designated by the Governor in Council for the purposes of this Agreement; ("ministre")

nation : (« member »)

a) personne dont le nom figure sur la liste de bande;

b) personne qui a droit à ce que son nom y figure.

« ministre » Le ministre des Affaires indiennes et du Nord canadien ou un membre du Conseil privé de la Reine désigné par le gouverneur en conseil aux fins du présent accord. (« Minister »)

« permis » Relativement aux terres d'une première nation : (« licence »)

a) dans une province ou un territoire autre que le Québec, tout droit d'usage ou d'occupation des terres de première nation, autre qu'un intérêt sur ces terres;

b) dans la province de Québec, tout droit d'utiliser ou d'occuper les terres de première nation autre qu'un droit foncier sur ces terres.

« première nation » Une bande qui est Partie au présent accord. (« First Nation »)

« registre des terres de premières nations » Le registre créé conformément à l'article 51 pour l'enregistrement des intérêts ou des droits fonciers sur les terres de premières nations. (« First Nation Lands Register »)

« terres de première nation » Dans le cas d'une première nation, tout ou partie d'une réserve décrite dans son code foncier. (« First Nation land »)

"verifier" means the person appointed pursuant to clauses 8 and 44 to monitor and verify the opting in process for a First Nation. ("vérificateur")

1.2 Terms that are defined or used in the Indian Act have the same meaning in this Agreement, unless the context otherwise requires.

1.3 This Agreement is not a treaty and shall not be considered to be a treaty within the meaning of section 35 of the Constitution Act, 1982.

1.4 The Parties acknowledge that the Crown's special relationship with the First Nations will continue.

1.5 This Agreement does not affect any lands, or any rights in lands, that are not subject to this Agreement.

1.6 This Agreement is not intended to define or prejudice inherent rights, or any other rights, of First Nations to control their lands or resources or to preclude other negotiations in respect of those rights.

1.7 The parties agree that when a provision of this agreement contains both civil law and common law terminology, or terminology that has different meanings in the civil law and the common law, the civil law

« texte législatif de la première nation »  
Une loi ou un autre texte législatif adopté par une première nation conformément à son code foncier. (« First Nation law »)

« vérificateur » La personne chargée, en application des articles 8 et 44, de surveiller et de vérifier le processus d'adhésion d'une première nation.  
(« verifier »)

1.2 Sauf indication contraire, les termes du présent accord qui sont définis ou utilisés dans la Loi sur les Indiens s'entendent au sens de cette loi.

1.3 Le présent accord ne constitue pas un traité et n'est pas considéré comme un traité au sens de l'article 35 de la Loi constitutionnelle de 1982.

1.4 Les Parties reconnaissent que la Couronne maintiendra la relation spéciale qu'elle entretient avec les premières nations.

1.5 Le présent accord ne s'applique pas aux terres ou aux droits sur ces terres qui ne sont pas visés par lui.

1.6 Le présent accord n'a pas pour but de définir les droits inhérents ou autres des premières nations d'exercer un contrôle sur leurs terres et leurs ressources ni d'y porter atteinte, ni d'empêcher que ces droits fassent l'objet d'autres négociations.

1.7 Les parties conviennent, que lorsque une disposition du présent accord emploie à la fois des termes propres au droit civil et à la common-law ou des termes qui ont

terminology or meaning is intended to apply to this provision with respect to First Nations in the Province of Quebec and the common law terminology or meaning is intended to apply with respect to First Nations in a province or territory other than Québec.

## 2. FIRST NATION LAND

2.1 Land that is a reserve of a First Nation is eligible to be managed by that First Nation under a land code as First Nation land.

2.2 First Nation land includes all the interests and rights or all the land rights and other rights, as well as the resources that belong to that land, to the extent that these are under the jurisdiction of Canada and are part of that land.

2.3 The Parties agree that First Nation lands are lands reserved for Indians within the meaning of section 91(24) of the Constitution Act, 1867.

## 3. INDIAN OIL AND GAS

3.1 The Indian Oil and Gas Act will continue to apply to any First Nation lands, or interests or land rights in First Nation land, that are "Indian lands" within the meaning of that Act.

un sens différent dans l'un et l'autre de ces systèmes, l'intention est, d'appliquer à cette disposition la terminologie de droit civil ou le sens qu'on lui donne dans ce système en ce qui a trait aux Premières nations au Québec et la terminologie de common-law ou le sens qu'on lui donne dans ce système en ce qui a trait aux Premières nations dans toute province ou territoire autre que le Québec.

## 2. TERRES D'UNE PREMIÈRE NATION

2.1 Les terres qui constituent une réserve d'une première nation sont admissibles à être gérées par celle-ci en vertu d'un code foncier à titre de terres de première nation.

2.2 Les terres de première nation comprennent tous les intérêts et droits ou tous les droits fonciers et autres droits ainsi que les ressources relatifs à ces terres dans la mesure où ils relèvent de la juridiction du Canada et font partie de ces terres.

2.3 Les parties reconnaissent que les terres de premières nations sont des terres réservées aux Indiens au sens du point 24 de l'article 91 de la Loi constitutionnelle de 1867.

## 3. PÉTROLE ET GAZ DES INDIENS

3.1 La Loi sur le pétrole et le gaz des terres indiennes continuera à s'appliquer aux terres de premières nations et aux intérêts ou droits fonciers sur les terres de premières nations qui sont des « terres indiennes » au sens de cette Loi.



3.2 Any interest or land right in First Nation land that is granted to Canada for the exploitation of oil and gas under a land code will be deemed to be "Indian lands" within the meaning of the Indian Oil and Gas Act.

3.3 Section 4 of the Indian Oil and Gas Act will continue to apply to revenues and royalties from oil or gas on First Nation land, despite anything to the contrary in clause 12.

#### 4. RESERVES

4.1 Any reserve managed by a First Nation under a land code will continue to be a reserve within the meaning of the Indian Act.

4.2 Any reserve, title to which is vested in Canada, and managed by a First Nation under a land code, will continue to be vested in Canada for the use and benefit of the respective First Nation for which it was set apart.

4.3 Where a First Nation wishes to manage a reserve, the whole of the reserve will be included as First Nation land to avoid disjointed administration of the reserve, subject to clauses 4.4, 4.5 and 4.5A.

4.4 Subject to clause 4.5A, a portion of a reserve may be excluded from a land code only if:

(a) the portion of the reserve is in an environmentally unsound condition and the condition cannot be remedied

3.2 Les intérêts ou droits fonciers sur les terres de première nation octroyés au Canada pour l'exploitation du pétrole et du gaz en vertu d'un code foncier seront réputés être des « terres indiennes » au sens de la Loi sur le pétrole et le gaz des terres indiennes.

3.3 L'article 4 de la Loi sur le pétrole et le gaz des terres indiennes continuera de s'appliquer aux revenus et aux redevances provenant du pétrole ou du gaz situés sur les terres de première nation, nonobstant toute disposition contraire de l'article 12.

#### 4. RÉSERVES

4.1 Les réserves gérées par une première nation en vertu d'un code foncier demeurent des réserves au sens de la Loi sur les Indiens.

4.2 Toute réserve, dont le titre est détenu par le Canada et qui est gérée par une première nation en vertu d'un code foncier, continuera d'appartenir au Canada à l'usage et au profit de la première nation pour laquelle la réserve fut mise de côté.

4.3 Lorsqu'une première nation souhaite gérer une réserve, l'ensemble de la réserve sera inclus comme terres de première nation de façon à éviter la double administration de la réserve sous réserve des articles 4.4, 4.5 et 4.5A.

4.4 Sous réserve de l'article 4.5A, il est permis de soustraire une partie d'une réserve à l'application du code foncier seulement dans l'un ou l'autre des cas suivants :

a) l'environnement y est si dégradé que

by measures that are technically and financially feasible before the land code is expected to be submitted for community approval;

(b) the portion of the reserve is the subject of ongoing litigation that is unlikely to be resolved before the land code is expected to be submitted for community approval;

(c) the portion of the reserve is uninhabitable or unusable as a result of a natural disaster; or

(d) there exist one or more other reasons which the First Nation and the Minister agree justify excluding a portion of a reserve.

4.5 A portion of a reserve may not be excluded if the exclusion would have the effect of placing the administration of a lease or other interest or right in land in more than one land management regime.

4.5A Land may be excluded from the application of the land code when it is uncertain whether the land forms part of the reserve. An exclusion for this reason shall be without prejudice to the right of the First Nation or Her Majesty to assert that the land forms part of the reserve. If excluding the land would have the effect of placing a lease, other interest or right in land in more than one land management regime, then all land that is subject to that lease, interest or right shall be excluded from the application of the land code.

des mesures réalisables sur les plans technique et économique ne permettront pas de l'assainir avant la présentation prévue du code foncier à l'approbation de la communauté;

b) cette partie de la réserve fait l'objet d'un litige qui ne sera probablement pas résolu avant la présentation prévue du code foncier à l'approbation de la communauté;

c) cette partie de la réserve est inhabitable ou inutilisable en raison d'un sinistre naturel;

d) l'exclusion est justifiée pour une ou plusieurs autres raisons convenues par la première nation et le ministre.

4.5 Une partie de la réserve ne peut être exclue si l'exclusion avait pour effet d'assujettir un bail ou tout autre intérêt ou droit foncier à plus d'un régime de gestion foncière.

4.5A Une terre peut être exclue de l'application du code foncier lorsqu'il y a une incertitude quant à la question de savoir si la terre est située ou non dans la réserve. L'exclusion pour ce motif ne porte pas atteinte au droit de la première nation ou de Sa Majesté de faire valoir que la terre fait partie de la réserve. Si l'exclusion a pour effet d'assujettir un bail ou tout autre intérêt ou droit foncier à plus d'un régime de gestion foncière, toute la partie de la réserve qui est assujettie au bail ou autre intérêt ou droit foncier doit être exclue de l'application du code foncier.

4.6 The First Nation will make provision to

amend the description of its First Nation land in its land code to include the excluded portion of the reserve when the First Nation and the Minister agree that the condition justifying the exclusion no longer exists and the individual agreement will be amended accordingly.

## PART II OPTING IN PROCEDURE

4.6 Lorsque la première nation et le ministre conviennent que la condition justifiant l'exclusion d'une partie d'une réserve n'existe plus, la première nation fera en sorte que la description des terres de première nation contenue dans son code foncier soit modifiée pour y inclure la partie jusqu'à présent exclue et l'accord distinct sera modifié en conséquence.

## PARTIE II PROCÉDURE D'ADHÉSION

## 5. DEVELOPMENT OF A LAND CODE

5.1 A First Nation that wishes to manage one or more of its reserves will first develop a land code.

5.2 The land code of a First Nation will

(a) describe the lands that are subject to the land code;

(b) set out the general rules and procedures that apply to the use and occupancy of First Nation land, including use and occupancy under

(i) licenses and leases, and

(ii) interests or land rights in First Nation land held pursuant to allotments under subsection 20(1) of the Indian Act or pursuant to the custom of the First Nation;

(b.1) set out the procedures that apply to the transfer, by testamentary disposition or succession, of any interest or land rights in First Nation land;

(c) set out the general rules and procedures that apply to revenues from natural resources belonging to First Nation land;

(d) set out the requirements for accountability to First Nation members for the management of moneys and First Nation lands under

## 5. ÉLABORATION D'UN CODE FONCIER

5.1 La première nation qui souhaite gérer une ou plusieurs de ses réserves doit préalablement élaborer un code foncier.

5.2 Les éléments suivants figurent dans le code foncier d'une première nation :

a) la description des terres qui y sont assujetties;

b) les règles générales - de procédure et autres - applicables en matière d'utilisation et d'occupation des terres de première nation, notamment :

(i) en vertu d'un permis ou d'un bail,

(ii) en vertu d'un intérêt ou d'un droit foncier sur les terres de première nation découlant soit de l'attribution de cet intérêt ou droit foncier en vertu du paragraphe 20(1) de la Loi sur les Indiens, soit de la coutume de la première nation;

(b.1) les règles de procédure applicables en matière de transfert d'intérêts ou de droits fonciers sur les terres de première nation, par disposition testamentaire ou succession;

c) les règles générales – de procédure et autres - applicables aux revenus tirés des ressources naturelles relatives aux terres de première nation;

d) les exigences touchant l'obligation de rendre compte de la gestion des fonds et des terres de première nation aux termes

the land code;

(e) set out the procedures for making and publishing its First Nation laws;

(f) set out the conflict of interest rules for land management;

(g) identify or establish a forum for the resolution of disputes in relation to interests or land rights in First Nation lands, including the review of land management decisions where a person, whose interest or land right in First Nation land is affected by a decision, disputes that decision;

(h) set out the general rules and procedures that apply to the First Nation when granting or expropriating interests or land rights in First Nation land, including provisions for notice and the service of notice;

(i) set out the general authorities and procedures whereby the First Nation council delegates administrative authority to manage First Nation land to another person or entity; and

(j) set out the procedure by which the First Nation can amend its land code or approve an exchange of its First Nation land.

5.3 A land code could also contain the following provisions:

du code foncier devant les membres de la première nation;

e) les règles d'édiction et de publication des textes législatifs de la première nation;

f) les règles applicables en matière de conflit d'intérêts dans la gestion des terres;

g) la création ou l'identification d'une instance chargée de résoudre les différends concernant les intérêts ou les droits fonciers sur les terres de première nation, y compris la révision de toute décision en matière de gestion des terres contestée par une personne dont les intérêts ou les droits fonciers sur ces terres sont affectés par cette décision;

h) les règles générales – de procédure et autres - applicables à la première nation en matière d'attribution ou d'expropriation d'intérêts ou de droits fonciers sur des terres de première nation, y compris les dispositions en matière d'avis et de notification;

i) les pouvoirs et procédures généraux applicables en matière de délégation, par le conseil de la première nation à une autre personne ou entité, des pouvoirs de gestion des terres de première nation;

j) la procédure selon laquelle la première nation peut modifier son code foncier ou approuver un échange de ses terres de première nation.

5.3 Peuvent également figurer dans le code foncier :

(a) any general conditions or limits on the power of the First Nation council to make First Nation laws;

(b) in any province or territory other than Quebec, any general exceptions, reservations, conditions or limitations to be attached to the rights and interests that may be granted in First Nation land;

(b.1) in the province of Quebec, any general exceptions, reservations, conditions or limits to be attached to the land rights or other rights that may be granted in First Nation land;

(c) any provisions respecting encumbering, seizing, or executing a right or an interest or land right in First Nation land as provided in clause 15; and

(d) any other matter respecting the management of First Nation land.

5.4 In order to clarify the intentions of the First Nations and Canada in relation to the breakdown of a marriage as it affects First Nation land:

(a) a First Nation will establish a community process in its land code to develop rules and procedures, applicable on the breakdown of a marriage, to the use, occupancy and possession of First Nation land and the division of interests or land rights in that land;

a) les conditions ou limites générales applicables au pouvoir du conseil de la première nation d'édicter des textes législatifs de la première nation;

b) dans une province ou un territoire autre que le Québec, les exclusions, réserves, conditions ou délimitations générales applicables en matière d'attribution des droits et des intérêts sur les terres de première nation;

b.1) dans la province de Québec, les exceptions, réserves, conditions ou limites générales applicables en matière d'attribution des droits fonciers et autres droits sur les terres de première nation;

c) les dispositions, telles que prévues à l'article 15, concernant la saisie ou l'exécution d'un droit ou d'un intérêt ou droit foncier sur les terres de première nation, ou le fait de les gérer;

d) toute autre disposition concernant la gestion des terres de première nation.

5.4 Afin de préciser l'intention des premières nations et du Canada en ce qui a trait à l'échec du mariage et à ses effets sur les terres de premières nations :

a) une première nation établira, dans son code foncier, un processus communautaire pour l'élaboration de règles et de procédures applicables, au moment de l'échec d'un mariage, en matière d'usage, d'occupation et de possession des terres de première nation et en matière de partage des intérêts ou des droits fonciers sur ces terres;



(b) for greater certainty, the rules and procedures referred to in clause (a) shall not discriminate on the basis of sex;

(c) the rules and procedures referred to in clause (a) shall be enacted in the First Nation's land code or First Nation laws;

(d) in order to allow sufficient time for community consultation during the community process referred to in clause (a), the First Nation shall have a period of 12 months from the date the land code takes effect to enact the rules and procedures;

(e) any dispute between the Minister and a First Nation in respect of this clause shall, notwithstanding clause 43.3, be subject to arbitration in accordance with Part IX;

(f) for greater certainty, this clause also applies to any First Nation that has voted to approve a land code before this clause comes into force.

## 6. DEVELOPMENT OF INDIVIDUAL FIRST NATION AGREEMENT

6.1 The Minister and each First Nation that intends to manage its First Nation land will also enter into an individual agreement to settle the actual level of operational funding for the First Nation and the specifics of the transfer of administration between Canada and the First Nation.

b) il est entendu que les règles et procédures mentionnées à l'alinéa a) ne peuvent faire aucune distinction fondée sur le sexe;

c) les règles et procédures mentionnées à l'alinéa a) sont prévues soit dans le code foncier de la première nation, soit dans ses textes législatifs;

d) afin qu'il puisse y avoir une période suffisante pour consulter la communauté, tel que mentionné à l'alinéa a), la première nation dispose d'un délai de 12 mois, à compter de la date d'entrée en vigueur de son code foncier, pour adopter ces règles et procédures;

e) tout différend entre le ministre et une première nation au sujet du présent article est, par dérogation à l'article 43.3, porté en arbitrage en conformité avec la Partie IX;

f) il est entendu que le présent article s'applique également à toute première nation qui a voté en faveur de l'adoption d'un code foncier avant que le présent article n'entre en vigueur.

## 6. ÉLABORATION D'UN ACCORD DISTINCT AVEC CHAQUE PREMIÈRE NATION

6.1 Le ministre et la première nation qui entend gérer ses propres terres concluront également un accord distinct fixant le niveau du financement opérationnel destiné à la première nation ainsi que les modalités du transfert des responsabilités en matière d'administration entre le

6.2 The First Nation and the Minister will each choose a representative to develop the individual agreement and to assist in transferring administration of the First Nation land.

6.3 Upon the request of a First Nation that is developing a land code, the Minister will provide it with the following information, as soon as practicable:

(a) a list of all the interests or land rights and licences, in relation to the proposed First Nation land, that are recorded in the Reserve Land Register and the Surrendered and Designated Lands Register under the Indian Act;

(b) all existing information, in Canada's possession, respecting any actual or potential environmental problems with the proposed First Nation land; and

(c) any other information in Canada's possession that materially affects the interests or land rights and licences mentioned in clause 6.3(a).

6.4 An amendment to an individual agreement with the Minister must be made in accordance with the procedure in that agreement.

## 7. COMMUNITY APPROVAL

7.1 Both the First Nation's land code and its

Canada et la première nation.

6.2 La première nation et le ministre désignent chacun un représentant chargé de préparer l'accord distinct et de faciliter le transfert de l'administration des terres de première nation.

6.3 À la demande de la première nation qui élabore un code foncier le ministre lui fournit les renseignements suivants, dans les meilleurs délais :

a) une liste de tous les intérêts ou droits fonciers et permis concernant les terres de la première nation proposées, qui sont consignés dans le registre des terres de réserve et le registre des terres désignées et cédées aux termes de la Loi sur les Indiens;

b) tous les renseignements en la possession du Canada concernant les problèmes environnementaux réels ou potentiels concernant les terres de la première nation proposées;

c) tout autre renseignement en la possession du Canada qui touche notamment les intérêts ou droits fonciers et les permis mentionnés à l'alinéa 6.3 a).

6.4 L'accord distinct conclu avec le ministre est modifié selon la procédure prévue dans celui-ci.

## 7. APPROBATION DE LA COMMUNAUTÉ

7.1 Le code foncier de la première nation

individual agreement with the Minister need community approval in accordance with this clause.

7.2 Every person who is a First Nation member, whether resident on or off-reserve, who is at least 18 years of age, is eligible to vote on whether to approve their First Nation's proposed land code and its individual agreement with the Minister.

7.3 The land code and individual agreement will be considered approved by the community if

(a) a majority of eligible voters participate in the vote and at least a majority of the participating voters vote to approve them;

(b) the First Nation registers all eligible voters who signified, in a manner determined by the First Nation, their intention to vote, and a majority of the registered voters vote to approve them; or

(c) the community approves them in such other manner as the First Nation and the Minister may agree upon.

7.4 The land code and individual agreement will not be considered approved if less than 25% plus one of all eligible voters voted to approve them.

7.5 The First Nation council may, by resolution, increase the minimum percentage for community approval otherwise required under this clause.

et l'accord distinct conclu avec le ministre doivent être approuvés par la communauté conformément au présent article.

7.2 A le droit de voter, dans le cadre de l'approbation du projet de code foncier de la première nation et de l'accord distinct conclu avec le ministre, tout membre de la première nation qui a au moins 18 ans, qu'il réside ou non dans la réserve.

7.3 Le code foncier et l'accord distinct sont réputés valablement approuvés par la communauté dans les cas suivants :

a) la majorité des électeurs participent au scrutin et au moins une majorité des électeurs participants ont exprimé un vote favorable;

b) la première nation inscrit tous les électeurs qui ont fait connaître, selon les modalités fixées par la première nation, leur intention de voter et une majorité des électeurs inscrits ont exprimé un vote favorable;

c) la communauté les approuve selon d'autres modalités fixées conjointement par la première nation et par le ministre.

7.4 Dans tous les cas cependant, le code foncier et l'accord distinct ne sont approuvés que si au moins vingt-cinq pour cent plus un des électeurs ont exprimé un vote favorable.

7.5 Le conseil de la première nation peut, par résolution, augmenter le pourcentage minimum requis en vertu du présent article pour recueillir l'approbation de la communauté.

7.6 A First Nation will take reasonable steps to locate its eligible voters and inform them of

- (a) their right to participate in the approval process and the manner in which that right can be exercised; and
- (b) the content of this Agreement, the individual agreement with the Minister, the proposed land code and the federal legislation.

7.7 Reasonable steps to locate and inform eligible voters may include the following :

- (a) mailing out information to eligible voters at their last known addresses;
- (b) making enquiries of family members and others to locate eligible voters whose addresses are not known or are uncertain;
- (c) making follow up contact with eligible voters by mail or telephone;
- (d) placing advertisements in newspapers circulating in the community and in newspapers circulating in other localities where the number of eligible voters warrants;
- (e) posting notices in the community;
- (f) holding information meetings in the community and in other places where appropriate; and

7.6 Le conseil de la première nation doit prendre des mesures raisonnables pour retrouver les électeurs et les informer :

- a) de leur droit de participer au processus d'approbation et de la manière d'exercer ce droit;
- b) du contenu du présent accord, de l'accord distinct conclu avec le ministre, du projet de code foncier et de la loi de ratification.

7.7 Parmi les mesures raisonnables envisagées pour retrouver les électeurs et les informer, le conseil peut prendre les mesures suivantes :

- a) envoyer par courrier de l'information aux électeurs à leur dernière adresse connue;
- b) s'enquérir auprès des membres de la famille et d'autres personnes afin de retrouver les électeurs dont l'adresse est inconnue ou incertaine;
- c) effectuer un suivi auprès des électeurs par courrier ou par téléphone;
- d) publier des avis dans les journaux distribués dans la communauté et dans toute autre localité où le nombre d'électeurs le justifie;
- e) afficher des avis dans la communauté;
- f) tenir des réunions d'information dans la communauté et à tout autre endroit approprié;

(g) making copies of the documents referred to in clause 7.6(b) available at the administration office of the First Nation and in other places where appropriate.

7.8 A First Nation will, within a reasonable time before the vote, also take appropriate measures to inform other persons having an interest or land right in its lands of the federal legislation, the proposed land code and the date of the vote.

7.9 Where the federal legislation has not yet been enacted when a First Nation proceeds under this clause, Canada will provide the First Nation with a draft copy of its proposed legislation which the First Nation will use to inform its eligible voters and other persons.

7.10 An amendment to a land code must be made in accordance with the procedure in the First Nation's land code.

## 8. VERIFICATION PROCESS

8.1 Where a First Nation develops a proposed land code and resolves to submit it to the community for approval, an independent person will be appointed as a verifier to monitor and verify the opting in process. The verifier will be chosen in accordance with clause 44.

8.2 The representatives of the First Nation

g) rendre disponible, au bureau d'administration de la première nation et à tout autre endroit approprié, une copie des documents mentionnés à l'alinéa 7.6b).

7.8 La première nation doit prendre dans un délai raisonnable avant le jour du scrutin, des mesures appropriées pour informer les autres personnes ayant un intérêt ou un droit foncier sur ses terres au sujet de la loi de ratification, du projet de code foncier et de la date du scrutin.

7.9 Si la loi de ratification n'a pas encore été adoptée au moment où la première nation met en oeuvre le présent article, le Canada fournira à la première nation une ébauche du projet de loi que la première nation portera à la connaissance des électeurs et des autres personnes concernées.

7.10 Le code foncier d'une première nation est modifié selon la procédure prévue dans celui-ci.

## 8. PROCESSUS DE VÉRIFICATION

8.1 Lorsqu'une première nation élabore un projet de code foncier et décide de le présenter à la communauté pour approbation, une personne indépendante doit être nommée à titre de vérificateur chargée de surveiller le processus d'adhésion et d'en vérifier la régularité. Le vérificateur est choisi conformément à l'article 44.

8.2 Les représentants de la première nation

and the Minister, who have been assisting in the process of transferring administration of the land, will meet with the verifier and provide information and advice to the verifier, after consulting with their respective Parties.

8.3 The First Nation will submit the following information to the verifier:

- (a) a copy of the proposed land code;
- (b) an initial list of the names of every First Nation member who, according to the First Nation's records at that time, would be eligible to vote on whether to approve the proposed land code; and
- (c) a detailed description of the community approval process that the First Nation proposes to use under clause 7.

8.4 The verifier will

- (a) decide whether the proposed land code conforms with the requirements of clause 5;
- (b) decide whether the proposed community approval process conforms with the requirements of clause 7;
- (c) determine whether the community approval process is conducted in accordance with the process that was confirmed; and
- (d) certify as being valid a First

et du ministre, qui ont participé au processus de transfert de la gestion des terres, rencontrent le vérificateur et lui fournissent renseignements et avis, après avoir consulté leurs Parties respectives.

8.3 La première nation communique au vérificateur les documents suivants :

- a) un exemplaire du projet de code foncier;
- b) la liste initiale des membres de la première nation qui, selon les registres de la première nation disponibles à ce moment, auraient le droit de voter aux fins de l'approbation de ce code;
- c) un exposé détaillé du processus d'approbation de la communauté proposé par la première nation aux termes de l'article 7.

8.4 Le vérificateur a pour mandat:

- a) de décider de la conformité du projet de code foncier avec les exigences de l'article 5;
- b) de décider de la conformité du processus d'approbation de la communauté proposé avec les exigences de l'article 7;
- c) de décider de la conformité du déroulement du scrutin avec le processus retenu pour l'approbation de la communauté;
- d) d'attester la validité du code foncier de



Nation's land code that is properly approved by the First Nation.

la première nation dûment approuvé par elle.

8.5 The verifier also has the power to make a final decision to resolve

8.5 Le vérificateur a également le pouvoir de trancher de façon définitive :

(a) any dispute regarding whether a portion of a reserve may be excluded from a land code pursuant to clause 4.4; and

a) tout différend ayant trait à la question de savoir si une partie d'une réserve peut être soustraite à l'application du code foncier selon l'article 4.4;

(b) any dispute regarding the specifics of the transfer of administration between Canada and the First Nation.

b) tout différend concernant les modalités du transfert des pouvoirs d'administration entre le Canada et la première nation.

8.6 A verifier will make decisions that are consistent with clauses 4.4 and 4.5.

8.6 Les décisions du vérificateur doivent être conformes aux paragraphes 4.4 et 4.5.

8.7 A verifier will not deal with disputes over funding.

8.7 Le vérificateur ne peut être saisi des différends concernant le financement.

8.8 Within 30 days of receiving the First Nation's information pursuant to clause 8.3, the verifier will issue a written notice to the First Nation and the Minister stating whether the proposed land code and community approval process are consistent with this Agreement.

8.8 Le vérificateur émet à la première nation et au ministre, dans les 30 jours de la réception des documents visés à l'article 8.3, un avis écrit indiquant si le projet de code foncier et le processus d'approbation de la communauté proposé sont conformes au présent accord.

8.9 The verifier will provide written reasons to the First Nation and the Minister in any case where he or she decides that the proposed land code and community approval process are not consistent with this Agreement.

8.9 Dans tous les cas où, à son avis, le projet de code foncier ou le processus proposé pour obtenir l'approbation de la communauté ne sont pas conformes au présent accord, le vérificateur consigne par écrit les motifs de cette décision qu'il transmet à la première nation et au ministre.

## 9. CONDUCT OF COMMUNITY VOTE

## 9. TENUE DU SCRUTIN

9.1 Once the verifier confirms that the

9.1 Après que le vérificateur ait décidé que

proposed land code and community approval process are consistent with this Agreement, the First Nation may proceed to submit its proposed land code, and the individual agreement with the Minister, for community approval.

9.2 The verifier will publish one or more notices advising the community of the date, time and place of the First Nation's approval vote.

9.3 The verifier may designate one or more assistants to help observe the conduct of the vote.

9.4 The verifier and any assistant observers will have complete authority to observe the approval process.

9.5 Within 15 days of the conclusion of the vote, the verifier will issue a written report to the First Nation and to the Minister on whether the community approval process was conducted in accordance with the process as previously confirmed.

## 10. CERTIFICATION OF LAND CODE

10.1 Where a First Nation approves a land code and its individual agreement with the Minister, the First nation council must, without delay, send a true copy of the land code to the verifier together with a true copy of the fully signed individual agreement and a statement from the First Nation council that the land code and the individual agreement were properly approved.

le projet de code et le processus proposé pour obtenir l'approbation de la communauté sont conformes au présent accord, la première nation peut soumettre à l'approbation de la communauté le projet de code foncier et l'accord distinct conclu avec le ministre.

9.2 Le vérificateur fait publier un ou plusieurs avis informant la communauté de la date, de l'heure et du lieu du scrutin.

9.3 Le vérificateur peut s'adjoindre un ou plusieurs assistants pour l'aider à surveiller le déroulement du scrutin.

9.4 Le vérificateur et ses adjoints ont pleins pouvoirs pour surveiller le processus d'approbation de la communauté.

9.5 Le vérificateur remet à la première nation et au ministre, dans les 15 jours suivant la fermeture du scrutin, son rapport écrit au sujet de la conformité du déroulement du scrutin avec le processus d'approbation retenu.

## 10. CERTIFICATION DU CODE FONCIER

10.1 Lorsque la première nation approuve le code foncier et l'accord distinct avec le ministre, le conseil de la première nation adresse au vérificateur, dans les meilleurs délais, une copie certifiée conforme de l'accord distinct entièrement signé et du code foncier approuvé ainsi qu'une déclaration du conseil de la première nation indiquant que le code foncier et l'accord distinct ont été dûment approuvés.

10.2 Upon receiving a copy of a First Nation's land code, signed individual agreement and statement, the verifier will, subject to clause 11, certify the land code as being valid.

10.3 The verifier will immediately provide the First Nation, the Lands Advisory Board and the Minister with a copy of any certified land code.

10.4 The Lands Advisory Board will, in such manner as it considers advisable, publish a notice announcing the certification of a land code and the date the land code takes effect and advising the public of the means of obtaining copies of it.

10.4.1 Certified copies of the land code will be made available to the public at such places deemed necessary by the First Nation.

10.5 Once a land code is certified by a verifier and takes effect, the land code has the force of law and will be given judicial notice.

10.6 A land code that has been certified pursuant to this Agreement is deemed to have been validly approved by the First Nation.

10.7 A land code takes effect on the day that it is certified by the verifier or on such later date as may be specified in the land code.

## 11. DISPUTED VOTE

11.1 The Minister or any eligible voter may, within five days after the conclusion of the vote, report any irregularity in the voting

10.2 Sur réception de la copie du code foncier, de l'accord distinct signée et de la déclaration, le vérificateur atteste la validité du code foncier, sous réserve de l'article 11.

10.3 Le vérificateur adresse immédiatement à la première nation, au Conseil consultatif des terres et au ministre une copie du code foncier dont il a attesté la validité.

10.4 Le Conseil consultatif des terres publie, selon les modalités qu'il estime appropriées, un avis attestant la validité du code foncier, sa date d'entrée en vigueur et faisant connaître au public la façon de s'en procurer des copies.

10.4.1 Des copies certifiées du code foncier seront mises à la disposition du public aux endroits que la première nation estime appropriés.

10.5 Dès que le code foncier reçoit l'attestation du vérificateur et qu'il entre en vigueur, il a dès lors force de loi et est admis d'office dans toute instance.

10.6 Une fois sa validité attestée conformément au présent accord, le code est réputé avoir été dûment approuvé par la première nation.

10.7 Le code foncier entre en vigueur à la date de l'attestation de sa validité par le vérificateur ou à la date postérieure fixée dans le code.

## 11. CONTESTATION DU VOTE

11.1 Le ministre ou tout électeur peut, dans les cinq jours suivant la clôture du scrutin, informer le vérificateur de toute

process to the verifier.

11.2 A verifier will not certify a land code if he or she is of the opinion that the following two conditions exist:

(1) the process by which the land code was approved varied from the process previously confirmed by the verifier or was otherwise irregular; and

(2) the land code might not have been approved but for the irregularity in the process.

11.3 Before making a decision under this clause, the verifier will provide the First Nation and the Minister with a reasonable opportunity to make submissions on the issue.

11.4 Any decision by a verifier under this clause must be made within 10 days of the conclusion of the vote.

### PART III

#### FIRST NATION LAND MANAGEMENT RIGHTS AND POWER

##### 12. LAND MANAGEMENT POWERS

12.1 A First Nation with a land code in effect will, subject to clause 13, have the power to manage its First Nation land and exercise its powers under this Agreement.

irrégularité dont a été entaché le déroulement du scrutin.

11.2 Le vérificateur ne peut attester la validité du code foncier s'il en vient aux conclusions suivantes :

(1) d'une part, le déroulement du scrutin n'est pas conforme au processus d'approbation qu'il a lui-même confirmé au préalable ou est autrement entaché d'irrégularité;

(2) d'autre part, le code n'aurait peut-être pas été approuvé sans cette irrégularité.

11.3 Avant de prononcer une décision aux termes du présent article, le vérificateur donne à la première nation et au ministre l'occasion de présenter des observations.

11.4 Toute décision du vérificateur en vertu du présent article doit être prise dans un délai de 10 jours suivant la conclusion du vote.

### PARTIE III

#### DROITS ET POUVOIRS DE GESTION DES TERRES DE PREMIÈRE NATION

##### 12. POUVOIRS DE GESTION DES TERRES

12.1 Dès que le code foncier entre en vigueur, la première nation a le pouvoir de gérer ses terres de première nation et d'exercer ses pouvoirs en vertu du présent accord, sous réserve de l'article 13.

12.2 This power includes

(a) all the rights, powers and privileges of an owner, in relation to its First Nation land; and

(b) the authority to grant interests or land rights and licences in relation to its First Nation land and to manage its natural resources, subject to clauses 3, 18.5 and 23.6.

12.3 In any province or territory other than Quebec, an interest or licence granted in relation to First Nation land is subject to any exception, reservation, condition or limitation established by the First Nation in its land code.

12.3A In the province of Quebec, a land right or licence granted in relation to First Nation land is subject to any exceptions, reservations, conditions or limits established by the First Nation in its land code.

12.4 For any purpose related to First Nation land, a First Nation will have legal capacity to acquire and hold property, to borrow, to contract, to expend and invest money, to be a party to legal proceedings, to exercise its powers and to perform its duties.

12.5 First Nation land, revenues, royalties, profits and fees in respect of that land will be managed by the First Nation council or its delegate for the use and benefit of the First Nation.

12.2 Elle peut notamment :

a) exercer tous les droits, pouvoirs et privilèges d'un propriétaire, pour ce qui est de ses terres de première nation;

b) sous réserve des articles 3, 18.5 et 23.6, attribuer des permis et des intérêts ou droits fonciers relatifs à ses terres de première nation et gérer ses ressources naturelles.

12.3 Dans une province ou un territoire autre que le Québec, un intérêt ou un permis relatif aux terres de première nation est assujéti aux exclusions, réserves, conditions ou délimitations énoncées par la première nation dans son code foncier.

12.3A Dans la province de Québec, un droit foncier ou un permis relatif aux terres de première nation est assujéti aux exceptions, réserves, conditions ou limites énoncées par la première nation dans son code foncier.

12.4 À l'égard de ses terres de première nation, la première nation a la capacité juridique d'acquérir et de détenir des biens, de conclure des contrats et d'emprunter, de dépenser des fonds et de faire des investissements, d'ester en justice et d'exercer ses pouvoirs et attributions.

12.5 Le conseil de la première nation ou son délégué administre les terres de première nation ainsi que les revenus, les redevances, les recettes et les droits y afférents à l'usage et au profit de la première nation.

12.6 If a First Nation establishes an entity for the purpose of administering its First Nation land, the entity shall be deemed to be a legal entity with the capacity, rights, powers and privileges of a natural person.

12.7 A First Nation has the right, in accordance with its land code, to receive and use all moneys acquired by or on behalf of the First Nation under its land code.

12.8 Once a First Nation's land code takes effect, all revenue moneys collected, received or held by Canada for the use and benefit of the First Nation or its members before that date, and from time to time thereafter, shall cease to be Indian moneys under the Indian Act, except for the purposes of paragraph 90 (1) (a), and shall be transferred by Canada to the First Nation

### 13. PROTECTION OF FIRST NATION LAND

13.1 Title to First Nation land is not changed when a First Nation's land code takes effect.

13.2 The Parties declare that it is of fundamental importance to maintain the amount and integrity of First Nation land.

13.3 First Nation land will not be sold, exchanged, conveyed or transferred, except for any exchange or expropriation of First Nation land made in accordance with this Agreement.

12.6 Si la première nation met sur pied une entité pour gérer ses terres, l'entité est réputée être une entité juridique ayant la capacité, les pouvoirs, les droits et les privilèges d'une personne physique.

12.7 La première nation a, conformément à son code foncier, le droit de recevoir et d'utiliser les sommes acquises par ou pour le compte de la première nation en vertu de son code foncier.

12.8 À compter de la date d'entrée en vigueur du code foncier d'une première nation, les fonds perçus, reçus et détenus par la Canada à l'usage et au profit de la première nation ou de ses membres avant cette date, ainsi que ceux qui le sont après cette date, cessent d'être de l'argent des Indiens aux fins de la Loi sur les Indiens, sauf aux fins de l'alinéa 90(1)a), et sont transférés par le Canada à la première nation.

### 13. PROTECTION DES TERRES DE PREMIÈRE NATION

13.1 L'entrée en vigueur du code foncier d'une première nation n'a pas pour effet de modifier le titre des terres de première nation.

13.2 Les Parties déclarent reconnaître l'importance fondamentale que revêt la préservation de la superficie et de l'intégrité des terres de première nation.

13.3 Les terres de première nation ne sont pas susceptibles d'être vendues, échangées ou transférées, si ce n'est dans le cadre d'un échange ou d'une expropriation effectué en conformité avec le présent

## 14. VOLUNTARY EXCHANGE OF FIRST NATION LAND

14.1 A First Nation has the right to exchange a parcel of First Nation land for another parcel of land, if that other parcel of land becomes First Nation land. An exchange of First Nation land may provide for additional compensation, including land that may not become First Nation land, and may be subject to any other terms and conditions.

14.2 Any exchange of First Nation land will require community approval in accordance with the process established in the land code.

14.3 First Nation land will only be exchanged for land that Canada consents to set apart as a reserve. In addition, the agreement of Canada is required on the technical aspects of the exchange.

14.4 The title to the land to be received in exchange for that First Nation land will be transferred to Canada and will be set apart by Canada as a reserve, as of the date of the land exchange or such later date as the First Nation may specify. This does not apply to land that is received by the First Nation as additional compensation and that is not intended to become First Nation land.

14.5 Where an exchange of First Nation land is approved by a First Nation in accordance with its land code, the First Nation can

accord.

## 14. ÉCHANGE VOLONTAIRE DE TERRES DE PREMIÈRE NATION

14.1 Une première nation a le droit d'échanger une parcelle des terres de première nation contre une autre parcelle, si cette autre parcelle fait dès lors partie des terres de première nation. L'échange peut également comporter une contrepartie supplémentaire, notamment des terres supplémentaires qui ne sont pas destinées à devenir des terres de première nation, et être assorti d'autres conditions.

14.2 Tout échange de terres de première nation doit être approuvé par les membres de la première nation selon les modalités prévues par le code foncier.

14.3 Des terres de première nation ne peuvent être échangées que contre des terres que le Canada accepte de mettre de côté à titre de réserve. L'accord du Canada est également requis quant aux aspects techniques de l'opération.

14.4 Le titre des terres reçues en échange des terres de première nation sera transféré au Canada, qui mettra ces terres de côté à titre de réserve, à la date de l'échange ou à la date ultérieure fixée par la première nation. Cette disposition ne s'applique pas aux terres remises à une première nation à titre de contrepartie supplémentaire et qui ne sont pas destinées à devenir des terres de première nation.

14.5 Lorsque l'échange des terres de première nation est approuvé par la première nation conformément à son code



execute an authorization to Canada to transfer title to the land.

14.6 Upon the issuance to Canada of an authorization to transfer title to First Nation land under clause 14.5, Canada will transfer title to the land in accordance with the authorization and the applicable terms and conditions of the exchange.

14.7 A copy of the instruments or acts transferring title to First Nation land will be registered in the First Nation Lands Register.

14.8 As of the date of the land exchange, or such later date as the First Nation may specify, the description of First Nation land in the land code will be deemed to be amended to delete the description of the First Nation land that was exchanged and to add the description of the First Nation land received in exchange.

14.9 For greater certainty, the First Nation land that was exchanged will cease to be a reserve.

#### 15. IMMUNITY FROM SEIZURE, ETC.

15.1 The Parties confirm that section 29 and subsections 89(1) and (2) of the Indian Act will continue to apply to any reserve that is First Nation land.

15.2 Subsection 89(1.1) of the Indian Act will continue to apply to all leasehold interests or leases that existed when the land code took effect if the First Nation land was

foncier, la première nation peut délivrer au Canada une autorisation de procéder au transfert du titre sur les terres en question.

14.6 Le Canada procède, sur réception de l'autorisation prévue à l'article 14.5, au transfert du titre sur les terres en question, en conformité avec cette autorisation et avec les conditions de l'échange.

14.7 Une copie des instruments ou actes de transfert du titre sur les terres de première nation sera enregistrée dans le registre des terres de premières nations.

14.8 À partir de la date de l'échange de terres, ou à la date ultérieure fixée par la première nation, la description des terres de première nation dans le code foncier est réputée être modifiée de façon à supprimer la description des terres de première nation qui ont été échangées et à ajouter celle des terres de première nation reçues en échange.

14.9 Il est entendu que les terres de première nation qui ont été échangées cessent de constituer une réserve.

#### 15. INSAISSABILITÉ, ETC.

15.1 Les parties confirment que l'article 29 et les paragraphes 89(1) et (2) de la Loi sur les Indiens continuent de s'appliquer aux réserves faisant partie des terres de première nation.

15.2 Le paragraphe 89(1.1) de la Loi sur les Indiens continue de s'appliquer à tous les baux ou intérêts à bail qui existaient lorsque le code foncier est entré en

designated land at that time.

15.3 A land code may provide that some or all of the provisions of subsection 89(1.1) of the Indian Act are also applicable to other leasehold interests or leases in any First Nation lands.

15.4 The Parties confirm that section 87 of the Indian Act continues to apply to First Nation land, so that

(a) the interest of an Indian or a First Nation in a reserve that is First Nation land remains exempt from taxation, subject to section 83 of the Indian Act; and

(b) the personal property or the movables of an Indian or a First Nation, situated on a reserve that is First Nation land, remains exempt from taxation.

## 16. THIRD PARTY INTERESTS

16.1 Interests or land rights or licences held by third parties or Canada in First Nation land, that exist at the time the land code takes effect, continue in force according to their terms and conditions.

16.2 Any rights of locatees in possession of First Nation land, either by custom or by allotment under the Indian Act, to transfer, lease and share in natural resource revenues will be defined in the land code.

vigueur, dans le cas où les terres de première nation étaient des terres désignées à ce moment.

15.3 Le code foncier peut énoncer que les dispositions du paragraphe 89(1.1) de la Loi sur les Indiens sont également applicables, en tout ou en partie, aux autres baux ou intérêts à bail sur les terres de première nation.

15.4 Les parties confirment que l'article 87 de la Loi sur les Indiens continue de s'appliquer aux terres de première nation de façon à ce que:

a) le droit d'un Indien ou d'une première nation sur une réserve faisant partie des terres de première nation demeure exempté de taxation, sous réserve de l'article 83 de la Loi sur les Indiens;

b) les biens personnels ou les meubles d'un Indien ou d'une première nation situés sur une réserve faisant partie des terres de la première nation demeurent exemptés de taxation.

## 16. INTÉRÊTS DES TIERS

16.1 Les intérêts ou droits fonciers ou les permis que détiennent les tiers ou le Canada sur des terres de première nation lorsque le code foncier entre en vigueur continuent d'avoir effet selon leurs conditions.

16.2 Les droits des occupants en possession de terres de première nation, que ce soit conformément à la coutume ou par attribution aux termes de la Loi sur les Indiens, en matière de transfert, de bail et

16.3 Once a land code takes effect, no interest, land right or licence in relation to First Nation land may be acquired or granted except in accordance with the land code.

16.4 For greater certainty, disputes in relation to third party interests shall be dealt with in the forum identified or established in a land code pursuant to clause 5.2(g).

#### 17. EXPROPRIATION BY FIRST NATIONS

17.1 A First Nation with a land code in effect has the right to expropriate interests or land rights in First Nation lands without consent if deemed by the First Nation council to be necessary for community works or other First Nation purposes.

17.2 A First Nation's power of expropriation will be exercised in accordance with the rules and procedures specified in its land code, its laws and this Agreement.

17.3 In any province or territory other than Québec, an interest in First Nation land that a First Nation expropriates becomes the property of the First Nation free of any previous claim or encumbrance in respect of the interest.

17.3A In the province of Québec, the First Nation that expropriates a land right in its First Nation lands becomes the holder of that

de partage des revenus provenant de ressources naturelles seront définis par le code foncier.

16.3 Après l'entrée en vigueur du code foncier, les permis, les intérêts ou droits fonciers concernant les terres de première nation ne peuvent être acquis ou accordés qu'en conformité avec ce code.

16.4 Il est entendu que les différends relatifs aux intérêts des tiers sont réglés selon ce que prévoit le code foncier conformément à l'alinéa 5.2g).

#### 17. EXPROPRIATION PAR LES PREMIÈRES NATIONS

17.1 La première nation ayant un code foncier en vigueur a le droit d'exproprier sans consentement des intérêts ou droits fonciers sur ses terres de première nation, si le conseil de la première nation estime en avoir besoin pour réaliser des ouvrages communautaires ou à d'autres fins de la première nation.

17.2 La première nation procède à l'expropriation conformément aux règles et procédures établies dans son code foncier, à ses textes législatifs et au présent accord.

17.3 Un intérêt sur les terres de première nation dans une province ou un territoire autre que le Québec exproprié par la première nation devient la propriété de celle-ci, libre de toute réclamation ou tout grèvement antérieurs quant à cet intérêt.

17.3A La première nation qui exproprie un droit foncier sur ses terres de première nation dans la province de Québec devient

right free of any previous right, charge or claim in respect of that land right.

17.4 A First Nation that expropriates an interest or land right in First Nation land will give fair compensation based on the heads of compensation set out in the Expropriation Act (Canada).

17.5 A First Nation will establish a mechanism to resolve disputes over compensation it pays for expropriation.

17.6 Any interest in First Nation land that was obtained pursuant to section 35 of the Indian Act or any interest or land right that has been acquired by Canada, or that is acquired after this Agreement comes into force by Canada in accordance with this Agreement, is not subject to First Nation expropriation.

17.7 A First Nation is not precluded from entering into an agreement with a utility or public body for the purpose of granting it an interest or land right in First Nation land that is exempt from expropriation by the First Nation.

17.8 No expropriation of an interest or land right in First Nation land by a First Nation takes effect earlier than either of the following days:

(a) the date the notice of expropriation is registered in the First Nation Lands Register; or

titulaire de ce droit foncier, libre de tout droit, charge ou réclamation antérieurs.

17.4 La première nation qui exproprie un intérêt ou droit foncier sur ses terres de première nation est tenue de verser une indemnité équitable, calculée selon les règles énoncées dans la Loi sur l'expropriation (Canada).

17.5 La première nation est tenue de mettre sur pied un mécanisme de règlement des différends relatifs à l'indemnisation qu'elle paye pour les expropriations.

17.6 Ne sont toutefois pas susceptibles d'expropriation par la première nation les intérêts ou les droits fonciers sur les terres de première nation obtenus sous le régime de l'article 35 de la Loi sur les Indiens ou qui ont été acquis par le Canada ou encore qui seront acquis par le Canada après l'entrée en vigueur du présent accord conformément à celui-ci.

17.7 Il n'est pas interdit à la première nation de conclure avec un organisme public ou une société de service public un accord lui attribuant un intérêt ou un droit foncier sur les terres de première nation non susceptible d'être exproprié par la première nation.

17.8 L'expropriation par une première nation d'un intérêt ou d'un droit foncier sur les terres de première nation ne prend effet qu'à la première des dates suivantes :

a) la date d'inscription de l'avis d'expropriation dans le registre des terres de la première nation;

(b) the 30th day after the day the last copy of the notice is served.

#### PART IV FIRST NATION LAW MAKING

##### 18. LAW MAKING POWERS

18.1 The council of a First Nation with a land code in effect will have the power to make laws, in accordance with its land code, respecting the development, conservation, protection, management, use and possession of First Nation land and interests or land rights and licences in relation to that land. This includes laws on any matter necessary or ancillary to the making of laws in relation to First Nation land.

18.2 The following examples illustrate some of the First Nation laws contemplated by the Parties:

- (a) laws on the regulation, control and prohibition of zoning, land use, subdivision control and land development;
- (b) laws on the creation, regulation and prohibition of interests or land rights and licences in relation to First Nation land;
- (c) laws on environmental assessment and protection;
- (d) laws on the provision of local

b) le 30<sup>e</sup> jour suivant la signification de la dernière copie de cet avis.

#### PARTIE IV POUVOIRS DE LÉGIFÉRER DE LA PREMIÈRE NATION

##### 18. POUVOIRS DE LÉGIFÉRER

18.1 Le conseil de la première nation ayant un code foncier en vigueur peut édicter des textes législatifs, conformément à celui-ci, concernant le développement, la conservation, la protection, la gestion, l'utilisation et la possession des terres de première nation et des intérêts ou droits fonciers et permis les concernant. Cela comprend les textes législatifs portant sur des questions nécessaires ou afférentes à l'élaboration des textes législatifs relatifs aux terres de première nation.

18.2 Les exemples qui suivent illustrent certaines des fins pour lesquelles les premières nations peuvent adopter des textes législatifs, comme l'envisagent les Parties :

- a) pour réglementer, régir ou interdire le zonage, l'aménagement, l'utilisation, le lotissement ou la mise en valeur des terres;
- b) pour créer et réglementer les permis et les intérêts ou les droits fonciers relatifs aux terres de première nation ou prévoir des interdictions à cet égard;
- c) pour régir la protection de l'environnement et l'évaluation environnementale;

services in relation to First Nation land and the imposition of equitable user charges; and

(e) laws on the provision of services for the resolution, outside the courts, of disputes in relation to First Nation land.

18.3 A land code will not address the taxation of real or personal property or of immovables or movables. Section 83 of the Indian Act will continue to apply.

18.4 In any proceeding, a copy of a First Nation law, appearing to be certified as a true copy by an officer of the First Nation is, without proof of the officer's signature or official character, evidence of its enactment on the date specified in the law.

18.5 This Agreement does not affect or extend existing rights and powers, or create additional rights and powers, related to fisheries.

## 19. ENFORCEMENT OF FIRST NATION LAWS

19.1 To enforce its land code and its First Nation laws, a First Nation will have the power to

(a) establish offences that are punishable on summary conviction;

(b) provide for fines, imprisonment,

d) pour régir la prestation de services locaux relatifs aux terres de première nation et l'imposition de frais équitables à leurs usagers;

e) pour régir la prestation de services de règlement extrajudiciaire des différends relatifs aux terres de première nation.

18.3 Le code foncier ne traite pas de l'imposition des biens réels ou personnels ou des immeubles ou meubles. L'article 83 de la Loi sur les Indiens continue de s'appliquer.

18.4 La copie d'un texte législatif de la première nation paraissant certifiée conforme par un fonctionnaire de la première nation fait foi, dans le cadre de toute procédure, de son adoption à la date qui y est inscrite sans qu'il soit nécessaire de prouver l'authenticité de la signature ou la qualité officielle du signataire.

18.5 Le présent accord ne modifie en rien les droits et pouvoirs actuels relatifs aux pêcheries, ni ne crée des droits ou pouvoirs additionnels à cet égard.

## 19. CONTRÔLE D'APPLICATION DES TEXTES LÉGISLATIFS DE LA PREMIÈRE NATION

19.1 Aux fins de contrôle d'application de son code foncier et de ses textes législatifs, la première nation peut :

a) créer des infractions punissables par procédure sommaire;

b) prévoir des peines, notamment les

restitution, community service, and alternate means for achieving compliance; and

(c) establish comprehensive enforcement procedures consistent with federal law, including inspections, searches, seizures and compulsory sampling, testing and the production of information.

19.2 First Nation laws may adopt or incorporate by reference the summary conviction procedures of the Criminal Code for the purpose of enforcement.

19.3 Persons may be appointed by the First Nation or the Governor in Council to act as justices of the peace for the purposes of enforcement. If no justice of the peace is appointed, then First Nation laws will be enforced through the provincial courts.

19.4 A person appointed as a justice of the peace under this clause will have jurisdiction to try offences established by or under a land code or a First Nation law.

19.5 Decisions made by a justice of the peace appointed under this clause may be appealed to a court of competent jurisdiction.

19.6 The First Nation will protect the independence of each justice of the peace it appoints in a way similar to that in a province, for example tenure, removal and

amendes, l'emprisonnement, la restitution, les travaux d'intérêt collectif ou toute autre mesure de nature à assurer l'observation de ces textes;

c) établir, conformément aux lois fédérales, des mesures de contrôle d'application de ces textes notamment en matière d'inspection, de perquisition, de saisie, de prise d'échantillons, d'examen et de communication de renseignements.

19.2 Les textes législatifs de la première nation peuvent, à ces fins, reproduire ou incorporer par renvoi la procédure sommaire du Code criminel.

19.3 La première nation ou le gouverneur en conseil peut nommer des juges de paix chargés d'assurer le contrôle d'application des textes législatifs de la première nation. En l'absence de juges de paix, les poursuites relatives aux textes législatifs de la première nation sont instruites devant les tribunaux provinciaux.

19.4 Il relève de la compétence du juge de paix nommé aux termes du présent article d'instruire les poursuites relatives aux infractions créées par un code foncier ou par un texte législatif de la première nation.

19.5 Les décisions du juge de paix nommé aux termes du présent article sont susceptibles d'appel devant un tribunal compétent.

19.6 La première nation est tenue de protéger l'indépendance des juges de paix qu'elle nomme, de façon analogue à ce que font les provinces, par exemple la durée de



remuneration.

19.7 The First Nation and Canada may enter into agreements for the training, supervision and administrative support for justices of the peace appointed by the First Nation. Provinces may also be parties to such agreements with First Nations.

19.8 The First Nation and Canada will enter into an agreement for the appointment, training, supervision and administrative support for any justice of the peace appointed under this clause by the Governor in Council. The affected province will be invited to participate in the development of and be a party to such agreement.

19.9 For the purpose of prosecuting offences, the First Nation will follow one or more of these options:

- (a) retain its own prosecutor;
- (b) enter into an agreement with Canada and the government of the province to arrange for a provincial prosecutor; or
- (c) enter into an agreement with Canada to arrange for a federal agent to prosecute these offenses.

## 20. APPLICATION OF FEDERAL LAWS

20.1 Federal laws applicable on First Nation land will continue to apply, except to the extent that they are inconsistent with the

leur mandat, leur destitution et leur rémunération.

19.7 La première nation et le Canada peuvent conclure des ententes concernant la formation, la surveillance et le soutien administratif des juges de paix nommés par la première nation. Les provinces peuvent également être parties à ces ententes avec les premières nations.

19.8 La première nation et le Canada sont tenus de conclure une entente relativement à la nomination, la formation, la surveillance et le soutien administratif des juges de paix nommés aux termes du présent article par le gouverneur en conseil. La province concernée sera invitée à participer à l'élaboration de cette entente et à être partie à celle-ci.

19.9 Aux fins des poursuites, la première nation peut se prévaloir d'une ou de plusieurs des mesures suivantes :

- a) embaucher ses propres procureurs;
- b) conclure avec le Canada et le gouvernement provincial concerné une entente prévoyant le recours à un procureur provincial;
- c) conclure avec le Canada une entente prévoyant le recours à un mandataire fédéral.

## 20. APPLICATION DES LOIS FÉDÉRALES

20.1 Les lois fédérales applicables sur les terres de première nation continuent de s'appliquer à celles-ci sauf dans la mesure

federal legislation.

20.2 Notwithstanding any inconsistency with the federal legislation, the Emergencies Act will apply on First Nation land, but any appropriation of an interest or land right in First Nation land under the Emergencies Act shall be authorized expressly by an order in council.

20.3 For greater certainty, and subject to Part VII, the Atomic Energy Control Act or any successor legislation continue to apply to First Nation lands.

## 21. INAPPLICABLE SECTIONS OF INDIAN ACT AND REGULATIONS

21.1 Once a land code takes effect, the First Nation, its members and its First Nation land will not be subject to the following:

- (a) sections 18 to 20 and 22 to 28 of the Indian Act;
- (b) sections 30 to 35 of the Indian Act;
- (c) sections 37 to 41 of the Indian Act;
- (d) sections 49, 50(4) and 53 to 60 of the Indian Act;
- (e) sections 66, 69 and 71 of the Indian Act;

où elles sont incompatibles avec la loi de ratification.

20.2 La Loi sur les mesures d'urgence est applicable sur les terres de première nation, même si elle est incompatible avec la loi de ratification. Cependant, la réquisition d'intérêts ou de droits fonciers sur les terres de première nation aux termes de la Loi sur les mesures d'urgence doit être expressément autorisée par un décret.

20.3 Sous réserve de la partie VII, il est entendu que la Loi sur le contrôle de l'énergie atomique, ou toute loi qui la remplace, continue de s'appliquer sur les terres de première nation.

## 21. INAPPLICABILITÉ DE CERTAINS ARTICLES DE LA LOI SUR LES INDIENS ET DES RÈGLEMENTS Y AFFÉRENTS

21.1 Dès l'entrée en vigueur de son code foncier, la première nation, ses membres et les terres de première nation, cessent d'être assujettis aux dispositions suivantes :

- a) les articles 18 à 20 et 22 à 28 de la Loi sur les Indiens;
- b) les articles 30 à 35 de la Loi sur les Indiens;
- c) les articles 37 à 41 de la Loi sur les Indiens;
- d) l'article 49, le paragraphe 50(4) et les articles 53 à 60 de la Loi sur les Indiens;
- e) les articles 66, 69 et 71 de la Loi sur les

- (f) section 93 of the Indian Act;
- (g) regulations made under section 57 of the Indian Act; and
- (h) regulations made under sections 42 and 73 of the Indian Act to the extent that they are inconsistent with this Agreement or the land code or the laws of the First Nation.

## 22. EXISTING FIRST NATION BY-LAWS

22.1 A First Nation will continue to have the authority under the Indian Act to make by-laws.

## PART V ENVIRONMENT

### 23. GENERAL PRINCIPLES

23.1 The council of a First Nation with a land code in effect will have the power to make environmental laws relating to First Nation land.

23.2 The Parties intend that there should be both an environmental assessment and an environmental protection regime for each First Nation.

23.3 The principles of these regimes are set out below.

Indiens;

f) l'article 93 de la Loi sur les Indiens;

g) les règlements pris en application de l'article 57 de la Loi sur les Indiens;

h) les règlements pris en application des articles 42 et 73 de la Loi sur les Indiens dans la mesure où ils sont incompatibles avec le présent accord, avec le code foncier ou avec les textes législatifs de la première nation.

## 22. RÈGLEMENTS ADMINISTRATIFS ACTUELS DE LA PREMIÈRE NATION

22.1 La première nation conserve le pouvoir d'adopter des règlements administratifs aux termes de la Loi sur les Indiens.

## PARTIE V ENVIRONNEMENT

### 23. PRINCIPES GÉNÉRAUX

23.1 Le conseil de la première nation ayant un code foncier en vigueur a le pouvoir d'édicter des textes législatifs de nature environnementale concernant les terres de première nation.

23.2 Les Parties s'entendent pour qu'il y ait un régime de protection de l'environnement et un régime d'évaluation environnementale pour chaque première nation.

23.3 Les principes de ces régimes sont énoncés ci-dessous.

23.4 The environmental assessment and protection regimes will be implemented through First Nation laws.

23.5 The Parties agree to harmonize their respective environmental regimes and processes, with the involvement of the provinces where they agree to participate, to promote effective and consistent environmental regimes and processes and to avoid uncertainty and duplication.

23.6 This Agreement is not intended to affect rights and powers relating to migratory birds or endangered species. These matters may be dealt with in the context of other negotiations. This Agreement is not intended to determine or prejudice the resolution of these issues.

#### 24. ENVIRONMENTAL MANAGEMENT

24.1 Subject to clause 27, a First Nation with a land code in effect will develop an environmental protection regime, with the assistance of the appropriate federal agencies to the extent that they agree to participate.

24.2 Each First Nation agrees to

harmonize environmental protection with the province in which the First Nation is situated, where the province agrees to participate

23.4 Les régimes de protection et d'évaluation environnementales seront mis en oeuvre par des textes législatifs de la première nation.

23.5 Les Parties conviennent d'harmoniser leurs régimes et processus environnementaux respectifs, en invitant les provinces à participer à cette opération si celles-ci le souhaitent, dans le but de promouvoir l'uniformité et l'efficacité des régimes et processus environnementaux et d'éviter les incertitudes et le double emploi.

23.6 Le présent accord n'a pas pour effet de modifier les droits et pouvoirs concernant les oiseaux migrateurs et les espèces en voie de disparition. Ces questions pourront faire l'objet d'autres négociations. Le présent accord n'a pas pour objet de déterminer la résolution de ces questions ou d'y porter préjudice.

#### 24. GESTION DE L'ENVIRONNEMENT

24.1 Sous réserve de l'article 27, une première nation qui a un code foncier en vigueur élaborera un régime de protection environnementale, avec l'appui des organismes fédéraux concernés, dans la mesure où la province accepte de participer.

24.2 Chaque première nation accepte d'harmoniser son régime de protection environnementale avec celui de la province où elle est située, dans la mesure où la province accepte de participer.

24.3 The First Nation environmental protection standards and punishments will have at least the same effect as those in the laws of the province in which the First Nation is situated.

24.4 For greater certainty, if there is an inconsistency between the provision of a federal law respecting the protection of the environment and a provision in a land code or First Nation law respecting the protection of the environment, the federal provision will prevail to the extent of any inconsistency.

## 25. ENVIRONMENTAL ASSESSMENT

25.1 Subject to clause 27, a First Nation will, with the assistance of the Lands

24.3 Les normes de protection environnementale et pénalités de la première nation devront avoir au moins l'effet équivalent à celui des lois de la province où se situe la première nation.

24.4 Il est entendu qu'en cas d'incompatibilité entre une disposition d'une loi fédérale en matière de protection de l'environnement et une disposition d'un code foncier ou d'un texte législatif des premières nations en matière de protection de l'environnement, la disposition fédérale l'emporte dans la mesure de l'incompatibilité.

## 25. ÉVALUATION ENVIRONNEMENTALE

25.1 Sous réserve de l'article 27, la première nation s'efforce, avec l'aide du

Advisory Board and the appropriate federal agencies, make best efforts to develop an environmental assessment process within one year after the First Nation's land code takes effect, or within such longer period as the Minister and the First Nation may agree to.

25.2 The First Nation and the Minister will, in the individual agreement referred to in clause 6, address how to conduct the environmental assessment of projects on First Nation land during the interim period until the First Nation's environmental assessment process is developed.

25.3 The First Nation's environmental assessment process will be consistent with requirements of the Canadian Environmental Assessment Act.

25.4 The First Nation's environmental assessment process will be triggered in appropriate cases where the First Nation is approving, regulating, funding or undertaking a project on First Nation land. The assessment will occur as early as possible in the planning stages of the project before an irrevocable decision is made.

25.5 The Parties agree that section 10 of the Canadian Environmental Assessment Act will not apply to projects located on First Nation land.

Conseil consultatif des terres et des organismes fédéraux intéressés, d'élaborer un processus d'évaluation environnementale dans l'année suivant l'entrée en vigueur du code foncier de la première nation ou dans un délai plus long convenu entre le ministre et la première nation.

25.2 L'accord distinct conclu entre la première nation et le ministre conformément à l'article 6 doit prévoir les modalités de l'évaluation environnementale des projets devant être réalisés sur les terres de première nation au cours de la période transitoire, jusqu'à ce que la première nation ait élaboré un processus d'évaluation environnementale.

25.3 Le processus d'évaluation environnementale mis sur pied par la première nation doit être compatible avec les exigences de la Loi canadienne sur l'évaluation environnementale.

25.4 Sera un élément déclencheur du processus d'évaluation environnementale dans les cas indiqués, tout projet sur les terres de première nation devant être réalisé, financé, approuvé ou réglementé par celle-ci. Cette évaluation doit s'effectuer le plus tôt possible au cours des premières étapes de la planification du projet avant que des décisions irrévocables ne soient prises.

25.5 Les Parties conviennent que l'article 10 de la Loi canadienne sur l'évaluation environnementale ne s'applique pas aux projets situés sur les terres de première nation.

25.6 The Parties agree to use their best efforts to implement the principle that the First Nation's environmental assessment process be used where an environmental assessment of a project on First Nation land is required by the Canadian Environmental Assessment Act.

25.7 The Parties agree to develop a plan to harmonize their respective environmental assessment processes, with the involvement of the provinces where they agree to participate.

## 26. OTHER AGREEMENTS

26.1 The First Nation and Canada recognize that it may be advisable to enter into other agreements with each other and other jurisdictions to deal with environmental issues like harmonization, implementation, timing, funding and enforcement.

26.2 Where matters being negotiated pursuant to clause 26.1 normally fall within provincial jurisdiction, or may have significant impacts beyond the boundaries of First Nation land, the parties will invite the affected province to be a party to such negotiations and resulting agreements.

## 27. RESOURCES

27.1 The Parties understand that the obligation of a First Nation to establish

25.6 Les Parties s'efforceront de mettre en œuvre le principe selon lequel le processus d'évaluation environnementale de la première nation sera appliqué lorsque la Loi canadienne sur l'évaluation environnementale exige qu'un projet devant être réalisé sur des terres de première nation fasse l'objet d'une telle évaluation.

25.7 Les Parties conviennent d'élaborer un plan visant à harmoniser leurs processus d'évaluation environnementale respectifs, avec la participation des provinces si celles-ci le souhaitent.

## 26. AUTRES ENTENTES

26.1 La première nation et le Canada reconnaissent qu'il pourrait être souhaitable de conclure d'autres ententes, entre elles et avec d'autres gouvernements, dans le domaine de l'environnement, notamment au sujet des questions d'harmonisation, de mise en œuvre, de calendrier, de financement et de contrôle d'application.

26.2 Si une question faisant l'objet de négociation en vertu de l'article 26.1 relève normalement de la compétence de la province, ou si de telles questions sont susceptibles d'avoir des effets importants à l'extérieur des terres de première nation, les Parties inviteront la province concernée à être partie à ces négociations et à l'entente qui en résulte.

## 27. RESSOURCES

27.1 Les Parties reconnaissent qu'une première nation ne peut remplir son

environmental assessment and environmental protection regimes depends on adequate financial resources and expertise being available to the First Nation.

## PART VI FUNDING

### 28. APPROPRIATION

28.1 Any amounts provided by Canada to the First Nations pursuant to funding arrangements in relation to First Nation land shall be paid out of such moneys as may be appropriated by Parliament for this purpose.

### 29. DEVELOPMENTAL FUNDING

29.1 Canada and the Lands Advisory Board will enter into a funding arrangement to allow the First Nations to develop land codes and community approval processes for their land codes, to negotiate the individual agreements mentioned in clause 6 and to seek community approval under clause 7.

### 30. OPERATIONAL FUNDING

30.1 An individual agreement between the Minister and a First Nation will determine the resources to be provided by Canada to the First Nation to manage First Nation lands and make, administer and enforce its laws under a land code. The agreement will determine specific funding issues, for example period of time, and terms and

obligation relative à l'établissement de régimes de protection et d'évaluation environnementales que si elle dispose des ressources financières et de l'expertise nécessaires.

## PARTIE VI FINANCEMENT

### 28. CRÉDITS

28.1 Les sommes versées par le Canada aux premières nations conformément aux ententes en matière de financement à l'égard des terres de première nation sont prélevées sur les crédits affectés à cette fin par le Parlement.

### 29. FINANCEMENT DE DÉMARRAGE

29.1 Le Canada et le Conseil consultatif des terres sont tenus de conclure une entente de financement pour permettre aux premières nations d'élaborer leur code foncier et leur processus d'approbation de la communauté relatif à ce code, de négocier l'accord distinct mentionné à l'article 6 et d'obtenir l'approbation de la communauté prévue à l'article 7.

### 30. FINANCEMENT DE FONCTIONNEMENT

30.1 L'accord distinct conclu entre le ministre et la première nation fixera les ressources que le Canada s'engage à fournir à la première nation pour que celle-ci gère les terres de première nation et édicte, administre et applique les textes législatifs de la première nation pris en vertu du code foncier. L'accord précisera



conditions.

30.2 A method for allocating such operating funds as may have been appropriated by Parliament will be developed by the Parties and the Lands Advisory Board.

30.3 Unless a First Nation and Canada agree otherwise, an individual agreement respecting the provision of funding under this clause will have a maximum term of five years and will include provisions for its amendment and renegotiation.

#### 31. LANDS ADVISORY BOARD FUNDING

31.1 Canada will enter into a funding arrangement with the Lands Advisory Board for the five year period following the coming into force of this Agreement.

### PART VII EXPROPRIATION OF FIRST NATION LAND BY CANADA

#### 32. RESTRICTIONS

32.1 In accordance with the principle stated in clause 13.2, the Parties agree, as a general principle, that First Nation lands will not be subject to expropriation.

32.2 Despite the general principle against expropriation, First Nation land may be expropriated by Canada

(a) only with the consent of the

les différents aspects du financement, par exemple sa périodicité et ses modalités.

30.2 Les Parties et le Conseil consultatif des terres sont tenus d'élaborer une méthode d'attribution des fonds de fonctionnement autorisés par le Parlement.

30.3 À défaut d'entente contraire de la première nation et du Canada, l'accord distinct concernant le financement prévu par le présent article sera en vigueur pour une durée maximale de cinq ans et prévoira des dispositions concernant sa modification et sa renégociation.

#### 31. FINANCEMENT DU CONSEIL CONSULTATIF DES TERRES

31.1 Le Canada est tenu de conclure avec le Conseil consultatif des terres une entente de financement qui portera sur une période de cinq ans à partir de l'entrée en vigueur du présent accord.

### PARTIE VII EXPROPRIATION DE TERRES DE PREMIÈRES NATIONS PAR LE CANADA

#### 32. RESTRICTIONS

32.1 Conformément au principe énoncé à l'article 13.2, les parties conviennent qu'en règle générale, les terres de première nation ne peuvent faire l'objet d'une expropriation.

32.2 Malgré le principe général voulant que les terres ne puissent faire l'objet d'une expropriation, le Canada peut toutefois exproprier les terres de première nation, si les conditions suivantes sont

Governor in Council; and

(b) only by and for the use of a federal department or agency.

32.3 The Governor in Council will only consent to an expropriation of First Nation land if the expropriation is justifiable and necessary for a federal public purpose that serves the national interest.

32.4 When making a decision to expropriate First Nation land, the Governor in Council, in addition to other steps that may be required before making such a decision, will at a minimum follow these steps:

(a) it will consider using means other than expropriation and will use those other means where reasonably feasible;

(b) it will use non-First Nation land, where such land is reasonably available;

(c) if it must use First Nation land, it will make reasonable efforts to acquire the land through agreement with the First Nation, rather than by expropriation;

(d) if it must expropriate First Nation land, it will expropriate only the smallest interest or land right necessary and for the shortest time required; and

réunies :

a) le gouverneur en conseil y consent;

b) l'expropriation est faite par un ministère ou un organisme fédéral pour ses seuls besoins.

32.3 Le gouverneur en conseil ne consentira à l'expropriation de terres de première nation que si cela est justifiable et nécessaire à des fins d'intérêt public national relevant de la compétence fédérale.

32.4 Avant de donner son consentement à une expropriation de terres de première nation, le gouverneur en conseil, en plus des autres mesures qui peuvent être requises, prendra au moins les mesures suivantes :

a) il envisagera d'autres moyens que l'expropriation et utilisera ces moyens lorsque cela est raisonnablement faisable;

b) il utilisera des terres autres que celles d'une première nation, lorsque de telles terres sont raisonnablement disponibles;

c) s'il faut utiliser des terres de première nation, il s'efforcera de procéder à l'acquisition des terres par convention avec la première nation et non par expropriation;

d) s'il doit exproprier des terres de première nation, il veillera à ce que l'expropriation se limite au strict nécessaire, tant en ce qui touche l'étendue de l'intérêt ou du droit foncier que la

(e) in every case, it will first provide the First Nation with information relevant to the expropriation.

32.5 Prior to the Governor in Council issuing an order consenting to the expropriation of First Nation land, the federal department or agency will make public a report on the reasons justifying the expropriation and the steps taken in satisfaction of this clause and will provide a copy of the report to the First Nation.

32.6 Where a First Nation objects to a proposed expropriation it may refer the issue to an independent third party for a neutral evaluation under Part IX, within 60 days of the release of the report referred to in clause 32.5.

32.7 An order of the Governor in Council consenting to the expropriation will not be issued earlier than

(a) the end of the 60 day period referred to in clause 32.6; or

(b) the day the opinion or recommendation of the neutral evaluator is released, where the First Nation referred the proposed expropriation to an independent evaluator under clause 32.6.

### 33. COMPENSATION BY CANADA

période pour laquelle il est exproprié;

e) dans tous les cas, il communiquera d'abord à la première nation tous les renseignements se rapportant à l'expropriation.

32.5 Avant que le gouverneur en conseil ne prenne un décret consentant à l'expropriation de terres de première nation, le ministère ou l'organisme fédéral est tenu de publier un rapport qui énonce les motifs la justifiant et les mesures prises en application du présent article et de fournir en même temps une copie de ce rapport à la première nation.

32.6 Si une première nation s'oppose à un projet d'expropriation, elle peut, dans les 60 jours de la publication du rapport mentionné à l'article 32.5, renvoyer l'affaire à une tierce partie indépendante pour conciliation aux termes de la Partie IX.

32.7 Un décret du gouverneur en conseil consentant à l'expropriation ne sera pas émis avant :

a) soit l'expiration du délai de 60 jours prévu à l'article 32.6;

b) soit le jour où l'opinion ou la recommandation du conciliateur est publiée, si la première nation renvoie le projet d'expropriation à un conciliateur, en application de l'article 32.6.

### 33. INDEMNISATION PAR LE CANADA

33.1 In the event of the expropriation of First Nation land by Canada under this Part, Canada will provide compensation to the First Nation in accordance with this clause.

33.2 The compensation will include alternate land of equal or greater size or of comparable value. If the alternate land is of less than comparable value, then additional compensation will be provided. The alternate land may be smaller than the land being expropriated only if that does not result in the First Nation having less land area than when its land code took effect.

33.3 The total value of the compensation provided by Canada under this clause will be based on the following:

- (a) the market value of the land or interest or land right that is acquired;
- (b) the replacement value of any improvement to the land that is acquired;
- (c) the damages attributable to disturbance;
- (d) the value of any special economic advantage arising out of or incidental to the occupation or use of the affected First Nation land to the extent that this value is not otherwise

33.1 Si le Canada exproprie des terres de première nation sous le régime de la présente partie, il est tenu d'indemniser la première nation conformément aux termes du présent article.

33.2 L'indemnité comprendra des terres substitutives ayant une superficie égale ou supérieure ou ayant une valeur comparable à celles qui ont été expropriées. Si les terres substitutives ont une valeur inférieure aux terres expropriées, le Canada est alors tenu d'offrir une indemnité supplémentaire. Les terres substitutives peuvent avoir une superficie moindre que les terres expropriées seulement si, à la suite de l'opération, la première nation dispose d'une superficie de terres qui n'est pas inférieure à celle qu'elle avait lorsque son code foncier est entré en vigueur.

33.3 La valeur totale de l'indemnité versée par le Canada aux termes du présent article doit tenir compte des éléments suivants :

- a) la valeur marchande des terres ou de l'intérêt ou du droit foncier acquis;
- b) la valeur de remplacement des améliorations apportées aux terres acquises;
- c) les dommages attribuables au trouble de jouissance;
- d) la valeur de tout avantage économique particulier découlant ou résultant de l'occupation ou de l'utilisation des terres de première nation concernée, dans la mesure où cette valeur n'a pas déjà donné lieu à

compensated;

(e) damages for any reduction in the value of a remaining interest or land right; and

(f) damages for any adverse effect on any cultural or other special value of the land.

33.4 If the value and nature of the compensation cannot be agreed upon by the federal department or agency and the affected First Nation, either party may refer a dispute on compensation to arbitration under Part IX.

33.5 In any province or territory other than Québec, any claim or encumbrance in respect of the interest, or in Québec any right, charge or claim in respect of the land right, expropriated by Canada may only be claimed against the amount of compensation that is otherwise payable to the person or entity whose interest or land right is being expropriated.

33.6 Interest on the compensation is payable from the date the expropriation takes effect, at the same rate as for prejudgment interest in the superior court of the province in which the First Nation land is located.

#### 34. STATUS OF LANDS

34.1 Where less than the full interest or only part of the land right of the First Nation in

une indemnité;

e) les dommages attribuables à la diminution de la valeur de l'intérêt ou du droit foncier non exproprié;

f) les dommages attribuables aux répercussions négatives sur la valeur culturelle ou toute autre valeur particulière de ces terres.

33.4 En cas de différend relatif à la valeur ou à la nature de l'indemnité, le ministère ou l'organisme fédéral ou la première nation peut saisir un arbitre de tout différend relatif à l'indemnité aux termes de la Partie IX.

33.5 Dans les provinces ou territoires autres que le Québec, le recouvrement de toute réclamation ou tout grèvement concernant l'intérêt exproprié par le Canada, ou dans la province de Québec, le recouvrement de tout droit, charge ou réclamation concernant le droit foncier ainsi exproprié, ne peut être demandé que jusqu'à concurrence de l'indemnité par ailleurs payable à la personne ou à l'entité dont l'intérêt ou le droit foncier est visé par l'expropriation.

33.6 L'indemnité porte intérêt à partir de la prise d'effet de l'expropriation, au taux applicable à l'intérêt avant jugement applicable devant la Cour supérieure de la province où sont situées les terres de première nation.

#### 34. STATUT DES TERRES

34.1 Dans les cas où l'expropriation par le Canada porte sur moins que la totalité de

First Nation land is expropriated by Canada,

(a) the land retains its status as First Nation land;

(b) the land remains subject to the land code and to any law of the First Nation that is otherwise applicable, except to the extent the land code or law is inconsistent with the expropriation; and

(c) the First Nation may continue to use and occupy the land, except to the extent the use or occupation is inconsistent with the expropriation.

34.2 Alternate land accepted by the First Nation as part of the compensation will become both a reserve and First Nation land.

### 35. REVERSION OR RETURN OF INTERESTOR LAND RIGHT IN FIRST NATION LAND

35.1 In any province or territory other than Québec, where an expropriated interest in First Nation land which is less than the full interest of the First Nation in the land is no longer required by Canada for the purpose for which it was expropriated, the interest in land will revert to the First Nation.

35.1A In the province of Québec, where the expropriated land right in First Nation land constitutes only part of the land right of the First Nation in the land, and it is no longer required by Canada for the purpose for

l'intérêt ou seulement sur une partie du droit foncier de la première nation sur les terres en question :

a) les terres conservent leur statut de terres de première nation;

b) les terres demeurent assujetties au code foncier et aux textes législatifs adoptés par la première nation, sauf dans la mesure où le texte ou le code foncier est incompatible avec l'expropriation;

c) la première nation peut continuer à utiliser et à occuper ces terres, sauf dans la mesure où cette utilisation ou cette occupation est incompatible avec l'expropriation.

34.2 Les terres substitutives acceptées par la première nation comme partie de l'indemnité deviennent à la fois une réserve et des terres de première nation.

### 35. RÉVERSION OU RETOUR D'UN INTÉRÊT OU DROIT FONCIER SUR LES TERRES DE PREMIÈRE NATION

35.1 Dans une province ou territoire autre que le Québec, lorsque l'intérêt exproprié est moindre que la totalité de l'intérêt de la première nation sur les terres en question, cet intérêt est, lorsqu'il n'est plus nécessaire au Canada aux fins de l'expropriation, retourné à la première nation.

35.1A Dans la province de Québec, lorsque l'expropriation porte seulement sur une partie du droit foncier de la première nation sur les terres en question,

which it was expropriated, the land right will return to the First Nation.

35.2 The Minister responsible for the expropriating department or agency, without the consent of the Governor in Council, may decide that the interest or the land right is no longer required and determine the disposition of any improvements.

#### 36. RETURN OF FULL INTEREST OR ENTIRE LAND RIGHT IN FIRST NATION LAND

36.1 Where the full interest or the entire land right of a First Nation in First Nation land was expropriated but is no longer required by Canada for the purpose for which it was expropriated, the land will be returned to the First Nation on terms negotiated by the First Nation and the federal department or agency, at the time of the expropriation or at a later date as agreed to by them.

36.2 Where the terms and conditions of the return cannot be agreed upon by the First Nation and the federal department or agency, either party may refer the dispute to arbitration under Part IX.

36.3 The Minister responsible for the expropriating department or agency, without the consent of the Governor in Council, may decide that the land is no longer required and determine the disposition of any

le droit foncier est, lorsqu'il n'est plus nécessaire au Canada aux fins de l'expropriation, retourné à la première nation.

35.2 Le ministre responsable du ministère ou de l'organisme à l'origine de l'expropriation peut, sans le consentement du gouverneur en conseil, décider que l'intérêt ou le droit foncier exproprié n'est plus nécessaire et il peut déterminer comment disposer des améliorations.

#### 36. RETOUR DE LA TOTALITÉ DE L'INTÉRÊT OU DU DROIT FONCIER SUR LES TERRES DE PREMIÈRE NATION

36.1 Lorsque la totalité de l'intérêt ou le droit foncier entier de la première nation sur les terres en question a été exproprié et qu'il n'est plus nécessaire au Canada aux fins de l'expropriation, les terres seront retournées à la première nation selon les conditions négociées par la première nation et le ministère ou l'organisme fédéral, soit au moment de l'expropriation, soit à une date ultérieure convenue par eux.

36.2 En cas de différend relatif aux conditions du retour, la première nation ou le ministère ou l'organisme fédéral peut renvoyer l'affaire à un arbitre nommé aux termes de la Partie IX.

36.3 Le ministre responsable du ministère ou de l'organisme à l'origine de l'expropriation peut, sans le consentement du gouverneur en conseil, décider que les terres expropriées ne sont plus nécessaires

improvements.

### 37. APPLICATION OF EXPROPRIATION ACT

37.1 Any provisions of the Expropriation Act, (Canada) that are applicable to an expropriation of First Nation land by Canada continue to apply, unless inconsistent with this Agreement.

### PART VIII LANDS ADVISORY BOARD

#### 38. LANDS ADVISORY BOARD

38.1 The Lands Advisory Board shall consist of at least three members appointed:

(a) Prior to September 1, 2003, by the Councils of the original First Nation parties to this Agreement; and

(b) After September 1, 2003, by the Councils of the First Nations that have ratified this Agreement, whether they ratify the Agreement on, before or after that date.

38.2 The Lands Advisory Board will have all necessary powers and capacity to properly perform its functions under this Agreement.

38.3 The Lands Advisory Board will select a chairperson to preside over the Board and, subject to the direction of the Board, to act

et il peut déterminer comment disposer des améliorations apportées aux terres concernées.

### 37. APPLICATION DE LA LOI SUR L'EXPROPRIATION

37.1 Les dispositions de la Loi sur l'expropriation (Canada) applicables à l'expropriation de terres de première nation par le Canada continuent de s'appliquer dans la mesure où elles ne sont pas incompatibles avec le présent accord.

### PARTIE VIII CONSEIL CONSULTATIF DES TERRES

#### 38. CONSEIL CONSULTATIF DES TERRES

38.1 Le Conseil consultatif des terres sera formé d'au moins trois membres nommés :

a) avant le 1er septembre 2003 par les conseils des premières nations qui étaient parties initiales au présent accord;

b) après le 1er septembre 2003 par les conseils des premières nations qui ont ratifié le présent accord, qu'ils l'aient ratifié à cette date, ou avant ou après cette date.

38.2 Le Conseil consultatif des terres possédera tous les pouvoirs et la capacité nécessaires à l'exercice efficace de ses attributions en vertu du présent accord.

38.3 Le Conseil consultatif des terres est tenu de choisir un président qui peut, sous réserve des instructions du conseil, agir



on its behalf.

### 39. FUNCTIONS OF THE LANDS ADVISORY BOARD

39.1 In addition to any other functions specifically assigned to it by the Parties, the Lands Advisory Board will be responsible for the following functions:

(a) developing model land codes, laws and land management systems;

(b) developing model agreements for use between First Nations and other authorities and institutions, including public utilities and private organizations;

(c) on request of a First Nation, assisting the First Nation in developing and implementing its land code, laws, land management systems and environmental assessment and protection regimes;

(d) assisting a verifier when requested by the verifier;

(e) establishing a resource centre, curricula and training programs for managers and others who perform functions pursuant to a land code;

(f) on request of a First Nation encountering difficulties relating to the management of its First Nation lands, helping the First Nation in obtaining the expertise necessary to resolve the difficulty;

pour le compte du conseil.

### 39. ATTRIBUTIONS DU CONSEIL CONSULTATIF DES TERRES

39.1 Outre les autres attributions que pourraient lui confier les Parties, le Conseil consultatif des terres possédera les attributions suivantes :

a) il élabore des modèles de code foncier, de textes législatifs et de systèmes de gestion des terres;

b) il élabore des modèles d'ententes destinés à être utilisés entre les premières nations et les autres autorités et institutions, notamment les sociétés de service public et les organismes privés;

c) à la demande d'une première nation, il assiste celle-ci dans l'élaboration et la mise en oeuvre de son code foncier, de ses textes législatifs, de ses systèmes de gestion des terres, et de ses régimes de protection et d'évaluation environnementales;

d) il apporte son aide au vérificateur, à la demande de ce dernier;

e) il met sur pied un centre de ressources, des cours et des programmes de formation à l'intention des gestionnaires et des autres personnes qui exercent des attributions aux termes d'un code foncier;

f) à la demande d'une première nation qui éprouve des difficultés dans la gestion des terres de la première nation, il l'aide à obtenir l'expertise dont elle a besoin pour

(g) proposing regulations for First Nation land registration;

(h) proposing to the Minister such amendments to this Agreement and the federal legislation as it considers necessary or advisable;

(i) in consultation with First Nations, negotiating a funding method with the Minister; and

(j) performing such other functions or services for a First Nation as are agreed to between the Board and the First Nation.

39.2 The Lands Advisory Board will have authority to adopt rules for the procedure at its meetings and generally for the conduct of its affairs.

#### 40. RECORD KEEPING

40.1 The Lands Advisory Board will maintain a record containing

(a) the name of each First Nation that approves a land code;

(b) a copy of that land code;

(c) a copy of each amendment to a land code; and

(d) the dates on which each was approved and certified.

résoudre les difficultés;

g) il propose des règlements concernant l'enregistrement des terres de première nation;

h) il propose au ministre les modifications au présent accord et à la loi de ratification qu'il estime souhaitables ou nécessaires;

i) en consultation avec les premières nations, il négocie avec le ministre un mécanisme de financement;

j) il exerce les autres attributions ou fournit à une première nation les services dont le conseil et celle-ci peuvent convenir.

39.2 Le Conseil consultatif des terres a le pouvoir d'adopter des règles de procédure pour la tenue de ses réunions et, d'une façon générale, pour l'exercice de ses activités.

#### 40. TENUE DES DOSSIERS

40.1 Le Conseil consultatif des terres est tenu de maintenir un registre dans lequel figurent :

a) le nom des premières nations ayant adopté un code foncier;

b) une copie de ces codes fonciers;

c) une copie des modifications apportées aux codes fonciers;

d) les dates auxquelles les codes ont été approuvés et celles auxquelles leur validité a été attestée.

40.2.1 The Lands Advisory Board shall, in consultation with the Minister, prescribe procedures for a First Nation to authorize the signing of this Agreement and for the formal signature of the First Nations to this Agreement, and shall advise the Minister when a First Nation has completed the procedures.

40.2.2 Subject to sub-clause 40.2.1, a First Nation may only become a signatory under this section with the consent of Canada, and Canada shall advise the Lands Advisory Board if and when such consent is given.

40.2.3 The Lands Advisory Board shall receive and record the adhesion of a First Nation party to this Agreement, made after January 1, 2001, and advise the Minister that the said First Nation has signed the Framework Agreement.

#### 41. ANNUAL REPORT

41.1 Within 90 days following the end of each year of operation, the Lands Advisory Board will deliver to the Parties an annual report, in both official languages, on the work of the Board for that year.

41.2 The Minister will cause a copy of the Lands Advisory Board's annual report to be laid before each House of Parliament within the first 30 sitting days of that House after the Minister receives it.

#### 42. LANDS ADVISORY BOARD NO LONGER IN EXISTENCE

40.2.1 Le Conseil consultatif des terres doit, en consultation avec le ministre, prescrire les procédures qu'une première nation doit suivre pour autoriser la signature du présent accord et les procédures régissant la signature formelle de cet accord par les premières nations et il doit aviser le ministre lorsqu'une première nation a complété les procédures.

40.2.2 Sous réserve de l'article 40.2.1, une première nation peut devenir signataire en vertu de cet article seulement avec le consentement du Canada, et ce dernier doit aviser le Conseil consultatif des terres lorsque le consentement a été accordé.

40.2.3 Le Conseil consultatif des terres doit recevoir et inscrire l'adhésion d'une première nation qui est Partie au présent accord, intervenue après le 1<sup>er</sup> janvier 2001, et aviser le ministre de la signature de l'accord par celle-ci.

#### 41. RAPPORT ANNUEL

41.1 Le Conseil consultatif des terres remet aux Parties, dans les 90 jours suivant la fin de son année de fonctionnement, un rapport annuel, dans les deux langues officielles, concernant les travaux accomplis pendant cette année.

41.2 Le ministre est tenu de présenter le rapport annuel du Conseil consultatif des terres aux deux Chambres du Parlement dans les 30 premiers jours de séance de chaque Chambre suivant sa réception par le ministre.

#### 42. DISPARITION DU CONSEIL CONSULTATIF DES TERRES

42.1 In the event that the Lands Advisory Board is no longer in existence, the functions of the Lands Advisory Board under this Agreement will be performed by the Parties, except as follows:

(a) the functions set out in clauses 29 and 39, except clause 39.1(g), will be performed by the First Nations; and

(b) the functions set out in clauses 10 and 40 will be assumed by the First Nations Lands Register.

## PART IX DISPUTE RESOLUTION

### 43. GENERAL PRINCIPLES

43.1 The Parties are committed to resolving any dispute that may arise out of this Agreement among themselves, amicably and in good faith. Where they cannot resolve a dispute through negotiation, the Parties agree to establish and participate in the out-of-court processes referred to in this Part to resolve the dispute.

43.2 Nothing in this Agreement is to be construed as preventing the Parties from using mediation to assist them in reaching an amicable agreement in respect of any issue in dispute. Where a Party has referred a dispute to mediation, the other Party is obliged to attend an initial meeting with the mediator. However, either Party can end a mediation process any time after the initial meeting.

43.3 Subject to clause 43.4, any dispute

42.1 En cas de disparition du Conseil consultatif des terres, les attributions de celui-ci en vertu du présent accord seront exercées par les Parties, sous réserve des dispositions suivantes :

a) les attributions énumérées aux articles 29 et 39, sauf pour ce qui est de l'alinéa 39.1g), seront exercées par les premières nations;

b) les attributions prévues aux articles 10 et 40 seront assumées par le bureau du Registre des terres des premières nations.

## PARTIE IX RÈGLEMENT DES DIFFÉRENDS

### 43. PRINCIPES GÉNÉRAUX

43.1 Les Parties s'engagent à résoudre entre elles, à l'amiable et de bonne foi, les différends qui peuvent découler du présent accord. Lorsque les Parties n'arrivent pas à s'entendre pour résoudre un différend par la négociation, elles conviennent de mettre sur pied les processus extrajudiciaires de règlement des différends décrits dans la présente partie et d'y avoir recours.

43.2 Les dispositions du présent accord n'empêchent pas les Parties de recourir à la médiation en vue de régler à l'amiable un différend. Lorsqu'une partie a soumis un différend à un médiateur, l'autre partie est tenue d'assister à une première rencontre avec le médiateur. L'une ou l'autre des Parties peut toutefois mettre fin à la médiation en tout temps après cette première rencontre.

43.3 Sous réserve de l'article 43.4, les

arising from the implementation, application or administration of this Agreement, the federal legislation, an individual agreement or an environmental management agreement may be resolved in either of two ways:

(a) Neutral evaluation - it may be referred to neutral evaluation by one party to the dispute; or

(b) Arbitration - it may be referred to arbitration by both parties to the dispute.

43.4 Any dispute respecting compensation for First Nation land expropriated by Canada or the terms and conditions for the return of the full interest or the entire land right in First Nation land will be referred to arbitration.

43.5 Any objection by a First Nation to a proposed expropriation under Part VII that has been referred to neutral evaluation will be evaluated and a report submitted by the neutral evaluator to the First Nation and Canada within 60 days of the referral to the neutral evaluator.

#### 44. PANELS OF ARBITRATORS, ETC.

44.1 The Parties and the Lands Advisory Board will jointly establish lists of mutually acceptable persons willing to act as mediators, arbitrators, verifiers and neutral evaluators.

différends découlant de la mise en oeuvre, de l'application ou de l'administration du présent accord, de la loi de ratification, d'un accord distinct ou d'un accord en matière de gestion de l'environnement peuvent être résolus selon l'un des deux moyens suivants :

a) la conciliation — le différend peut être renvoyé à un conciliateur par l'une des parties impliquées dans le différend;

b) l'arbitrage — le différend peut être soumis à l'arbitrage par les deux parties impliquées dans le différend.

43.4 Sont soumis à l'arbitrage, les différends portant sur l'indemnité à verser par le Canada en raison de l'expropriation par celui-ci de terres de première nation, ou sur les conditions du retour de la totalité de l'intérêt ou du droit foncier entier sur les terres de première nation.

43.5 Toute opposition, par la première nation, à un projet d'expropriation en vertu de la Partie VII qui aura été porté devant un conciliateur sera évalué par ce dernier. Par la suite, un rapport sera soumis, par ce dernier, à la première nation et au Canada dans un délai de 60 jours suivant le dépôt de l'opposition devant le conciliateur.

#### 44. LISTES D'ARBITRES, ETC.

44.1 Les Parties et le Conseil consultatif des terres sont tenus d'établir conjointement des listes de personnes mutuellement acceptables prêtes à agir en qualité de médiateur, d'arbitre, de vérificateur et de conciliateur.

44.2 Parties who become involved in a dispute may select mediators, arbitrators and neutral evaluators from the appropriate list, or may agree to the appointment of an individual who is not on the list.

44.3 The selection and assignment of verifiers and the procedure to be followed by verifiers will be arranged by the Lands Advisory Board, Canada and the First Nation.

44.4 Individuals appointed to act as mediators, arbitrators, verifiers or neutral evaluators must be unbiased and free from any conflict of interest relative to the matter in issue and have knowledge or experience to act in the appointed capacity.

## 45. NEUTRAL EVALUATION

45.1 Where a dispute is referred to neutral evaluation, the evaluator will where appropriate,

- (a) identify the issues in the dispute;
- (b) assess the strengths of each party's case;
- (c) structure a plan for the progress of the case;
- (d) encourage settlement of the dispute; and
- (e) provide the parties with a non-binding opinion or recommendation to resolve the dispute.

44.2 Les parties à un différend peuvent choisir, parmi ces listes, un médiateur, un arbitre et un conciliateur ou s'entendre sur la nomination d'une personne qui ne figure pas sur ces listes.

44.3 Le Conseil consultatif des terres, le Canada et la première nation choisiront les vérificateurs, définiront leurs attributions et fixeront la procédure que ces derniers doivent utiliser.

44.4 Les personnes nommées en qualité de médiateur, d'arbitre, de vérificateur ou de conciliateur doivent être impartiales et ne pas se trouver en situation de conflit d'intérêts par rapport aux questions en litige; elles doivent par ailleurs posséder la compétence ou l'expérience nécessaires pour agir en cette qualité.

## 45. CONCILIATION

45.1 Lorsque la situation l'exige, le conciliateur saisi d'un différend exerce les fonctions suivantes :

- a) il précise les questions sur lesquelles porte le différend;
- b) il évalue le bien-fondé des arguments des parties;
- c) il établit un plan afin de faire progresser la situation;
- d) il encourage le règlement du différend;
- e) il remet aux parties une opinion ou une recommandation non exécutoire visant à mettre fin au différend.

## 46. ARBITRATION

46.1 Unless otherwise agreed by the Parties, each arbitration will be conducted in accordance with this clause.

46.2 The procedure will follow the Commercial Arbitration Code, which is a schedule to the Commercial Arbitration Act.

46.3 If no appropriate procedural provision is in that Code, the parties in dispute may adopt the Commercial Arbitration Rules in force from time to time of the British Columbia International Commercial Arbitration Centre.

46.4 The arbitrator will establish the procedures of the arbitration, subject to this clause.

## 47. RELATED ISSUES

47.1 The parties to a dispute will divide the costs of the dispute resolution process equally between themselves.

47.2 Any person whose interests will be adversely affected by a dispute that is referred to a dispute resolution process may participate in the process, if

(a) all parties to the process consent; and

(b) the person pays the costs of his or her participation, unless otherwise agreed by the other parties to the dispute.

47.3 The decision of a verifier and a

## 46. ARBITRAGE

46.1 Sauf entente contraire des Parties, l'arbitrage s'effectuera conformément au présent article.

46.2 La procédure qui sera suivie est celle du Code d'arbitrage commercial, figurant à l'annexe de la Loi sur l'arbitrage commercial.

46.3 Si ce Code ne contient pas de disposition procédurale appropriée, les parties au différend peuvent suivre les Règles d'arbitrage commercial établies à l'occasion par le British Columbia International Commercial Arbitration Centre.

46.4 L'arbitre est tenu de déterminer la procédure d'arbitrage à suivre, sous réserve du présent article.

## 47. QUESTIONS CONNEXES

47.1 Les parties à un différend assument les frais relatifs à sa résolution à parts égales.

47.2 Toute personne dont les intérêts seraient lésés par un différend porté devant l'un des mécanismes de règlement des différends peut participer au mécanisme de règlement si :

a) d'une part, toutes les parties au mécanisme y consentent;

b) d'autre part, cette personne assume les frais de sa participation, sauf entente contraire des autres parties au différend.

47.3 La décision du vérificateur et la

decision or award of an arbitrator will be final and binding on the participating parties.

47.4 No order shall be made, processed, entered or proceeding taken in any court, whether by way of injunction, mandamus, certiorari, prohibition or quo warranto to contest, review, impeach or limit the action of a person acting as a verifier, an arbitrator or a neutral evaluator under this Agreement.

47.5 Despite clause 47.4, judicial review may be taken under the Federal Court Act within 30 days of a decision of a person acting as a verifier, an arbitrator or a neutral evaluator under this Agreement in respect of such person exceeding his or her jurisdiction, refusing to exercise his or her jurisdiction or failing to observe a principal of natural justice.

## PART X RATIFICATION AND ENACTMENTS BY THE PARTIES

### 48. RATIFICATION OF AGREEMENT

48.1 The Parties agree that they will seek to ratify this Agreement and implement it in the following manner:

- (a) each First Nation agrees to develop a land code and to seek community approval; and
- (b) following community approval by two First Nations, Canada agrees to recommend to Parliament the

décision ou sentence d'un arbitre sont définitives et lient les parties qui ont participé aux mécanismes de règlement.

47.4 Aucune ordonnance ne peut être rendue, exécutée ou inscrite, et aucune poursuite ne peut être initiée devant une cour par voie d'injonction, de mandamus, de certiorari, de prohibition ou de quo warranto pour contester, réviser, empêcher ou limiter une mesure prise par le vérificateur, l'arbitre ou le conciliateur nommé sous le régime du présent accord.

47.5 Malgré l'article 47.4, une demande de révision judiciaire peut, dans les 30 jours qui suivent la décision prise par toute personne agissant comme vérificateur, arbitre ou conciliateur sous le régime du présent accord, être présentée en vertu de la Loi sur les Cours fédérales au motif que cette personne a outrepassé sa compétence, refusé de l'exercer ou n'a pas respecté un principe de justice naturelle.

## PARTIE X RATIFICATION PAR LES PARTIES ET MESURES LÉGISLATIVES

### 48. RATIFICATION DE L'ACCORD

48.1 Les Parties conviennent de ratifier le présent accord et de le mettre en oeuvre de la façon suivante :

- a) chaque première nation s'engage à élaborer un code foncier et à le soumettre à l'approbation de la communauté;
- b) une fois un code approuvé par deux premières nations, le Canada s'engage à recommander au Parlement l'adoption



enactment of legislation.

48.2 This Agreement will be considered to have been ratified by a First Nation when the First Nation approves a land code, and to have been ratified by Canada when the federal legislation comes into force.

#### 49. ENACTMENTS BY THE PARTIES

49.1 Canada agrees that the federal legislation that it recommends to Parliament will be consistent with and will ratify this Agreement.

49.2 In the event of an inconsistency or conflict between the federal legislation and any other federal enactment, the federal legislation will prevail to the extent of the inconsistency or conflict.

49.3 In the event of any inconsistency or conflict between the land code of a First Nation and the provisions of a First Nation law or of a by-law made by its council under section 81 of the Indian Act, the land code will prevail to the extent of the inconsistency or conflict.

### PART XI OTHER MATTERS

#### 50. LIABILITY

50.1 The First Nation will not be liable for acts or omissions of Canada or any person or entity authorized by Canada to act in relation to First Nation land that occurred before the First Nation's land code takes effect.

d'une loi de ratification.

48.2 Le présent accord sera réputé avoir été ratifié par une première nation lorsque celle-ci aura approuvé un code foncier, et il sera réputé avoir été ratifié par le Canada au moment de l'entrée en vigueur de la loi de ratification.

#### 49. MESURES LÉGISLATIVES ADOPTÉES PAR LES PARTIES

49.1 Le Canada s'engage à ce que la loi de ratification qu'il présentera au Parlement soit conforme au présent accord et ait pour effet de le ratifier.

49.2 En cas d'incompatibilité ou de conflit entre la loi de ratification et une autre loi fédérale, la loi de ratification l'emporte dans la mesure de l'incompatibilité ou du conflit.

49.3 En cas d'incompatibilité ou de conflit entre le code foncier d'une première nation et des dispositions de ses textes législatifs ou de règlements administratifs pris par son conseil en vertu de l'article 81 de la Loi sur les Indiens, le code foncier l'emporte dans la mesure de l'incompatibilité ou du conflit.

### PARTIE XI AUTRES QUESTIONS

#### 50. RESPONSABILITÉ

50.1 La première nation n'est pas responsable des actes ou omissions du Canada ou d'une personne ou entité autorisée par le Canada à agir à l'égard des terres de première nation et qui surviendraient avant l'entrée en vigueur du

50.2 Canada will not be liable for acts or omissions of the First Nation or any person or entity authorized by the First Nation to act in relation to First Nation land that occur after the First Nation's land code takes effect.

50.3 Canada will indemnify a First Nation for any loss arising from an act or omission by Canada, or any person or entity acting on behalf of Canada, in respect of First Nation land that occurred before the First Nation's land code takes effect.

50.4 The First Nation will indemnify Canada for any loss arising from an act or omission by the First Nation, or any person or entity acting on behalf of the First Nation, in respect of First Nation land that occurs after the land code takes effect.

50.5 No action or other proceeding lies or shall be commenced against a person acting as a member of the Lands Advisory Board, a mediator, verifier, neutral evaluator or arbitrator for or in respect of anything done, or omitted to be done, in good faith, during the course of and for the purposes of carrying out his or her functions under this Agreement.

## 51. FIRST NATION LANDS REGISTER

51.1 Canada will establish a First Nation

code foncier de la première nation.

50.2 Le Canada n'est pas responsable des actes ou omissions de la première nation ou d'une personne ou entité autorisée par celle-ci à agir à l'égard des terres de première nation et qui surviendraient après l'entrée en vigueur du code foncier de la première nation.

50.3 Le Canada s'engage à indemniser la première nation de toute perte découlant d'un acte ou d'une omission du Canada, ou d'une personne ou entité agissant pour son compte, à l'égard des terres de première nation et qui surviendrait avant l'entrée en vigueur du code foncier de la première nation.

50.4 La première nation s'engage à indemniser le Canada de toute perte découlant d'un acte ou d'une omission de la première nation, ou d'une personne ou entité agissant pour son compte, à l'égard des terres de première nation et qui surviendrait après l'entrée en vigueur du code foncier.

50.5 Aucune action ni autre procédure ne peut être intentée contre une personne agissant en qualité de membre du Conseil consultatif des terres, de médiateur, de vérificateur, de conciliateur ou d'arbitre pour avoir, de bonne foi, agi ou omis d'agir dans l'exercice de ses fonctions ou dans le but de les exercer aux termes du présent accord.

## 51. REGISTRE DES TERRES DE PREMIÈRES NATIONS

51.1 Le Canada est tenu d'établir un

Lands Register to record documents respecting First Nation land or interests or land rights in First Nation land. It will be administered by Canada as a subsystem of the existing Reserve Land Register.

51.2 A separate register will be maintained for each First Nation with a land code in effect.

51.3 The Governor in Council will be authorized in the federal legislation to make regulations respecting the First Nation Lands Register. These regulations will be developed by the Lands Advisory Board and the Minister.

## 52. STATUS OF DOCUMENTS

52.1 The Statutory Instruments Act, or any successor legislation, will not apply to a land code or to First Nation laws.

## 53. PROVINCIAL RELATIONS

53.1 Where Canada and a First Nation intend to enter into an agreement that is not referred to in this Agreement but is required to implement this Agreement and where it deals with matters that normally fall within provincial jurisdiction, or may have significant impacts beyond the boundaries of First Nation land, Canada and the First Nation will invite the affected province to be a party to the negotiations and resulting agreement.

registre des terres de premières nations où seront consignés les documents relatifs aux terres de premières nations ou aux intérêts ou aux droits fonciers sur celles-ci. Ce registre sera administré par le Canada à titre de sous-système du registre actuel des terres de réserve.

51.2 Un registre distinct sera créé pour chaque première nation ayant un code foncier en vigueur.

51.3 La loi de ratification autorisera le gouverneur en conseil à prendre un règlement concernant le registre des terres de premières nations. Ce règlement sera élaboré conjointement par le Conseil consultatif des terres et le ministre.

## 52. STATUT DES DOCUMENTS

52.1 La Loi sur les textes réglementaires ou les lois qui pourraient la remplacer, ne s'appliqueront pas au code foncier, ni aux textes législatifs des premières nations.

## 53. RAPPORT AVEC LES PROVINCES

53.1 Si le Canada et une première nation entendent conclure une entente qui n'est pas mentionnée dans le présent accord mais qui est nécessaire à la mise en oeuvre du présent accord, et si cette entente traite des questions qui relèvent normalement de la compétence des provinces ou risque d'avoir des effets importants à l'extérieur des terres de première nation, le Canada et la première nation inviteront la province concernée à participer aux négociations de l'entente ainsi qu'à l'entente qui en résulte.

## 54. TIME LIMITS

54.1 The time limits in this Agreement for the doing of anything may be waived on consent.

## 55. OTHER REGIMES

55.1 Nothing in this Agreement prevents a First Nation, at any time, from opting into any other regime providing for community decision-making and community control, if the First Nation is eligible for the other regime and opts into it in accordance with procedures developed for that other regime.

55.2 Sub-clause 38.1 and clause 57 do not apply to a First Nation to which sub-clause 55.1 applies.

## 56. REVIEW PROCESS

56.1 The Lands Advisory Board will, on a continuing basis, consult with representatives of the Parties for the purpose of assessing the effectiveness of this Agreement and the federal legislation.

56.2 Within four years of the federal legislation coming into force, the Minister and the Lands Advisory Board or their representatives will jointly conduct a review of this Agreement. It will focus on the following issues, among others:

- (a) the functioning of land management under this Agreement;
- (b) the adequacy and appropriateness of the funding arrangements;

## 54. DÉLAIS

54.1 Les Parties peuvent, par consentement mutuel, renoncer aux délais prévus par le présent accord.

## 55. AUTRES RÉGIMES

55.1 Aucune disposition du présent accord n'empêche une première nation, en tout temps, d'adhérer à tout autre régime en matière de prise de décision et de contrôle par la communauté, à la condition que cette première nation soit admissible à adhérer à cet autre régime et y adhère, conformément à la procédure prévue par cet autre régime.

55.2 Le paragraphe 38.1 et l'article 57 ne s'appliquent pas à une première nation à laquelle le paragraphe 55.1 s'applique.

## 56. MÉCANISME D'EXAMEN

56.1 Le Conseil consultatif des terres est tenu de consulter régulièrement les représentants des Parties dans le but d'évaluer l'efficacité du présent accord et de la loi de ratification.

56.2 Dans les quatre ans de l'entrée en vigueur de la loi de ratification, le ministre et le Conseil consultatif des terres ou leurs représentants procéderont conjointement à un examen du présent accord. Cet examen portera notamment sur les points suivants :

- a) le fonctionnement de la gestion des terres aux termes du présent accord;
- b) le caractère adéquat et approprié des modalités de financement;

(c) the role of the Lands Advisory Board;

(d) whether there is a demand by other First Nations to use this Agreement;

(e) changes that may improve the functioning of First Nation land management;

(f) the dispute resolution processes; and

(g) such other issues as may be agreed to by the Parties.

c) le rôle du Conseil consultatif des terres;

d) l'identification d'autres premières nations désirant se prévaloir du présent accord;

e) les changements qui pourraient améliorer le fonctionnement de la gestion des terres de première nation;

f) les mécanismes de règlement des différends;

g) toute autre question convenue par les Parties.

56.3 Canada and the First Nations will make best efforts to complete this review within one year. Following completion of the review, the Minister will meet with representatives of the First Nations to discuss the results of the review.

56.3 Le Canada et les premières nations sont tenus de s'efforcer d'achever cet examen dans un délai d'un an. À la fin de l'examen, le ministre rencontrera les représentants des premières nations pour en analyser les résultats.

## 57. AMENDMENTS

## 57. MODIFICATIONS

57.1 Until September 1, 2003, this Agreement may be amended by agreement of the parties, provided that the amendments to Part VIII may be made with the consent of Canada and 2/3 of the original First Nation parties to this Agreement.

57.1 Le présent accord peut être modifié jusqu'au 1<sup>er</sup> septembre 2003 avec le consentement des parties, pourvu que les modifications à la Partie VIII soient apportées avec le consentement du Canada et des deux tiers des premières nations qui étaient Parties initiales au présent accord.

57.2 No amendment affecting the powers, authorities, obligations, operations or operational funding of a First Nation that has ratified this agreement is effective with respect to that First Nation without the consent of that First Nation.

57.2 Aucune modification ayant une incidence sur les pouvoirs, les autorités, les obligations, les opérations ou les fonds de fonctionnement d'une première nation qui a ratifié le présent accord ne peut entrer en vigueur à l'égard de cette dernière sans son consentement.

57.3 After September 1, 2003, this Agreement, may, subject to 57.2, be amended with the consent of Canada and 2/3 of the First Nations which have ratified the Agreement, before, on or after that day.

## 58. RECITALS

58.1 The recitals form part of this Agreement.

## 59. COMING INTO FORCE

59.1 This Agreement will come into force in respect of Canada and a First Nation when Canada and that First Nation both ratify this Agreement under Part X.

59.2 Despite clause 59.1, such provisions of this Agreement as are necessary to allow a First Nation to ratify this Agreement before Canada ratifies this Agreement will have effect as of the day Canada and that First Nation both sign this Agreement.

57.3 Sous réserve du paragraphe 57.2, après le 1er septembre 2003, le présent accord peut être modifié avec le consentement du Canada et des deux tiers des premières nations qui l'ont ratifié que ce soit à cette date, ou avant ou après cette date.

## 58. PRÉAMBULE

58.1 Les dispositions figurant au préambule font partie du présent accord.

## 59. ENTRÉE EN VIGUEUR

59.1 Le présent accord entrera en vigueur pour ce qui est du Canada et d'une première nation au moment où le Canada et cette première nation auront tous deux ratifié le présent accord conformément à la Partie X.

59.2 Malgré le paragraphe 59.1, les dispositions du présent accord nécessaires à sa ratification par une première nation avant que le Canada ne l'ait ratifié entrent en vigueur le jour où le Canada et cette première nation auront tous deux signé le présent accord.

# FRAMEWORK AGREEMENT ON FIRST NATION LAND MANAGEMENT

## EXECUTIVE SUMMARY

### INTRODUCTION

The *Framework Agreement on First Nation Land Management* was signed by the Minister of Indian Affairs and Northern Development and 13 First Nations on February 12, 1996. One other First Nation was added as of December 1997. The Agreement was ratified by Canada through the *First Nations Land Management Act*, assented to June 17, 1999

The Agreement is an initiative by these 14 First Nations to take over the governance and management control of their lands and resources. This First Nation designed and driven *Framework Agreement* with Canada has expanded from the original 14 First Nation signatories to 84 First Nation Signatories in 2013. The *Framework Agreement* applies only to those First Nations who choose to ratify it.

The *Framework Agreement* is not a treaty and does not affect existing treaty or other constitutional rights of the First nations. .

The *Framework Agreement* provides the option to govern and manage reserve lands outside the *Indian Act*. The option to regain control of reserve land through a land code can only be undertaken with the consent of the community. A land code replaces approximately 30 sections of the *Indian Act*.

### TAKING CONTROL OF LAND GOVERNANCE

A First Nation signatory to the *Framework Agreement* develops its land governance system by creating its own Land Code, drafting a community ratification process and entering into an individual Agreement with Canada. The specific steps are set out in the *Framework Agreement*:

***The Land Code:*** Drafted and approved by the community, will be the basic land law of the First Nation and will replace the land management provisions of the Indian Act. The Minister of Indian Affairs and Northern Development will no longer be involved in the management and decision making of a First Nation's reserve lands. The Land Code does not have to be approved by the Minister or AANDC.

The Land Code is drafted by each First Nation and provides for the following matters:

- Identifies the reserve lands to be governed by the First Nation under its Land Code,
- Sets out the general rules and procedures for the use and occupation of these lands by First Nation members and others,
- Provides financial accountability for revenues from the lands (except oil and gas revenues, which continue under the Indian Oil and Gas Act),
- Provides the procedures for making and publishing First Nation land laws,
- Provides conflict of interest rules,
- Provides a community process to develop rules and procedures applicable to land on the breakdown of a marriage,
- Identifies a dispute resolution process,
- Sets out procedures by which the First Nation can grant interests in land or acquire lands for community purposes,
- Allows the delegation of certain land management responsibilities,
- Sets out the procedure for amending the Land Code,
- Deals with any other matter respecting the governance of First Nation reserve land and resources.

***Individual Transfer Agreement:*** An Individual Agreement between each community and the Minister will be negotiated to deal with such matters as:

- The reserve lands to be managed by the First Nation,
- The specifics of the transfer of the administration of land from Canada to the First Nation,
- The transitional and operational funding to be provided by Canada to the First Nation for land governance.

***Community Ratification Process:*** In order for the First Nation to assume control over its lands, the Land Code and the Individual Agreement must be ratified by the voting age members of the First Nation. All members of the First Nation who are at least 18 years of age, whether living off-reserve or on-reserve, have the right to vote on the Land Code and the Individual Agreement. The procedure for the community ratification process is developed by the community in accordance with the *Framework Agreement*.

***Federal Legislation:*** Canada agreed to ratify the *Framework Agreement* by enacting federal legislation that is consistent with the *Framework Agreement*. The *First Nations Land Management Act* was enacted and given royal assent on June 17, 1999.

***Verification:*** An independent person selected jointly by the First Nation and Canada, called a Verifier, confirms that the community ratification process and Land Code are consistent with the *Framework Agreement*. The Verifier monitors the community ratification process to ensure that the rules are followed.



***Recognition of Land Governance Authority:*** If the community ratifies their own Land Code and the Individual Agreement, control over First Nation lands and resources are no longer be subject to the *Indian Act*, but recognized to be under the governance authority of the First Nation.

## **TITLE TO FIRST NATIONS**

Reserve lands under the *Indian Act* are held by Her Majesty and are set apart for the use and benefit of a First Nation. This will not change under the *Framework Agreement*. These lands remain a federal responsibility under section 91(24) of the *Constitution Act, 1867*. In addition, the First Nation's land will be protected against future surrender for sale.

## **LEGAL STATUS AND POWERS OF FIRST NATIONS**

The *Framework Agreement* provides First Nations with all the legal status and powers needed to govern and manage their lands and resources. While First Nations will not be able to sell their land, they will be able to lease or develop their lands and resources, subject to any limits imposed by their own community Land Code.

***Law-Making Powers:*** A First Nation governing its lands under a Land Code will have the power to make laws in respect of the development, conservation, protection, management, use and possession of First Nation land. The Land Code does not authorize laws relating to the taxation of real or personal property. Such laws must be made separately pursuant to section 83 of the *Indian Act*. The First Nation's Council can also continue to make by-laws under section 81 of the *Indian Act*.

***Land Management:*** The *Framework Agreement* provides the First Nation with all the powers of an owner in relation to its First Nation Land, except for control over title or the power to sell it. The First Nation's Council can manage land and resources, as well as revenues from the land and resources, in accordance with its Land Code.

***Third Party Interests:*** Interests in First Nation land held by third parties, or by Canada, will continue in effect according to their terms and conditions under a Land Code. No new interests or licences may be acquired or granted except in accordance with the Land Code.

***First Nation Expropriation:*** The First Nation will have the option to acquire lands for community purposes upon payment of fair compensation to those whose interests are affected.

***Accountability:*** A Land Code will make provision for a First Nation to report to its members and to be accountable for the governance of their lands, resources and revenues.

***Marriage Breakdown:*** A First Nation will be able make rules on the rights of spouses to interests in First Nation land if their marriage breaks down. The community must, within 12 months of passage of its Land Code, develop and enact rules and procedures on this topic. The new rules and procedures will ensure the equality of women and men.

***Registration of Interests:*** All documents pertaining to land interests of a reserve will be recorded in the First Nation Land Registry System (FNLRS).

The FNLRS is:

- Electronic
- Provides for Instant Registration
- Priority based
- Paperless
- Backed by Regulation (Unlike the *Indian Act* registry system)

The FNLRS system and regulations are landmark achievements. These regulations made it possible for reserve to have greater land certainty, mortgageability, title insurance and drastically reduced or eliminated land transaction costs

## **PROTECTION OF FIRST NATION LAND**

The preserving of the quantity and quality of existing First Nations lands is a fundamental principle of the *Framework Agreement*. Some aspects of this principle are summarized below:

***Taxation and Seizure under Legal Process:*** The current exemption of reserve lands, and personal property situated on-reserve, will continue under the relevant provisions of the *Indian Act*.

***Environmental Protection:*** A First Nation with a land code in effect will be required to develop an environmental protection regime. A First Nation will have the power to make environmental assessment and protection laws and will harmonize these laws with federal and respective provincial environmental laws.

***Voluntary Exchange of Lands:*** A First Nation may decide that it is advantageous to exchange some of its First Nation lands for other lands. Provision can be made in its Land Code for a procedure to negotiate and approve such exchanges. An exchange of land cannot occur without the consent of the First Nation community.

***No Provincial Expropriation:*** Under the *Framework Agreement* there can be no expropriation of First Nation land by a provincial or municipal government or agency.

***Restricted Federal Expropriation:*** Canada's power to expropriate First Nation land is greatly restricted. That power can only be exercised with Cabinet approval and only when the expropriation is justified and necessary for a federal public purpose that serves

the national interest. Compensation must include provision for equivalent lands so that the land base of the First Nation is not diminished.

***Enforcement:*** The First Nation will have full power to enforce its land and environmental laws and may enter into further agreements with other jurisdictions to assist in such enforcement. A First Nation can appoint its own Justice of the Peace or special prosecutor to try offences created under a Land Code or a First Nation law. First Nation laws may make provision for search and seizure, fines, imprisonment, restitution, community service or alternate means for achieving compliance with its laws.

## **CONTINUING FEDERAL RESPONSIBILITY**

Canada will remain liable for and will indemnify a First Nation for losses suffered as a result of any act or omission by Canada, or its agents, that occurred before the Land Code comes into effect. After that date, the First Nation is responsible for its own acts or omissions in managing its lands.

## **DISPUTE RESOLUTION**

The First Nation will establish its own processes for dealing with disputes in relations to its lands and resources. These can include mediation, neutral evaluation and arbitration. In the case of a disagreement between the First Nations and Canada on the meaning or implementation of the *Framework Agreement*, there are provisions in the *Framework Agreement* to resolve the dispute outside the courts.

## **LANDS ADVISORY BOARD AND RESOURCE CENTRE**

The First Nations party to the *Framework Agreement* established a Lands Advisory Board and Resource Centre to assist them in implementing their own land governance regimes, including developing model land codes, laws, documents, agreements and management systems.

## FIRST NATIONS INVOLVED

The following is a list of the 40 First Nations who signed the *Framework Agreement* and who have enacted Land Codes pursuant to the *Framework Agreement*.

### BC

1. Beecher Bay
2. Kitselas
3. Leq' a: mel
4. Lheidli T'enneh
5. Matsqui
6. Musqueam
7. Seabird Island
8. Shx'wha:y Village
9. Skawahlook
10. Sliammon
11. Snaw Naw As (Nanoose)
12. Songhees
13. Squiala
14. Sumas
15. Tsawout
16. Tsawwassen<sup>(a)</sup>

### MB

1. Chemawawin
2. Opaskwayak
3. Swan Lake

17. Tsekani (McLeod Lake)
18. Ts'kw'aylaxw (Pavilion)
19. T'sou-ke
20. Tsleil-Waututh
21. Tzeachten
22. Westbank<sup>(b)</sup>
23. We Wai Kai (Cape Mudge)
24. We Wai Kum (Campbell River)

### SK

1. Kahkewistahaw
2. Kinistin
3. Muskeg Lake
4. Muskoday
5. Whitecap Dakota
6. Flying Dust

### ON

1. Anishinaabeg of Naongashiing
2. Georgina Island
3. Henvey Inlet
4. Mississauga
5. Nipissing
6. Scugog Island
7. Whitefish Lake

(a) Now implementing treaty

(b) Now implementing full self-government

## **(Insert name of FN) INDIVIDUAL AGREEMENT SUMMARY**

(Insert name of FN) is one of a number of First Nations (FN) in Canada who is party to the *Framework Agreement on First Nation Land Management (Framework Agreement)*. The federal government is also a party to the agreement and ratified it through the *First Nation Lands Management Act* on June 17, 1999.

The *Framework Agreement* and legislation enable these FNs to take control over the management and administration of their reserve lands from Aboriginal Affairs and Northern Development Canada (AANDC). In order to do this each FN must enter into an Individual Agreement with AANDC. This Individual Agreement sets out the specifics of the transfer of management of reserve lands from Canada to the (Insert name of FN).

The Individual Agreement for the (Insert name of FN) is summarized as follows:

### **Section 1 – Interpretation**

This section defines the terms that are used in the Individual Agreement, including identifying the reserve lands that will be transferred.

#### **Description of (Insert name of FN) Land**

This section identifies the lands that are subject to this Individual Agreement:

**(Insert Legal Land Descriptions here as recorded in the approved Legal Land Description Report)**

### **Section 2 – Information Provided by Canada**

This section confirms that Canada has provided the (Insert name of FN) with all of the information in its possession regarding dispositions of reserve lands, environmental issues on reserve lands and any similar information. Land interests and dispositions are set out in “Annex C”.

The information collected during the Phase I Environmental Site Assessment (ESA) that was conducted in (insert date of Phase I ESA work) is summarized in “Annex D”. The environmental issues were identified in this report and an action plan for the Phase II Environmental Site Assessment is also included.

**(Insert the potential areas of environmental concerns as identified in the Phase I ESA report)**

This section also includes any other information in Canada's possession on monies payable, including information on any arrear of rent as the date of transfer as set out in "Annex E".

### **Section 3 – Transfer of Land Management**

This section provides that Canada will transfer the management and control of reserve lands to the **(Insert name of FN)** on the effective date of the Individual Agreement. **(Insert name of FN)** will then begin managing and controlling its reserve lands and natural resources under its Land Code.

### **Section 4 – Transfer of Rights**

This section transfers all of Canada's rights, obligations, powers and authorities in or under all previous interests or licenses affecting reserve lands to the **(Insert name of FN)**.

### **Section 5 – Operational Funding**

This section obligates Canada to provide the **(Insert name of FN)** with funding and resources for managing reserve lands. The amount of funding is set out in "Annex A". The amount of FN operational funding is based upon a variety of factors as outlined in the Memorandum of Understanding on Funding (October 19, 2011) that would give **(Insert name of FN)** **(Insert the operational funding amount)** for the first fiscal year.

### **Section 6 – Transfer of Revenues**

This section obligates Canada to transfer to the **(Insert name of FN)** any monies that it holds in trust for the use and benefit of the **(Insert name of FN)** and any revenues it receives from reserve lands. Canada will transfer to the **(Insert name of FN)** the amount of **(Insert the amount to be transferred)** that is currently held in the **(Insert name of FN)** Revenue Account. The procedures for the transfer of funds are set out in "Annex B".

### **Section 7 – Notice to Other Persons**

This section requires Canada to notify any non-members who hold an interest in reserve land that management of the reserve lands will be transferred to the **(Insert name of FN)** and that the **(Insert name of FN)** will collect the revenues from those interests in the future. This notice must be given within thirty days of the ratification of the Land Code.

### **Section 8 – Interim Environmental Assessment Process**

This section provides that until the **(Insert name of FN)** establishes its own Environmental Assessment process, the *Canadian Environmental Assessment Act* will

apply. The procedure for Environmental Assessments during this period is set out in “Annex F”.

**Sections 9 and 10**

These are standard formalities regarding this amendment of the Individual Agreement, giving formal notice and documentation.

**Section 11 – Dispute Resolution**

This section provides that the dispute resolution provisions of the *Framework Agreement* apply to any disputes between Canada and the **(Insert name of FN)** regarding the Individual Agreement.

**Section 12 – Date of Coming into Force**

This section provides that the Individual Agreement comes into force at the same time as the **(Insert name of FN)** Land Code.



# **INVENTORY OF CONTAMINATED SITE GUIDELINES AND STANDARDS IN SELECTED CANADIAN JURISDICTIONS**

Prepared for:

**First Nations Lands Advisory Board**

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## 1.0 INTRODUCTION

The First Nations Lands Advisory Board (LAB) is assisting First Nations to develop environmental plans as part of their responsibility under the Framework Agreement. There is a growing demand from these operational and developmental communities for information regarding environmental management, including the management of contaminated sites. Environmental Management Agreements (EMAs), described in the Framework Agreement, are to include information on the environmental standards to apply on First Nations land.

The LAB requested WRG Westland Resource Group (Westland) to compile an inventory of environmental guidelines and standards associated with soil, sediment, water, and air. This inventory and report have been prepared for the purpose of summarizing federal and provincial environmental standards.

The scope of the inventory is limited to gathering information from the federal government and the provinces of British Columbia, Alberta, Saskatchewan, Manitoba and Ontario. Each of the provinces have legislation that addresses contaminated sites, administered by provincial agencies that establish and regulate guidelines and standards for monitoring environmental quality. Federally, the inventory includes guidelines and standards from the Canadian Council of Ministers of the Environment (CCME), the Contaminated Sites Management Working Group (CSMWG) of Environment Canada (EC), and Health Canada (HC).

The results of the inventory are presented in Microsoft (MS) Excel spreadsheets that are colour coded to indicate differing federal and provincial guidelines and standards for respective contaminants. The report includes four spreadsheets for soil, two spreadsheets for sediment, four spreadsheets for water, and one spreadsheet for air.

This report contains a brief discussion of the differences between the meanings of terms that are commonly associated with environmental standards. The report also provides an overview context of contaminated site management on First Nations reserve lands in Canada. This report does not attempt to interpret differences between federal and provincial guidelines or standards, nor does it discuss the derivations of guidelines or standards for particular contaminants. Readers should recognize that guidelines are regularly amended by federal and provincial agencies, so this document only provides a 'snapshot' of current guidelines.

### 1.1 Contaminated sites management on reserve lands

The main national program that focuses on the management of contaminated sites on reserve lands in Canada is the Contaminated Sites Management Program (CSMP), administered by Indian and Northern Affairs Canada (INAC). The CSMP manages contaminated sites on

more than 800 inhabited reserves in Canada (INAC, 2009). To determine the extent and severity of contaminated sites on reserve lands, INAC uses the CCME National Classification System for Contaminated Sites (NCSCS). The contaminated sites management policy of INAC (2009) provides direction for the management of contaminated sites on reserve lands and on any other lands under INAC's custodial responsibility (INAC, 2009).

### 1.2 National classification system for contaminated sites

The NCSCS provides scientific and technical assistance in the identification and prioritization of contaminated sites, which may be considered to represent high, medium, or low risk to human health and or to the environment (CCME, 2008). The NCSCS provides an extensive list of contaminants that are rated for hazard levels, noted as "persistent" under the Canadian Environmental Protection Act (CEPA) or as being potentially carcinogenic. The NCSCS acts as a screening framework for identifying priority of the sites for remediation, based on potential adverse impacts on human health and the environment.

### 1.3 Terminology

Terminology is important to the creation and application of environmental standards. Key terms that are associated with environmental standards as discussed in this report include:

- **Criteria:** Numerical value(s) or narrative statement for a physical, chemical, or biological characteristic of water, biota, soil, or sediment that must not be exceeded to protect, maintain, and improve the specific uses of soil, sediment, and water. (CCME, 1999).
- **Guidelines:** Generic numerical concentrations or narrative statements recommended to as upper limits to protect and maintain the specified uses of air, water, sediment, soil, or wildlife. These values are not legally binding. (CCME, 1999).
- **Objectives:** Numerical concentration or narrative statements that have been established by taking into account site specific conditions to protect and maintain a specified use of a resource, such as water, soil, or sediment, at a particular site (CCME, 1999).
- **Standards:** A legally enforceable numerical limit or narrative statement, such as in a regulation, statute, contract, or other legally binding document, that has been adopted from a criterion or an objective (CCME, 1999).

## 2.0 STUDY OBJECTIVES AND RESEARCH METHODS

### 2.1 Study Objectives

The primary objective of this study is to create a cross jurisdictional inventory of guidelines and standards that apply to soils, sediments, water, and air. A secondary objective of the study is to identify applicable legislation and regulations that pertain to contaminated sites in

federal and applicable provincial jurisdictions. This inventory is meant to support the development of environmental quality standards in EMAs.

## 2.2 Research methods

Westland compiled inventory information through extensive Internet-based research and e-mail and telephone interviews with staff of the CSMWG and the provincial agencies responsible for regulation of environmental standards. As the scope of this project is limited to developing a current inventory of environmental quality guidelines, the research efforts did not extend to the origin of guidelines, or to management implications, or methods of remedial action.

## 3.0 CATEGORIES OF ENVIRONMENTAL STANDARDS

### 3.1 Land use categories and soil texture

Contaminated soil guidelines are organized into several land use categories for purposes of determining of toxicological effects of contaminants, potential exposure pathways, and remedial responses. Consequently, guideline values for contaminants often differ among land use categories. Common land use categories include agriculture, residential, parkland, commercial, and industrial. Some provincial jurisdictions have specific land use categories; British Columbia has an urban park category, Alberta has a natural areas category, and Saskatchewan forested and subsoil categories.

The CCME, Alberta, and Manitoba, link soil quality guidelines to specific soil texture types to minimize the effect of soil variability on chemical analysis (CCME, 2006). For example coarse-grained soils (sand and gravels) are defined as soil, having more than 50% by mass of particles exceeding 75 µm mean diameter ( $D_{50} > 75 \mu\text{m}$ ) (CCME, 2006). Fine-grained soils (silts and clays) contain more than 50% by mass particles less than 75 µm mean diameter ( $D_{50} < 75 \mu\text{m}$ ) (CCME, 2006). Soil texture affects the transport and bioavailability of a contaminant (CCME, 2006).

### 3.2 Sediment use categories

There are two sediment types that have contaminant guidelines, freshwater sediment and marine sediment. Of the jurisdictions reviewed for this study, only CCME, British Columbia and Ontario have guidelines for freshwater and marine sediment.

### 3.3 Water use categories

Several water use categories are applied to the management of contaminants. Water use categories include ground water, drinking water, aquatic life (freshwater and marine), and irrigation. The CCME guidelines for Canadian water quality are based on scientific research of health effects of contaminants, aesthetic effects (e.g. taste and odour), and operational

effects (e.g. water treatment). Currently, CCME is working with provinces to harmonize federal and provincial standards.

## 3.4 Air quality

Air quality objectives described in this inventory are generally based on the National Ambient Air Quality Objectives (NAAQOs). The NAAQOs are national goals for outdoor air quality that protect public health, the environment, or aesthetic properties of the environment (CCME, 1999). The NAAQOs were developed from the recommendations of the Federal-Provincial Working Group on Air Quality Objectives and Guidelines. The objectives are designed to provide targets for federal, provincial, and regional air quality management activities.

## 4.0 JURISDICTIONAL COMPARISON

This section compares federal environmental guidelines and standards with those in the provinces of British Columbia, Alberta, Saskatchewan, Manitoba, and Ontario.

### 4.1 Canada-wide standards

Canada-wide standards (CWS) have been developed under the Canada-wide Environmental Standards Sub Agreement of the Canada-wide Accord on Environmental Harmonization (CCME, 2009). The Environmental Sub-Agreement provides a framework for federal, provincial, and territorial Environment Ministers to address key environmental protection and health risk-reduction issues that require common environmental standards across the country). CWS have been developed for specific substances, industrial emissions, and air quality. The CCME has endorsed CWS for the following contaminants:

- benzene,
- dioxin and furan emissions from conical waste combustion of municipal waste,
- dioxin and furan emissions from incineration and coastal pulp and paper boilers,
- dioxin and furan emissions from iron sintering plants,
- dioxin and furan emissions from steel manufacturing electric arc furnaces,
- mercury emissions,
- mercury emissions from coal-fired electric power generation plants,
- mercury-containing lamps,
- mercury for dental amalgam waste,
- particulate matter and ground-level ozone, and
- petroleum hydrocarbons in soil.

Each CCME member is responsible for implementing the CWS in respective jurisdictions, with the goal of effective, efficient, and harmonized implementation. However, not all CWS

are outright adopted by individual jurisdictions, rather, a government can use discretion in applying specific measures to regulate a particular contaminant addressed by a CWS.

#### 4.1 CCME and Canadian environmental quality guidelines

The federal guidelines used for soil, water, and air contamination have been developed by the CCME and are collectively a part of the Canadian Environmental Quality Guidelines (CEQG). The CCME is an intergovernmental forum comprised of Environmental Ministers from federal, provincial, and territorial governments. The ministers in the CCME develop national strategies, norms, and guidelines that each provincial and territorial environment ministry across the country can use (CCME, 2009). One of the main objectives of the CCME is to propose nationally consistent environmental guidelines and standards, such as the CEQG. More specifically, the CEQG are nationally endorsed science-based goals for the quality of atmospheric, aquatic, and terrestrial ecosystems (CCME, 2001).

The adoption and implementation of the CCME guidelines vary among provincial and territorial jurisdictions. At the federal level, the guidelines support various legislative acts, such as the Canadian Environmental Protection Act (CEPA) (CCME, 2009). The CCME has also recently produced a Canada wide strategy for the management of wastewater at the municipal level. The CCME has no authority to implement or enforce legislation, so it is up to provincial, territorial, and municipal governments to adopt and enforce CCME guidelines and standards.

#### 4.2 British Columbia guidelines

The management of contaminated sites in British Columbia is regulated by the *Environmental Management Act* and the associated Contaminated Sites Regulation (CSR) (CSR; BC Reg. 375/96, amendments to January 2009). Under the CSR, generic numerical soil standards and “matrix” numerical standards are listed for specific contaminants. The generic numerical standards are single values for substances, and are intended to protect human health and the environment at any site regardless of site-specific features (BC Ministry of Environment, 2009). Matrix numerical standards are ranges of concentrations of substances affect environmental and human health. The British Columbia CSR also lists generic numerical criteria for freshwater, marine, and estuarine sediments. The CSR also lists numerical water standards in the categories of aquatic life, irrigation, livestock, and drinking water.

In British Columbia a set of air quality objectives and guidelines are listed at three levels of emission concentration (Levels A, B, C). These levels are similar to the federal air quality objectives that are listed as maximum desirable, maximum acceptable, and maximum tolerable. Air quality is evaluated by emission inventories, air quality monitoring, and dispersion modeling. (Environment Canada, 2009).

#### 4.3 Alberta guidelines

In Alberta, the *Environmental Protection and Enhancement Act* (EPEA) and the *Water Act* provide the legislative basis for management of contaminated soil and groundwater. Regulatory requirements related to substance release, remediation, and reclamation are found in the EPEA (Alberta Environment, 2009). Under the *Water Act*, the Alberta Ministry of Environment establishes guidelines for water management including:

- Alberta Tier 1 Contaminated Soil and Groundwater Remediation Guidelines
- Alberta Tier 2 Contaminated Soil and Groundwater Remediation Guidelines
- Exposure Control

The Tier 1 and 2 guidelines include of guidelines from CCME, Health Canada, and Alberta Environment. The Tier 1 and Tier 2 guidelines have also incorporated the Canada-wide standards for petroleum hydrocarbons. Tier 1 remediation guidelines are generic based on identification of receptors to be protected under various land uses, exposure pathways, and parameters for conservative predictions of risk (AENV, 2009). Tier 1 guidelines have been developed to protect sites with greater sensitivity and can therefore be used at most sites without modification (AENV, 2009). The sensitivity of a site is related to differences in receptors and site conditions. The Tier 2 approach allows for consideration of site-specific information such as exposure pathways that may increase human and ecological risk to determine the appropriate guideline (AENV, 2009). Exposure control involves risk management through exposure barriers or administrative controls based on site-specific risk assessment. This approach is used for sites that require restrictions to typical land use activities as well as ongoing risk management (AENV, 2009). Alberta has established generic guidelines for use of groundwater and surface water affected by contaminated groundwater sources. Additionally, Alberta has adopted the CCME guidelines for drinking water. Water use categories in Alberta include:

- human consumption (potable water),
- aquatic life,
- livestock and wildlife watering, and
- irrigation.

Under the EPEA, Alberta Environment has developed ambient air quality objectives and guidelines to protect air quality (Alberta Environment, 2008). Some of Alberta’s objectives are equivalent to or more stringent, than existing NAAQOs. For some substances, Alberta has adopted objectives from other jurisdictions such as Ontario, Texas, and California (Alberta Environment, 2008).

#### 4.4 Saskatchewan guidelines

Contaminated sites and groundwater in Saskatchewan are managed under the *Environmental Management and Protection Act*. The criteria applied to the assessment of contaminated sites in Saskatchewan have generally been developed from the CCME EQGs. Additional remediation criteria are contained in the Upstream Petroleum Sites Remediation Guidelines. The soil remediation criteria listed in the Saskatchewan Upstream Petroleum Sites Remediation Guidelines include the categories of agricultural, residential, forest, and subsoil. These guidelines also list water quality guidelines for freshwater aquatic, irrigation, livestock watering, and drinking water uses. The 2008 PHC CWS have been applied to all contaminated sites in Saskatchewan but there are no specific regulations were passed to support the implementation of the PHC CWS. For air quality, the Saskatchewan government uses both federal and provincial standards. Ambient Air quality standards are listed under the Clean Air Regulation (C-12.1 REG 1) of the provincial *Clean Air Act*.

#### 4.5 Manitoba guidelines

In Manitoba, soil and water quality are managed under the *Contaminated Sites Remediation and Consequential Amendments Act*. Manitoba has adopted the CCME PHC CWS, the CCME EQGs, and the Health Canada drinking water quality guidelines. Manitoba differs from other provincial jurisdictions in that it has unique guidelines for the consumption of aquatic life (*e.g.*, fish) tissues that contain chemical residues such as PCBs and DDT. Manitoba has adopted a three-tiered approach to contaminated site remediation. Tier 1 is criteria based and adopts the CCME EQGs for soil, sediments, and water. Tier 2 criteria include site-specific characteristics to modify the criteria based values of Tier 1. Tier 3 authorizes a full risk assessment for human and environmental health criteria, to be conducted and the development of a risk management plan. Provincial air quality management falls under the *Environment Act*. Ambient air quality criteria for Manitoba are used to define by three levels of air contaminants, maximum tolerable, maximum acceptable, and maximum desirable.

#### 4.6 Ontario guidelines

Soil, sediment, and groundwater standards in Ontario have been developed for management of contaminated sites in Ontario under Part XV.1 Records of Site Condition (RSC) of the *Environmental Protection Act* (Ontario Ministry of Environment, 2004). Contaminated site standards are regulated under RSC Regulation 153/04 of the *Environmental Protection Act*. (Ontario MoE, 2004). Three approaches are used to manage contaminated sites including the background approach, generic approach, and site specific risk assessment approach.

Drinking water and water used for agricultural purposes is legislated under the *Ontario, Water Resources Act* (OWRA) and the *Environmental Protection Act* (EPA). Ontario has developed Provincial Water Quality Objectives (PWQO) that serve as chemical and physical indicators for surface and ground water. The objectives are intended to protect all forms of

aquatic life and to protect recreational water uses based on public health and aesthetic considerations (Ontario, MoE, 2009). Ontario follows the CCME CWQG for agricultural uses (*i.e.* livestock and irrigation) and has specific standards and objectives for drinking water and aquatic life

Air quality in Ontario is regulated under Regulation 419: Air Pollution – Local Air Quality (O. Reg. 419) under the *Environmental Protection Act*. Most of standards and guidelines listed in this regulation are based on Ambient Air Quality Criteria (AAQCs) developed by the Ontario Ministry of Environment.

The province of Ontario has extensive listing of soil, water quality, and air quality contaminants, as well as scenarios of site conditions (*e.g.*, contaminated soils in contact with potable versus non - potable water). This inventory includes the guidelines and standards that are most comparable with other jurisdictions. This is also consistent with a general jurisdictional comparison conducted by the Environment Canada, Contaminated Sites Management Working Group. The documents to refer to for further guideline listings are listed in the reference section, they include:

- Technical support document for Ontario drinking water standards, objectives, and guidelines;
- Soil, groundwater, and sediment guidelines for use under Part XV.1 of the Environmental Protection Act; and
- Summary of Standards and guidelines to support Ontario regulation 419: Air pollution – local air quality.

#### 5.0 RECOMMENDATIONS

The following set of recommendations regarding the development of FN LAB contaminated site guidelines are based on current understanding of the environmental planning process, the requirement to meet the expressed needs of First Nations and to maintain the LAB's leadership role in supporting operational communities.

1. Operational communities of the FN LAB should prepare a “state of the environment” report as part of their Phase 1 Environmental Site Assessment (ESA) or as a separate Step 1 task. First Nations should identify known and suspected sources and types of contamination, which occur from past or current land uses or water uses. The First Nation should identify and map the contamination according to the land use categories that are mentioned in this report (*i.e.* agricultural, commercial, industrial, residential, parkland, forested).

2. Review the CCME (2006) document, *Recommended Principles on Contaminated Sites Liability*; specifically the recommendations on principles for a consistent approach to contaminated sites management in operational communities.
3. Operational First Nations considering how to respond to Framework Agreement requirements regarding environmental standards should consider adopting provincial guidelines and standards. This approach has the advantage of being easily administered, and the standards are shared by provincial and municipal governments, and industry. Additionally, provincial government staff and consultants that may assist in the remediation of contaminated sites or the training of individuals from operational communities are familiar with the application of provincial guidelines and standards.
4. FN LAB may wish to sponsor and organize local or regional workshops for member First Nation community representatives to examine issues associated with environmental standards.

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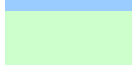
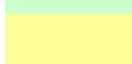
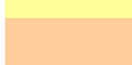

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## Federal and Provincial Comparison of Guidelines and Standards

### Inventory table structure

#### Colour coding for tables

	Federal guidelines, criteria, and standards
	British Columbia guidelines, criteria, and standards
	Alberta guidelines, criteria, and standards
	Saskatchewan guidelines, criteria, and standards
	Manitoba guidelines, criteria, and standards
	Ontario guidelines, criteria, and standards

#### Notes for contaminated soil tables

The units of measure (mg/kg) and (µg/g) are comparable as they equal the same amount in parts per million (ppm)

Values separated by " / " indicate surface vs. subsurface soils

For Ontario values in ( ) applies to medium and fine grained textured soils

The Ontario values represent surface soil in a potable ground water situation

BC standards are split between generic and matrix standards. Generic standards are single values are used regardless of site-specific features except land or sediment use. Matrix standards accommodate site specific conditions.

**PAH** = Polycyclic Aromatic Hydrocarbons.

**DDD** is 2,2-bis(p-chlorophenyl)-1,1-dichloroethane

**DDE** is 2,2-bis(p-chlorophenyl)-1,1-dichloroethylene

**DDT** is 2,2-bis(p-chlorophenyl)-1,1,1-trichloroethane

Methyl mercury ++ = Analysis for methyl mercury only applies when the mercury (total) standard is exceeded.

**N/V** "means no value." No guideline or standard has been determined.

**IARC** = Index Additive for Risk of Cancer

**VPH** = Volatile Petroleum Hydrocarbons

**LEPH** = Light Extractable Petroleum Hydrocarbons

**HEPH** = Heavy Extractable Petroleum Hydrocarbons

### Notes for contaminated sediment tables

No information on sediment guidelines or standards were found for the Provinces of Alberta, Saskatchewan, or Manitoba.

BC and ON present guideline values in µg/g dry weight

**ISQG** = Interim Sediment Quality Guideline . Derived when data are available but limited and information gaps are outlined.

**PEL** = Probable Effect Level. Indicates the level above which adverse effects are expected to occur frequently.

**SedQC<sub>ss</sub>** = Sediment Quality Criteria for Sensitive Sediment. Sensitive sediment means sediment at a site with sensitive aquatic habitat and for which sensitive sediment management objectives apply.

**SedQC<sub>ts</sub>** = Sediment Quality for Typical Sediment. Typical sediment that is characterized as not having sensitivity to habitat or where sensitive sediment management objectives apply.

**LEL** = Lowest Effect Level. Indicate a level of contamination that can be tolerated by the majority of sediment-dwelling organisms.

**DDD** is 2,2-bis(p-chlorophenyl)-1,1-dichloroethane

**DDE** is 2,2-bis(p-chlorophenyl)-1,1-dichloroethylene

**DDT** is 2,2-bis(p-chlorophenyl)-1,1,1-trichloroethane

**TEQ** = Toxic equivalents. TEQ approach used to characterize the toxicity of a mixture of related compounds by expressing toxicities of each individual compound in common terms and summing them.

**PAH** = Polycyclic Aromatic Hydrocarbons.

**PCBs** = Polychlorinated Biphenyls.

### Notes for water quality tables

British Columbia has established standards for freshwater and marine and/or estuarine aquatic life.

Ammonia standard in BC varies with pH, temperature and salinity. 10° C and 10 g/L is assumed.

In Manitoba, for aquatic life tissue residue: wildlife consumers of PCBs. Mammalian: 0.79 ng TEQ/kg diet; Avian: 2.4 ng TEQ/kg diet

In Manitoba, for Trihalomethanes (total THMs) if at the 1600 (µg/kg) level it is not fit for human consumption.

**MCPA** = MCPA is 4-chloro-2-methylphenoxy acetic acid

### Notes for air quality tables

**Maximum desirable level** is the long term goal for air quality and provides a basis for an anti-degradation policy for unpolluted parts of the country and for the continuing development of pollution control technology.

**Maximum acceptable level** is intended to provide adequate protection against effects on soil, water, vegetation, materials, animals, visibility, and personal comfort and well being.

**Maximum tolerable level** denotes time based concentrations of air contaminants beyond which, owing to a diminishing margin of safety, appropriate action is required without delay to protect the health of the general population.

**RF** = Reference level

**Formaldehyde action level** is the target used when managing the level of formaldehyde in an airshed.

**Formaldehyde episode level** = corresponds to the concentration that starts to be of concern to the health of the general population; at this level it is recommended that immediate steps be taken to reduce the release of formaldehyde into the atmosphere.

**Ontario** standards and guidelines are set for odour and health.

For Ontario air quality standards, values separated by a " / " indicated that the current (until February 2010) and future guideline (after February 2010).

**Contaminated Agricultural and Natural Area Soil - Federal and Provincial Comparison of Guidelines and Standards**

Contaminants	CCME (Guidelines)		British Columbia (Standards)	Alberta (Guidelines)				Saskatchewan (Guidelines)			Manitoba (Guidelines)		Ontario (Guidelines)
	Fine grained (mg/kg)	Coarse grained (mg/kg)	Generic and matrix numerical soil standards (µg/g)	Fine grained (mg/kg)	Coarse grained (mg/kg)	Natural Area fine grained (mg/kg)	Natural Area coarse grained (mg/kg)	Soil (General) (µg/g)	Subsoil (µg/g)	Forest soil (General) (µg/g)	Fine grained (mg/kg)	Coarse grained (mg/kg)	Surface soil (µg/g)
<b>General and inorganic parameters</b>													
pH (in 0.01 M CaCl <sub>2</sub> )	6-8	6-8		6-8.5	6-8.5	6-8.5	6-8.5	6 - 8	6 - 8	4 - 7	6-8	6-8	
Cyanide (Free)	0.9	0.9	2 to 3 (matrix standard)	0.9	0.9	0.9	0.9	0.9			0.9	0.9	100
Fluoride	400	200	200	200	200	200	200	200 - 400			400	200	
Sulphur (elemental)	0	500	4	500	500	500	500	0 - 500			0	500	
<b>Metals</b>													
Antimony	20	20	20	20	20	20	20	20			20	20	13
Arsenic (inorganic)	12	12	15 - 100 (matrix standard)	17	17	17	17	12			12	12	(25) 20
Barium	750	750	400 - 6500 (matrix standard)	750	750	750	750	750	2,000	500	750	750	(1000) 750
Barite-barium				3,200	3,200	3,300	3,300						
Beryllium	4	4	4	5	5	5	5	4			4	4	1.2
Boron (hot water soluble)	0	2	2	2	2	2	2	0 - 2			0	2	1.5+
Cadmium	1.4	1.4	1.5 - 1000 (matrix standard)	1.4	1.4	3.8	3.8	1.4	27	10	1.4	1.4	(4.0) 3.0
Chromium (hexavalent)	0.4	0.4		0.4	0.4	0.4	0.4	0.4			0.4	0.4	
Chromium (total)	64	64	50 - 300 (matrix standard)	64	64	64	64	64	87	64	64	64	(1000) 750
Cobalt	50	40	40	20	20	20	20	40 - 50			50	40	(50) 40
Copper	63	63	150 - 350,000 (matrix standard)	63	63	63	63	63	100	63	63	63	(200) 150
Lead	70	70	100 - 100,000 (matrix standard)	70	70	70	70	375	1,000	500	70	70	200
Mercury (inorganic)	6.6	6.6	0.6 - 100 (matrix standard)	6.6	6.6	12	12	6.6	30	6.6	6.6	6.6	10
Molybdenum	10	5	5	4	4	4	4	5.0 - 10.0			10	5	5
Nickel	50	50	150	50	50	50	50	150	500	100	50	50	(200) 150
Selenium	1	1	2	1	1	1	1	1			1	1	2
Silver	20	20	20	20	20	20	20	20			20	20	(25) 20
Thallium	1	1	2	1	1	1	1	1			1	1	4.1
Tin	50	5	5	5	5	5	5	50			50	5	
Uranium	23	23		23	23	33	33						
Vanadium	130	130	200	130	130	130	130	130	130	130	130	130	(250) 200
Zinc	200	200	150 - 35,000 (matrix standard)	200	200	200	200	200	380	200	200	200	(800) 600

**Contaminated Agricultural and Natural Area Soil - Federal and Provincial Comparison of Guidelines and Standards**

Contaminants	CCME (Guidelines)		British Columbia (Standards)	Alberta (Guidelines)				Saskatchewan (Guidelines)			Manitoba (Guidelines)		Ontario (Guidelines)
	Fine grained (mg/kg)	Coarse grained (mg/kg)	Generic and matrix numerical soil standards (µg/g)	Fine grained (mg/kg)	Coarse grained (mg/kg)	Natural Area fine grained (mg/kg)	Natural Area coarse grained (mg/kg)	Soil (General) (µg/g)	Subsoil (µg/g)	Forest soil (General) (µg/g)	Fine grained (mg/kg)	Coarse grained (mg/kg)	Surface soil (µg/g)
<b>Hydrocarbons</b>													
Benzene	0.0068/0.0068	0.0095/0.01	0.04 - 1000 (matrix standard)	0.046	0.073	0.078	0.078	0.5 - 5	5	5	0.0068/0.0068	0.0095/0.01	0.24
Toluene	0.08/0.08	0.37/0.37	1.5 - 40,000 (matrix standard)	0.52	0.49	0.49	0.49	3.0 - 30	30	30	0.08/0.08	0.37/0.37	2.1
Methylbenzene	0.018/0.018	0.082/0.082	1 - 3,500 (matrix standard)	0.11	0.21	0.21	0.21	5.0 - 50	50	50	0.018/0.018	0.082/0.082	0.28
Xylenes	2.4/2.4	11/11	0.1 - 65,000 (matrix standard)	15	12	28	28	5.0 - 50	50	50	2.4/2.4	11/11	25
Styrene	5	0.1	0.05	0.68	0.8	0.8	0.8	0.1 - 5			5	0.1	(1.7) 1.2
Petroleum Hydrocarbons F1 (C6 to C10)	180/180	130/200		210	24	210	210	130 - 200			180/180	130/200	100 (gas/diesel) 1000 (heavy oils)
Petroleum Hydrocarbons F2 (C>10 to C16)	250/250	150/150		150	130	150	150	150 - 250			250/250	150/150	
Petroleum Hydrocarbons F3 (C>16 to C34)	800/3,500	400/2,500		1,300	300	300	300	400 - 3500			800/3500	400/2500	
Petroleum Hydrocarbons F4 (C>34 to C50+)	5,600/10,000	2,800/10,000		5,600	2,800	2,800	2,800	2800 - 10000			5600/10000	2800/10000	
Acenaphthene				0.32	0.38	0.38	0.38						15
Acenaphthylene				5	6	6	6						100
Anthracene				0.0046	0.0056	0.0056	0.0056						28
Fluoranthene				0.032	0.039	0.039	0.039						40
Fluorene				0.29	0.34	0.34	0.34						340
Naphthalene	0.1	0.1	0.1	0.016	0.018	0.018	0.018	0.1			0.1	0.1	4.6
Phenanthrene	5	0.1	0.1	0.051	0.061	0.061	0.061	0.1 - 5			5	0.1	40
Pyrene	10	0.1		0.034	0.04	0.04	0.04	0.1 - 10			10	0.1	250
<b>Carcinogenic PAHs</b>													
Benzo[a]anthracene	1	0.1	0.1	0.07	0.083	0.083	0.083	0.1 - 1			1	0.1	6.6
Benzo[b+j]fluoranthene	1	0.1	0.1	6.2	6.2	6.2	6.2	0.1 - 1			1	0.1	12
Benzo[k]fluoranthene	1	0.1	0.1	6.2	6.2	6.2	6.2	0.1 - 1			1	0.1	12
Benzo[g,h,i]perylene													40
Benzo[a]pyrene	0.1	0.1	0.1	0.6	0.6	0.6	0.6	0.1 - 1			0.1	0.1	1.2
Chrysene				6.2	6.2	6.2	6.2						12
Dibenz[a,h]anthracene	1	0.1	0.1	7.4	8.4	8.4	8.4	0.1 - 1			1	0.1	1.2
Indeno[1,2,3-c,d]pyrene	1	0.1	0.1					0.1 - 1			1	0.1	12
<b>Halogenated Aliphatics</b>													
Vinyl chloride				0.0083	0.00034	0.02	0.02						(0.0075) 0.003
1,1-Dichloroethene				0.15	0.021	0.24	0.24						
Trichloroethene (Trichloroethylene, TCE)	0.01	0.01	0.15 - 200 (matrix standard)	0.054	0.012	0.081	0.081	0.01			0.01	0.01	(34) 26
Tetrachloroethene (Tetrachloroethylene, Perchloroethylene, PCE)	0.1	0.1	0.1 - 1000	0.69	0.16	0.77	0.77	0.1			0.1	0.1	(3.9) 1.1
1,2-Dichloroethane				0.0062	0.0027	0.041	0.041						
Dichloromethane (Methylene chloride)			0.1	0.052	0.048	0.095	0.095						1.1
Trichloromethane (Chloroform)			0.1	0.0029	0.001	0.003	0.003						0.13

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Tetrachloromethane (Carbon tetrachloride)			0.1	0.013	0.00056	0.062	0.062						(0.64) 0.10
Dibromochloromethane				0.12	0.12	1.5	1.5						0.09
<b>Chlorinated Aromatics</b>													
Chlorobenzene	1	0.1	0.1	0.39	0.018	1.1	1.1	0.1 - 1			1	0.1	2.4
1,2-Dichlorobenzene	1	0.1	0.1	0.097	0.18	0.18	0.18	0.1 - 1			1	0.1	0.88
1,3-Dichlorobenzene	1	0.1	0.1					0.1 - 1			1	0.1	30
1,4-Dichlorobenzene	1	0.1	0.1	0.051	0.098	0.098	0.098	0.1 - 1			1	0.1	0.32
1,2,3-Trichlorobenzene			0.05	0.26	0.26	0.31	0.31						
1,2,4-Trichlorobenzene				0.78	0.23	0.93	0.93						30
1,3,5-Trichlorobenzene				1.9	0.13	3.6	3.6						
1,2,3,4-Tetrachlorobenzene			0.05	0.042	0.05	0.05	0.05						
1,2,3,5-Tetrachlorobenzene				0.37	0.1	0.7	0.7						
1,2,4,5-Tetrachlorobenzene				0.19	0.052	0.37	0.37						
Pentachlorobenzene			0.05	3.7	4.5	4.5	4.5						
Hexachlorobenzene	2	0.05	0.01	0.8	0.5	7	7	0.05 - 2			2	0.05	0.46
2,4-Dichlorophenol				0.0029	0.0034	0.0034	0.0034						0.3
2,4,5 Trichlorophenol													3.2
2,4,6-Trichlorophenol				0.19	0.37	0.37	0.37						0.66
2,3,4,6-Tetrachlorophenol			0.05	0.039	0.047	0.047	0.047						
Pentachlorophenol	7.6	7.6	0.15 - 750,000 (matrix standard)	0.024	0.029	0.029	0.029	7.6			7.6	7.6	5
Dioxins & Furans	4 ng TEQ/kg	4 ng TEQ/kg	>1000 mg/g - 15,000 (matrix standard)	0.000004	0.000004	0.00025	0.00025	4			4	4	0.01
PCBs	0.5	0.5	0.5 - 5 (matrix standard)	1.3	1.3	1.3	1.3	0.5	5	5	0.5	0.5	0.5
<b>Pesticides</b>													
Aldicarb				0.012	0.012	0.065	0.065						
Aldrin				3.4	3.4	7.4	7.4						0.05
Atrazine and metabolites				0.0088	0.01	0.01	0.01						
Azinphos-methyl				0.41	0.75	0.75	0.75						
Bendiocarb				0.14	0.21	0.21	0.21						
Bromoxynil				0.044	0.052	0.052	0.052						
Carbaryl				1.9	3.6	3.6	3.6						
Carbofuran				0.082	0.089	1.2	1.2						
Chlorothalonil				0.0084	0.01	0.01	0.01						
Chlorpyrifos				3.2	3.8	95	95						
Cyanazine				0.029	0.032	0.21	0.21						
2,4-D				0.1	0.1	0.67	0.67						
DDT	0.7	0.7	15 - 550 (matrix standard)	0.015	0.018	0.018	0.018	0.7			0.7	0.7	1.6
Diazinon				2.2	4.2	4.2	4.2						
Dicamba				0.12	0.12	0.79	0.79						
Dichlofop-methyl				0.059	0.071	2.4	2.4						
Dieldrin				0.011	0.014	0.014	0.014						0.05
Dimethoate				0.0028	0.0027	0.0055	0.0055						

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Dinoseb				1.1	1.3	5.5	5.5						
Diquat				11	21	21	21						
Diuron				1.9	3.5	3.5	3.5						
Endosulfan				0.0085	0.01	0.01	0.01						0.18
Endrin				0.0075	0.009	0.009	0.009						0.05
Glyphosate				0.054	0.049	0.049	0.049						
Heptachlor epoxide				0.039	0.076	0.039	0.039						0.06
Lindane			0.1	0.11	0.13	0.6	0.6						
Linuron				0.051	0.059	0.059	0.059						
<b>Pesticides</b>													
Malathion				0.82	1.3	1.3	1.3						
MCPA				0.02	0.025	0.032	0.032						
Methoxychlor				0.046	0.056	0.056	0.056						4
Metolachlor				0.048	0.055	0.055	0.055						
Metribuzin				0.012	0.014	0.028	0.028						
Paraquat (as dichloride)				1.1	2.2	2.2	2.2						
Parathion				7.2	14	14	14						
Phorate				0.075	0.14	0.14	0.14						
Picloram				0.024	0.022	0.022	0.022						
Simazine				0.033	0.038	0.038	0.038						
Tebuthiuron				0.12	0.11	3.7	3.7						
Terbufos				0.08	0.15	0.15	0.15						
Toxaphene				3.3	4.8	6.3	6.3						
Triallate				0.0077	0.0092	0.0092	0.0092						
Trifluarin				0.038	0.045	0.045	0.045						
<b>Other Organics</b>													
Aniline				0.36	0.6	0.6	0.6						
Bis(2-ethyl-hexyl)phthalate				34	41	41	41						100
Dibutyl phthalate				0.54	0.65	0.65	0.65						
Dichlorobenzidine				4.2	8.1	8.1	8.1						1.3
Diisopropanolamine	180	180		14	17	17	17	180			180	180	
Ethylene glycol	960	960	5,500 - 65,000 (matrix standard)	60	62	62	62	960	960	960	960	960	
Hexachlorobutadiene				0.026	0.0067	0.031	0.031						(2.2) 0.38
Methylmethacrylate				1.3	0.1	1.8	1.8						
MTBE				0.044	0.046	0.062	0.062						
Nonylphenol + ethoxylates	5.7	5.7		2.7	3.3	3.3	3.3	5.7			5.7	5.7	
Phenol	3.8	3.8		0.0014	0.0012	0.0024	0.0024	3.8			3.8	3.8	40
Sulfolane	0.8	0.8		0.18	0.18	0.21	0.21	0.8			0.8	0.8	
<b>Radionuclides (Bq/g)</b>													
Uranium-238 Series (all progeny)				0.3	0.3	0.3	0.3						
Uranium-238 (238U, 234Th, 234pa, 234U)				10	10	10	10						
Thorium-230				10	10	10	10						
Radium-226 (in equilibrium with its progeny)				0.3	0.3	0.3	0.3						
Lead-210 (in equilibrium with 210B1 and 210Po)				0.3	0.3	0.3	0.3						
Thorium-232 Series (all progeny)				0.3	0.3	0.3	0.3						
Thorium-232				10	10	10	10						

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Radium-228 (in equilibrium with 228 progeny)				0.3	0.3	0.3	0.3						
Thorium-228 (in equilibrium with its progeny)				0.3	0.3	0.3	0.3						
Potassium-40				17	17	17	17						
<b>Miscellaneous contaminants</b>													
Electrical conductivity @ 25 degrees C dS/m (unconditional use)	2							2	8	2	2	2	0.7
Electrical conductivity @ 25 degrees C dS/m (moderately tolerant crops)	3 - 5							3 to 5	9 - >12	3 - 5			
Electrical conductivity @ 25 degrees C dS/m (tolerant crops)	6 - 8							6 to 8	9 - >12	6 - 8			
Sodium adsorption ratio (unconditional use)	5	5						6 to 8	8	5	5	5	5
Sodium adsorption ratio (conditional use)								6 - 8	9 - >13	6 - 8			
Chlorophenols (each)	0.5	0.05						0.05 - 0.5			0.5	0.05	
Nonchlorinated Phenols	1	0.1						0.1 - 1			1	0.1	
2, 4 - dimethylphenol			0.1										0.94
2, 4 - dinitrophenol			0.1										0.2
2 - methyl 4, 6 - dinitrophenol nitrophenol (2- , 4- )			0.1										
phenol			0.1										
cresol			0.1										
Chlorinated aliphatics (each)	5	0.1	0.5					0.1 - 5			5	0.1	
Chlorobenzenes (each)	2	0.05						0.05 - 2			2	0.05	
Hexachlorocyclohexane	0	0.01						0 - 0.01			0	0.01	0.41
Nonchlorinated aliphatics (each)	0	0.3						0 - 0.3			0	0.3	
Phthalic acid esters (each)	0	30	0.1					0 - 30			0	30	
Quinoline	0	0.1						0 - 0.1			0	0.1	
Thiophene	0	0.1						0 - 0.1			0	0.1	
Total extractable hydrocarbons (C11 – C22) µg/g	1,000								1,000	1,000			
Total extractable hydrocarbons (C23 – C60) µg/g	4,000								4,000	4,000			
nonaqueous phase liquids			Not present										
VPHs			1000										
LEPHs			1000										
HEPHs			0.1										
odorous substances			200										
Sodium Ion			> 1 000 mg/g (matrix standard)										
chlorinated phenols													
Chlorophenol isomers (ortho, meta, para)			0.05										
dichlorophenols			0.05										
trichlorophenols			0.05										
monochlorobenzene			0.1										
nonchlorinated phenols			30										



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Chloride Ion (Cl-)			90 - 1000										N/V
Sodium Ion (Na+)			200 - >1000 mg/g										
Methyl ethyl ketone													0.27
Methyl isobutyl ketone													0.48
Methyl mercury													6.8++
Methyl tert butyl ether													5.7
Methylnaphthalene, 2-(*1-)													1.2
Acetone													3.5
Biphenyl, 1, 10.89													0.89
Bis(2-chloroethyl)ether													0.66
Bis(2-chloroisopropyl)ether													0.66
Bromodichloromethane													0.12
Bromoform													0.11
Bromomethane													(0.38) 0.061
Chlordane													0.29
Chloroaniline, p													1.3
Chlorophenol, 2													0.1
Chromium (VI)													(10) 8.0
DDD													2.2
DDE													1.6
Dichloroethane, 1, 1			0.1										3
Dichloroethane, 1, 2			0.1										(0.05) 0.022
Dichloroethylene, 1, 1													(0.015) 0.0024
Dichloroethylene, CIS - 1,2													2.3
Dichloroethylene, Trans 1, 2,4.1													4.1
Dichloropropane 1, 2			0.1										(0.12) 0.019
Dichloropropene 1, 3			0.1										(0.04) 0.0066
Diethyl phthalate													0.71
Dimethyl phthalate													0.7
Dinitrotoluene 2, 4													0.66
Ethylene dibromide													(0.01) 0.0056
Heptachlor													(0.12) 0.084
Hexachloroethane													(6.3) 3.8
Tetrachloroethane, 1, 1, 1, 2													(0.12) 0.019
Tetrachloroethane, 1, 1, 2, 2													0.01
Trichloroethane, 1, 1, 2			0.1										0.28
Nitrate													N/V
Nitrite													N/V

**Contaminated Residential Soil - Federal and Provincial Comparison of Residential Guidelines and Standards**

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	Fine grained soil (mg/kg)	Coarse grained soil (mg/kg)	Generic and matrix numerical soil standards (µg/g)	Urban Park (µg/g)	Fine grained soil (mg/kg)	Coarse grained soil (mg/kg)	Guideline (µg/g)	Fine grained soil (mg/kg)	Coarse grained soil (mg/kg)	Surface soil (ug/g)
<b>General and inorganic parameters</b>										
pH (in 0.01 M CaCl2)	6-8	6-8			6-8.5	6-8.5	6 - 8	6-8	6-8	
Cyanide (Free)	0.9	0.9	10.0-50.0 (matrix standard)		0.9	0.9	0.9	0.9	0.9	100
Fluoride	2000	2000	400	400	200	200	2000	2000	2000	
Sulphur (elemental)					500	500				
<b>Metals</b>										
Antimony	40	40	20	20	20	20	40	40	40	13
Arsenic (inorganic)	12	12	15 - 100 (matrix standard)	15 - 100 (matrix standard)	17	17	12	12	12	(25) 20
Barium	500	500	400 - 6,500 (matrix standard)	400 - 6,500 (matrix standard)	500	500	500	500	500	(1000) 750
Barite-barium					3,200	3,200				
Beryllium	8	8	4	4	5	5	8	8	8	1.2
Boron (hot water soluble)					2	2				1.5+
Cadmium	10	10	1.5 - 1000 (matrix standard)	2 - 1,000 (matrix standard)	10	10	10	10	10	12
Chromium (hexavalent)	0.4	0.4			0.4	0.4	0.4	0.4	0.4	
Chromium (total)	0	64	60 - 300 (matrix standard)	60 - 300 (matrix standard)	64	64	64	0	64	(1000) 750
Cobalt	300	300	50	50	20	20	300	300	300	(50) 40
Copper	63	63	90 - 350,000 (matrix standard)		63	63	63	63	63	(300) 225
Lead	140	140	100 - 100,000 (matrix standard)	100 - 100,000 (matrix standard)	140	140	500	140	140	200
Mercury (inorganic)	6.6	6.6	15 - 100 (matrix standard)	15 - 100 (matrix standard)	6.6	6.6	6.6	6.6	6.6	10
Molybdenum	40	40	10	10	4	4	40	40	40	40
Nickel	50	50	100	100	50	50	100	50	50	(200) 150
Selenium	1	1	0.15 - 300,000	3	1	1	1	1	1	10
Silver	40	40	20	20	20	20	40	40	40	(25) 20
Thallium	1	1		2	1	1	1	1	1	4.1
Tin	300	300	50	50	5	5	300	300	300	
Uranium					23	23				
Vanadium	130	130	200	200	130	130	130	130	130	(250) 200
Zinc	200	200	150 - 35,000 (matrix standard)	150 - 35,000 (matrix standard)	200	200	200	200	200	(800) 600
<b>Hydrocarbons</b>										
Benzene	0.0068/0.0068	0.0095/0.011	0.4 - 1,000 (matrix standard)	0.04 - 1,000 (matrix standard)	0.046	0.073	0.5	0.0068/0.0068	0.0095/0.011	0.24
Toluene	0.08/0.08	0.37/0.37	1.5 - 40,000 (matrix standard)	1.5 - 40,000 (matrix standard)	0.52	0.49	3	0.08/0.08	0.37/0.37	2.1
Ethylbenzene	0.018/0.018	0.082/0.082	1 - 7,000 (matrix standard)	1 - 3,500 (matrix standard)	0.11	0.21	5	0.018/0.018	0.082/0.082	0.28

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Xylenes	2.4/2.4	11/11	5 - 65,000 (matrix standard)	5 - 6,500 (matrix standard)	15	12	5	2.4/2.4	11/11	25
Styrene	50	50	5	5	0.68	0.8	50	50	50	(1.7) 1.2
Petroleum Hydrocarbons F1 (C6 to C10)	180/180	30/40			210	24	180/180	180/180	30/40	100 (gas/diesel)- 1000 (heavy oils)
Petroleum Hydrocarbons F2 (C>10 to C16)	250/250	150/150			150	130	250/250	250/250	150/150	
Petroleum Hydrocarbons F3 (C>16 to C34)	800/3500	400/2500			1,300	300	800/3500	800/3500	400/2500	
Petroleum Hydrocarbons F4 (C>34 to C50+)	5600/10000	2800/10000			5,600	2,800	5600/10000	5600/10000	2800/10000	
Acenaphthene					0.32	0.38				15
Acenaphthylene					5	6				100
Anthracene					0.0046	0.0056				28
Fluoranthene					0.032	0.039				40
Fluorene					0.29	0.34				340
Naphthalene	0.6	0.6	5	5	0.016	0.018	0.6	0.6	0.6	4.6
Phenanthrene	50	50	5	5	0.051	0.061	50	50	50	40
Pyrene	100	100	10	10	0.034	0.04	100	100	100	250
Carcinogenic PAHs					IARC<1.0	5.3; IARC<1.0				
Benz[a]anthracene	10	10	1	1	0.07	0.083	10	10	10	6.6
Benzo[b+]fluoranthene	10	10	1	1			10	10	10	12
Benzo[k]fluoranthene	10	10	1	1			10	10	10	12
Benzo[g,h,i]perylene										40
Benzo[a]pyrene	0.7	0.7	1.0 - 5 (matrix standard)	1 - 5 (matrix standard)	0.7	0.77	0.7	0.7	0.7	1.2
Chrysene										12
Dibenz[a,h]anthracene	10	10	1	1	7.4	8.4	10	10	10	1.2
Indeno[1,2,3-c,d]pyrene	10	10	1	1			10	10	10	12
<b>Halogenated Aliphatics</b>										
Vinyl chloride					0.0083	0.00034				(0.0075) 0.003
1,1-Dichloroethene					0.15	0.021				
Trichloroethene (Trichloroethylene, TCE)	0.01	0.01	0.65 - 200 (matrix standard)	0.015 - 200 (matrix standard)	0.054	0.012	0.01	0.01	0.01	
Tetrachloroethene (Tetrachloroethylene, Perchloroethylene, PCE)	0.2	0.2	5 - 1,000 (matrix standard)	5 - 1,000 (matrix standard)	0.69	0.16	0.2	0.2	0.2	0.45
Dichloroethane 1, 1			5							3
1,2-Dichloroethane			5		0.025	0.0027				(0.05) 0.022
Dichloromethane (Methylene chloride)			5		0.1	0.095				
Trichloromethane (Chloroform)			5		0.0029	0.001				0.13
Tetrachloromethane (Carbon tetrachloride)			5		0.013	0.00056				
Dibromochloromethane			5		0.91	0.27				0.09
<b>Chlorinated Aromatics</b>										
Chlorobenzene	10	10	2	2	0.39	0.018	10	10	10	2.4
1,2-Dichlorobenzene	10	10	1	1	0.097	0.18	10	10	10	0.88
1,3-Dichlorobenzene	10	10	1				10	10	10	30
1,4-Dichlorobenzene	10	10	1		0.051	0.098	10	10	10	0.32
1,2,3-Trichlorobenzene			2		0.26	0.26				

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	Fine grained soil (mg/kg)	Coarse grained soil (mg/kg)	Generic and matrix numerical soil standards (µg/g)	Urban Park (µg/g)	Fine grained soil (mg/kg)	Coarse grained soil (mg/kg)	Guideline (µg/g)	Fine grained soil (mg/kg)	Coarse grained soil (mg/kg)	Surface soil (ug/g)
1,2,4-Trichlorobenzene			2		0.78	0.23				30
1,3,5-Trichlorobenzene			2		1.9	0.13				
1,2,3,4-Tetrachlorobenzene			2		0.042	0.05				
1,2,3,5-Tetrachlorobenzene			2		0.37	0.1				
1,2,4,5-Tetrachlorobenzene			2		0.19	0.052				
Pentachlorobenzene			2		3.7	4.5				
Hexachlorobenzene	10	10	2	2	3.6	0.5	10	10	10	0.46
2,4-Dichlorophenol			0.5		0.0029	0.0034				0.3
Trichlorophenol 2, 4, 5			0.5							3.2
2,4,6-Trichlorophenol			0.5		0.19	0.37				0.66
2,3,4,6-Tetrachlorophenol			0.5		0.039	0.047				
Pentachlorophenol	7.6	7.6	0.15 - 300,000 (matrix standard)	0.15 - 750,000 (matrix standard)	0.024	0.029	7.6	7.6	7.6	5
Dioxins & Furans	4	4	0.00035 - 0.001 (matrix standard)	0.00035 - 0.001(matrix standard)	0.000004	0.000004	4	4	4	1
PCBs	1.3	1.3	5 (matrix standard)	5 (matrix standard)	22	22	5	1.3	1.3	
<b>Pesticides</b>										
Aldicarb					0.041	0.065				
Aldrin					3.4	3.4				0.05
Atrazine and metabolites					0.0088	0.01				
Azniphos-methyl					0.41	0.75				
Bendiocarb					0.14	0.21				
Bromoxynil					0.044	0.052				
Carbaryl					1.9	3.6				
Carbofuran					0.68	1.2				
Chlorothalonil					0.0084	0.01				
Chlorpyrifos					49	95				
Cyanazine					0.12	0.21				
2,4-D					0.43	0.67				
DDT	0.7	0.7	10.0 - 15.0 (matrix standard)	15 (matrix standard)	0.015	0.018	0.7	0.7	0.7	1.6
Diazinon					2.2	4.2				
Dicamba					0.5	0.79				
Dichlofop-methyl					2	2.4				
Dieldrin					0.011	0.014				0.05
Dimethoate					0.0058	0.0055				
Dinoseb					2.8	5.5				
Diquat					11	21				
Diuron					1.9	3.5				
Endosulfan					0.0085	0.01				0.18
Endrin					0.0075	0.009				0.05
Glyphosate					0.054	0.049				
Heptachlor epoxide					0.039	0.01				0.06
Lindane					0.31	0.6				
Linuron					0.051	0.059				
Malathion					0.82	1.3				
MCPA					0.02	0.032				
Methoxychlor					0.046	0.056				4
Metolachlor					0.048	0.055				

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Metribuzin					0.024	0.028				
Paraquat (as dichloride)					1.1	2.2				
Parathion					7.2	14				
Phorate					0.075	0.14				
Picloram					0.024	0.022				
Simazine					0.033	0.038				
Tebuthiuron					2.5	3.7				
Terbufos					0.08	0.15				
Toxaphene					3.3	4.8				
Triallate					0.0077	0.0092				
Trifluarin					0.038	0.045				
<b>Other Organics</b>										
Aniline					0.36	0.6				
Bis(2-ethyl-hexyl)phthalate					34	41				
Dibutyl phthalate					0.54	0.65				
Dichlorobenzidine					4.2	8.1				1.3
Diisopropanolamine	180	180			14	17	180	180	180	
Ethylene glycol	960	960	1,500 - 6,500 (matrix standard)	1,500 - 6,500 (matrix standard)	60	62	960	960	960	
Hexachlorobutadiene					0.026	0.0067				(2.2) 0.38
Methylmethacrylate					1.3	0.1				
MTBE					0.044	0.046				
Nonylphenol + ethoxylates	5.7	5.7			2.7	3.3	5.7	5.7	5.7	
Phenol	3.8	3.8			0.0028	0.0024	3.8	3.8	3.8	40
Sulfolane	0.8	0.8			0.18	0.21	0.8	0.8	0.8	
<b>Radionuclides (unit of measure = Bq/g)</b>										
Uranium-238 Series (all progeny)					0.3	0.3				
Uranium-238 (238U, 234Th, 234pa, 234U)					10	10				
Thorium-230					10	10				
Radium-226 (in equilibrium with its progeny)					0.3	0.3				
Lead-210 (in equilibrium with 210B1 and 210Po)					0.3	0.3				
Thorium-232 Series (all progeny)					0.3	0.3				
Thorium-232					10	10				
Radium-228 (in equilibrium with 228 progeny)					0.3	0.3				
Thorium-228 (in equilibrium with its progeny)					0.3	0.3				
Potassium-40					17	17				
<b>Miscellaneous contaminants</b>										
Electrical conductivity @ 25 degrees C dS/m (unconditional use)							2			0.7
Electrical conductivity @ 25 degrees C dS/m (moderately tolerant crops)							3 - 5			
Electrical conductivity @ 25 degrees C dS/m (tolerant crops)							6 - 8			
Conductivity	4	4					2 - 8	4	4	
Sodium adsorption ratio	12	12					5 to 8	12	12	5

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Chlorophenols (each)	5	5					5	5	5	
Nonchlorinated Phenols (each)	10	10	1				10	10	10	
Chlorinated aliphatics (each)	50	50	5	5			50	50	50	
VPHs			200	200						
LEPHs			1000	1000						
HEPHs			1000	1000						
Chloride Ion (Cl-)			35 - > 1 000 mg/g (matrix standard)	35 - > 1 000 mg/g (matrix standard)						N/V
Sodium Ion			200 - > 1 000 mg/g (matrix standard)	200 - > 1 000 mg/g (matrix standard)						N/V
nonaqueous phase liquids			Not present							
odorous substances			Not present							
dichlorobenzenes			1							
monochlorobenzene			1	1						
chlorinated phenols			0.5							
Total extractable hydrocarbons (THE)							1,000			
cyanide (WAD)				0.5						
cyanide (SAD)				5						
chlorinated phenols				0.5						
nonchlorinated phenols				1						
Phthalic Acid Esters										
Acetone										3.5
Biphenyl 1, 10.89										0.89
Bis(2-chloroethyl)ether										0.66
Bis(2-chloroisopropyl)ether										0.66
Bis(2-ethylhexyl)phthalate										100
Bromodichloromethane										0.12
Bromoform										0.11
Bromomethane										(0.38) 0.061
Carbon tetrachloride										(0.64) 0.10
Chlordane										0.29
Chloroaniline, p										1.3
Chlorophenol, 2										0.1
Chromium (VI)										(10) 8.0
DDD										2.2
DDE										1.6
Dichloroethylene, 1,1										(0.015) 0.0024
Dichloroethylene, CIS-1,2										2.3
Dichloroethylene, Trans - 1, 24.1										4.1
Dichloropropane 1, 2										(0.12) 0.019
Dichloropropene 1, 3										(0.04) 0.0066
Diethyl phthalate										0.71
Dimethyl phthalate										0.7
Dimethylphenol 2, 4			1							0.94
Dinitrophenol 2, 4			1							0.2
Dinitrotoluene 2, 4										0.66
Ethylene dibromide										(0.01) 0.0056
Heptachlor										(0.12) 0.084
Hexachlorocyclohexane, Gamma										0.41

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Hexachloroethane										(6.3) 3.8
Methyl ethyl ketone										0.27
Methyl isobutyl ketone										0.48
Methyl mercury										6.8++
Methyl tert butyl ether										5.7
Methylene chloride										1.1
Methylnaphthalene 2-(1-)										1.2
Polychlorinated biphenyls										5
Tetrachloroethane 1, 1, 1, 2										0.01
Trichloroethane 1, 1, 1										(34) 26
Trichloroethane 1, 1, 2										0.28
Trichloroethylene										(3.9) 1.1
Nitrate										N/V
Nitrite										N/V

**Contaminated Commercial Soil - Federal and Provincial Comparison of Guidelines and Standards**

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	Fine grained soil (mg/kg)	Coarse grained soil (mg/kg)	Generic and matrix numerical soil standards (µg/g)	Fine grained soil (mg/kg)	Coarse grained soil (mg/kg)	Standard (µg/g)	Fine grained soil (mg/kg)	Coarse grained soil (mg/kg)	Surface soil criteria for potable water condition (µg/g)
<b>General and inorganic parameters</b>									
pH (in 0.01 M CaCl <sub>2</sub> )	6-8	6-8		6-8.5	6-8.5	6-8	6-8	6-8	
Cyanide (Free)	8			8	8	8	8		100
Fluoride	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	
Sulphur (elemental)				500	500				
<b>Metals</b>									
Antimony	40	40	40	40	40	40	40	40	(44) 40
Arsenic (inorganic)	12	12	15 - 300 (matrix standard)	26	26	12	12	12	(50) 40
Barium	2,000	2,000	400 - 20,000 (matrix standard)	2,000	2,000	2,000	2,000	2,000	(2,000) 1500
Barite-barium				11,000	11,000				
Beryllium	8	8	8	8	8	8	8	8	1.2
Boron (hot water soluble)				2	2				2.0+
Cadmium	22	22	2 - 1,000 (matrix standard)	22	22	22	22	22	12
Chromium (hexavalent)	1.4	1.4		1.4	1.4	1.4	1.4	1.4	
Chromium (total)	87	87	60 - 300 (matrix standard)	87	87	87	87	87	(1,000) 750
Cobalt	300	300	300	300	300	300	300	300	(100) 80
Copper	91	91	90 - 350, 000 (matrix standard)	91	91	91	91	91	(300) 225
Lead	260	260	100 - 40,000 (matrix standard)	260	260	260	260	260	1000
Mercury (inorganic)	24	24	40 - 150 (matrix standard)	50	50	24	24	24	10
Molybdenum	40	40	40	40	40	40	40	40	40
Nickel	50	50	500	50	50	50	50	50	(200) 150
Selenium	3.9	3.9	10	2.9	2.9	3.9	3.9	3.9	10
Silver	40	40	40	40	40	40	40	40	(50) 40
Thallium	1	1		1	1	1	1	1	32
Tin	300	300	300	300	300	300	300	300	
Uranium				33	33				
Vanadium	130	130		130	130	130	130	130	(250) 200
Zinc	360	360	150 - 30,000 (matrix standard)	360	360	360	360	360	(800) 600
<b>Hydrocarbons</b>									
Benzene	0.0068/0.0068	0.03/0.03	0.04 - 4,000 (matrix standard)	0.046	0.078	0.0068/0.0068	0.0068/0.0068	0.03/0.03	0.24
Toluene	0.08/0.08	0.37/0.37	2.5 - 100,000 (matrix standard)	0.52	0.49	0.08/0.08	0.08/0.08	0.37/0.37	2.1
Ethylbenzene	0.018/0.018	0.082/0.082	7 - 10,000 (matrix standard)	0.11	0.21	0.018/0.018	0.018/0.018	0.082/0.082	0.28
Xylenes	2.4/2.4	11/11	20 - 200,000 (matrix standard)	15	28	2.4/2.4	2.4/2.4	11/11	25
Styrene	50	50	50	0.68	0.8	50	50	50	(1.7) 1.2
Petroleum Hydrocarbons F1 (C6 to C10)	180/180	230/230		320	270	180/180	180/180	230/230	100 (gas/diesel) and 1,000 (heavy oils)
Petroleum Hydrocarbons F2 (C>10 to C16)	250/250	150/150		260	260	250/250	250/250	150/150	
Petroleum Hydrocarbons F3 (C>16 to C34)	2,500/5,000	1,700/3,500		2,500	1,700	2,500/5,000	2,500/5,000	1,700/3,500	
Petroleum Hydrocarbons F4 (C>34 to C50+)	6,600/10,000	3,300/10,000		6,600	3,300	6,600/10,000	6,600/10,000	3,300/10,000	
Acenaphthene				0.32	0.38				15
Acenaphthylene				5	6				130
Anthracene				0.0046	0.0056				28
Fluoranthene				0.032	0.039				40
Fluorene				0.29	0.34				340
Naphthalene	22	22	50	0.016	0.018	22	22	22	4.6
Phenanthrene	50	50	50	0.051	0.061	50	50	50	40
Pyrene	100	100	100	0.034	0.04	100	100	100	250
<b>Carcinogenic PAHs</b>									
Benz[a]anthracene	10	10	10	0.07	0.83	10	10	10	6.6
Benzo[b+j]fluoranthene	10	10	10			10	10	10	18



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Benzo[k]fluoranthene	10	10	10			10	10	10	18
Benzo[g,h,i]perylene									40
Benzo[a]pyrene	0.7	0.7	10 - 15 (matrix standard)	0.7	0.77	0.7	0.7	0.7	1.9
Chrysene									17
Dibenz[a,h]anthracene	10	10	10	7.4	8.4	10	10	10	1.9
Indeno[1,2,3-c,d]pyrene	10	10	10			10	10	10	19
<b>Halogenated Aliphatics</b>									
Vinyl chloride				0.014	0.0043				(0.0075) 0.003
1,1-Dichloroethene				0.15	0.24				
Trichloroethene (Trichloroethylene, TCE)	0.01	0.01	0.015 - 600 (matrix standard)	0.054	0.081	0.01	0.01	0.01	(3.9) 1.1
Tetrachloroethene (Tetrachloroethylene, Perchloroethylene, PCE)	0.5	0.5	5 - 3,500 (matrix standard)	0.69	0.77	0.5	0.5	0.5	0.45
Dichloroethane, 1,1			50						3
Dichloroethane, 1,2			50						(0.05) 0.022
Dichloromethane (Methylene chloride)			50	0.1	0.095				1.1
Trichloromethane (Chloroform)				0.0029	0.003				0.13
Tetrachloromethane (Carbon tetrachloride)			50	0.059	0.0068				(0.64) 0.10
Dibromochloromethane				0.91	1.5				0.09
<b>Chlorinated Aromatics</b>									
Chlorobenzene	10	10	10	0.61	0.22	10	10	10	
1,2-Dichlorobenzene	10	10	10	0.097	0.18	10	10	10	0.88
1,3-Dichlorobenzene	10	10					10	10	30
1,4-Dichlorobenzene	10	10	10	0.051	0.098	10	10	10	0.32
1,2,3-Trichlorobenzene			10	0.26	0.31				
1,2,4-Trichlorobenzene			10	0.78	0.93				30
1,3,5-Trichlorobenzene			10	1.9	1.3				
1,2,3,4-Tetrachlorobenzene			10	0.042	0.05				
1,2,3,5-Tetrachlorobenzene			10	0.37	0.7				
1,2,4,5-Tetrachlorobenzene			10	0.19	0.37				
Pentachlorobenzene			10	3.7	4.5				
Hexachlorobenzene	10	10	10	3.6	6	10	10	10	0.76
2,4-Dichlorophenol			5	0.0029	0.0034				0.3
2,4,6-Trichlorophenol			5	0.19	0.37				0.66
2,3,4,6-Tetrachlorophenol			5	0.039	0.047				
Pentachlorophenol	7.6	7.6	0.15 - 750,000 (matrix standard)	0.024	0.029	7.6	7.6	7.6	5
Dioxins & Furans			0.001 - 0.0025 (matrix standard)	0.000004	0.000004				1
PCBs	33	33	15 (matrix standard)	33	33	33	33	33	
<b>Pesticides</b>									
Aldicarb				0.041	0.065				
Aldrin				5.1	5.1				0.05
Atrazine and metabolites				0.0088	0.01				
Azinphos-methyl				0.41	0.75				
Bendiocarb				0.14	0.21				
Bromoxynil				0.044	0.052				
Carbaryl				1.9	3.6				
Carbofuran				0.68	1.2				
Chlorothalonil				0.0084	0.01				
Chlorpyrifos				49	95				
Cyanazine				0.12	0.21				

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2,4-D				0.43	0.67				
DDT	12	12	15 - 50 (matrix standard)	0.015	0.018	12	12	12	2
Diazinon				2.2	4.2				
Dicamba				0.5	0.79				
Dichlofop-methyl				2	2.4				
Dieldrin				0.011	0.014				0.05
Dimethoate				0.0058	0.0055				
Dinoseb				2.8	5.5				
Diquat				11	21				
Diuron				1.9	3.5				
Endosulfan				0.0085	0.01				0.18
Endrin				0.0075	0.009				0.05
Glyphosate				0.054	0.049				
Heptachlor epoxide				0.039	0.076				0.09
Lindane				0.31	0.6				
Linuron				0.051	0.059				
Malathion				0.82	1.3				
MCPA				0.02	0.032				
Methoxychlor				0.046	0.056				4
Metolachlor				0.048	0.055				
Metribuzin				0.024	0.028				
Paraquat (as dichloride)				1.1	2.2				
Parathion				7.2	14				
Phorate				0.075	0.14				
Picloram				0.024	0.022				
Simazine				0.033	0.038				
Tebuthiuron				2.5	3.7				
Terbufos				0.08	0.15				
Toxaphene				3.3	6.3				
Triallate				0.0077	0.0092				
Trifluarin				0.038	0.045				
<b>Other Organics</b>									
Aniline				0.36	0.6				
Bis(2-ethyl-hexyl)phthalate				34	41				
Dibutyl phthalate				0.54	0.65				
Dichlorobenzidine				4.2	8.1				
Diisopropanolamine	180	180		14	17		180	180	
Ethylene glycol	960	960	1,500 - 200,000 (matrix standard)	60	62	960	960	960	
Hexachlorobutadiene				0.026	0.031				(2.2) 0.38
Methylmethacrylate				1.3	1.3				
MTBE				0.044	0.062				
Nonylphenol + ethoxylates	14	14		2.7	3.3		14	14	
Phenol	3.8	3.8		0.0028	0.0024	3.8	3.8	3.8	40
Sulfolane	0.8	0.8		0.18	0.21	0.8	0.8	0.8	
<b>Radionuclides</b>									
Uranium-238 Series (all progeny)				0.3	0.3				
Uranium-238 (238U, 234Th, 234pa, 234U)				10	10				
Thorium-230				10	10				
Radium-226 (in equilibrium with its progeny)				0.3	0.3				
Lead-210 (in equilibrium with 210B1 and 210Po)				0.3	0.3				

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Thorium-232 Series (all progeny)				0.3	0.3				
Thorium-232				10	10				
Radium-228 (in equilibrium with 228 progeny)				0.3	0.3				
Thorium-228 (in equilibrium with its progeny)				0.3	0.3				
Potassium-40				17	17				
<b>Miscellaneous contaminants</b>									
Polychlorinated dibenzo-p-dioxins/ dibenzofurans (PCDD/Fs)	4	7.6				4 - 7.6	4	7.6	
Conductivity	4	4					4	4	1.4
Sodium adsorption ratio	12	4				4.0 - 12	12	4	12
Chlorobenzene		12						12	
Chlorophenols (each)	5	5					5	5	
Nonchlorinated Phenols (each)	10	10					10	10	
Chlorinated aliphatics (each)	50	50					50	50	
nonaqueous phase liquids			Not present						
odorous substances			Not present						
VPHs			200						
LEPHs			1000						
HEPHs			1000						
chlorinated aliphatics			5						
dichlorobenzenes			1						
monochlorobenzene			1						
chlorinated phenols			0.5						
nonchlorinated phenols			1						
Chloride Ion (Cl-)			500 - > 1 000 mg/g (matrix standard)						
Polychlorinated Dioxins and Furans (PCDDs and PCDFs)			0.00035						
Sodium Ion			> 1 000 mg/g						
Acetone									3.5
Biphenyl 1,10.89									0.89
Bis(2-chloroethyl)ether									0.66
Bis(2-chloroisopropyl)ether									0.66
Bis(2-ethylhexyl)phthalate									100
Bromodichloromethane									0.12
Bromoform									0.11
Bromomethane									(0.38) 0.061
Chlordane									0.29
Chloroaniline, p									1.3
Chlorobenzene									2.4
Chlorophenol, 2									0.1
Dichlorobenzidine, 3,3'									1.3
DDD									3.5
DDE									2.4
Dichloroethylene, 1,1									(0.015) 0.0024
Dichloroethylene, CIS-1,2									2.3
Dichloroethylene, Trans-1,2,4.1									4.1
Dichloropropane, 1,2			50						(0.12) 0.019
Dichloropropene, 1,3			50						(0.04) 0.0066
Diethyl phthalate									0.71
Dimethyl phthalate									0.7
Dimethylphenol, 2,4			10						0.94

**Contaminated Commercial Soil - Federal and Provincial Comparison of Guidelines and Standards**

Contaminants	CCME (Guidelines)		British Columbia (Standards)	Alberta (Guidelines)		Saskatchewan (Guidelines)	Manitoba (Guidelines)		Ontario (Guidelines)
	Fine grained soil (mg/kg)	Coarse grained soil (mg/kg)	Generic and matrix numerical soil standards (µg/g)	Fine grained soil (mg/kg)	Coarse grained soil (mg/kg)	Standard (µg/g)	Fine grained soil (mg/kg)	Coarse grained soil (mg/kg)	Surface soil criteria for potable water condition (µg/g)
Dinitrophenol, 2,4			10						0.2
Dinitrotoluene, 2,4									0.66
Ethylene dibromide									(0.012) 0.0056
Heptachlor									(0.15) 0.084
Hexachlorocyclohexane, Gamma									0.49
Hexachloroethane									(8.5) 3.8
Methyl ethyl ketone									0.27
Methyl isobutyl ketone									0.48
Methyl mercury									10++
Methyl tert butyl ether									5.7
Methylnapthalene, 2-(*1-)									1.2
Polychlorinated biphenyls									25
Tetrachloroethane, 1,1,1,2									(0.12) 0.019
Tetrachloroethane, 1,1,2,2									0.01
Trichloroethane, 1,1,1									(34) 26
Trichloroethane, 1,1,2									0.28
Trichlorophenol, 2,4,5									3.2
Chloride									N/V
Nitrate									N/V
Nitrite									N/V

**Contaminated Industrial Soil - Federal and Provincial Comparison of Guidelines and Standards**

Contaminants	CCME (Guidelines)		British Columbia (Standards)	Alberta (Guidelines)		Saskatchewan (Guidelines)	Manitoba (Guidelines)		Ontario (Guidelines)
	Fine grained soil (mg/kg)	Coarse grained soil (mg/kg)	Generic and matrix numerical soil standards (µg/g)	Fine grained soil (mg/kg)	Coarse grained soil (mg/kg)	Standard (µg/g)	Fine grained soil (mg/kg)	Coarse grained soil (mg/kg)	Surface soil criteria for potable water condition (µg/g)
<b>General and inorganic parameters</b>									
pH (in 0.01 M CaCl <sub>2</sub> )	6-8	6-8		6-8.5	6-8.5	6-8	6-8	6-8	
Cyanide (Free)	8	8		8	8	8	8	8	100
Fluoride	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	
Sulphur (elemental)				500	500				
<b>Metals</b>									
Antimony	40	40	40	40	40	40	40	40	(44) 40
Arsenic (inorganic)	12	12	15 - 100 (matrix standard)	26	26	12	12	12	(50) 40
Barium	2,000	2,000	400 - 3,500 (matrix standard)	2,000	2,000	2000	2000	2000	(2,000) 1500
Barite-barium				41,000	41,000				
Beryllium	8	8	8	8	8	8	8	8	1.2
Boron (hot water soluble)				2	2				2.0+
Cadmium	22	22	1.5 - 1,000 (matrix standard)	22	22	22	22	22	12
Chromium (hexavalent)	1.4	1.4		1.4	1.4	1.4	1.4	1.4	
Chromium (total)	87	87	60 - 700 (matrix standard)	87	87	87	87	87	(1000) 750
Cobalt	300	300	300	300	300	300	300	300	(100) 80
Copper	91	91	90 - 350,000 (matrix standard)	91	91	91	91	91	(300) 225
Lead	600	600	100 - 40,000 (matrix standard)	600	600	600	600	600	1,000
Mercury (inorganic)	50	50	150 (matrix standard)	50	50	50	50	50	10
Molybdenum	40	40	40	40	40	40	40	40	40
Nickel	50	50	50	50	50	50	50	50	(200) 150
Selenium	3.9	3.9	10	2.9	2.9	3.9	3.9	3.9	10
Silver	40	40	40	40	40	40	40	40	(50) 40
Thallium	1	1		1	1	1	1	1	32
Tin	300	300	300	300	300	300	300	300	
Uranium				300	300				
Vanadium	130	130		130	130	130	130	130	(250) 200
Zinc	360	360	150 - 35,000 (matrix standard)	360	360	360	360	360	(800) 600
<b>Hydrocarbons</b>									
Benzene	0.0068/0.0068	0.03/0.03	0.04 - 150 (matrix standard)	0.046	0.078	0.0068/0.0068	0.0068/0.0068	0.03/0.03	0.24
Toluene	0.08/0.08	0.37/0.37	2.5 - 350 (matrix standard)	0.52	0.49	0.08/0.08	0.08/0.08	0.37/0.37	2.1
Ethylbenzene	0.018/0.018	0.082/0.082	7 - 7,000 (matrix standard)	0.11	0.21	0.018/0.018	0.018/0.018	0.082/0.082	0.28
Xylenes	2.4/2.4	11/11	20 - 50 (matrix standard)	15	28	2.4/2.4	2.4/2.4	11/11	25
Styrene	50	50	50	0.68	0.8	50	50	50	(1.7) 1.2
Petroleum Hydrocarbons F1 (C6 to C10)	180/180	230/230		320	270	180/180	180/180	230/230	100 (gas/diesel) - 1000 (heavy oils)
Petroleum Hydrocarbons F2 (C>10 to C16)	250/250	150/150		260	260	250/250	250/250	150/150	
Petroleum Hydrocarbons F3 (C>16 to C34)	2,500/5,000	1,700/3,500		2,500	1,700	2,500/5,000	2,500/5,000	1,700/3,500	
Petroleum Hydrocarbons F4 (C>34 to C50+)	6,600/10,000	3,300/10,000		6,600	3,300	6,600/10,000	6,600/10,000	3,300/10,000	
Acenaphthene				0.32	0.38				15
Acenaphthylene				5	6				130
Anthracene				0.0046	0.0056				28
Fluoranthene				0.032	0.039				40
Fluorene				0.29	0.34				340
Naphthalene	22	22	50	0.016	0.018	22	22	22	4.6
Phenanthrene	50	50	50	0.051	0.061	50	50	50	40
Pyrene	100	100	100	0.034	0.04	100	100	100	250
<b>Carcinogenic PAHs</b>									
Benz[a]anthracene	10	10	10	0.07	0.083	10	10	10	6.6
Benzo[b+j]fluoranthene	10	10	10			10	10	10	18

**Contaminated Industrial Soil - Federal and Provincial Comparison of Guidelines and Standards**

Contaminants	CCME (Guidelines)		British Columbia (Standards)	Alberta (Guidelines)		Saskatchewan (Guidelines)	Manitoba (Guidelines)		Ontario (Guidelines)
	Fine grained soil (mg/kg)	Coarse grained soil (mg/kg)	Generic and matrix numerical soil standards (µg/g)	Fine grained soil (mg/kg)	Coarse grained soil (mg/kg)	Standard (µg/g)	Fine grained soil (mg/kg)	Coarse grained soil (mg/kg)	Surface soil criteria for potable water condition (µg/g)
Benzo[k]fluoranthene	10	10	10			10	10	10	18
Benzo[g,h,i]perylene									40
Benzo[a]pyrene	0.7	0.7	10 (matrix standard)	0.7	0.77	0.7	0.7	0.7	1.9
Chrysene									17
Dibenz[a,h]anthracene	10	10	10	7.4	8.4	10	10	10	1.9
Indeno[1,2,3-c,d]pyrene	10	10	10			10	10	10	19
<b>Halogenated Aliphatics</b>									
Vinyl chloride				0.014	0.0043				(0.0075) 0.003
Trichloroethene (Trichloroethylene, TCE)	0.01	0.01	0.015 - 50 (matrix standard)	0.054	0.081	0.01	0.01	0.01	(3.9) 1.1
Tetrachloroethene (Tetrachloroethylene, Perchloroethylene, PCE)	0.6	0.6	5.0 - 50 (matrix standard)	0.69	0.77	0.6	0.6	0.6	0.45
1,1-Dichloroethane			50	0.15	0.24				3
1,2-Dichloroethane			50	0.025	0.033				(0.05) 0.022
Dichloromethane (Methylene chloride)			50	0.1	0.095				1.1
Trichloromethane (Chloroform)				0.0029	0.003				0.13
Tetrachloromethane (Carbon tetrachloride)			50	0.059	0.0068				(0.64) 0.10
Dibromochloromethane				0.91	1.5				0.09
<b>Chlorinated Aromatics</b>									
Chlorobenzene	10	10	10	0.61	0.22	10	10	10	2.4
1,2-Dichlorobenzene	10	10	10	0.097	0.18	10	10	10	0.88
1,3-Dichlorobenzene	10	10	10			10	10	10	30
1,4-Dichlorobenzene	10	10	10	0.051	0.098	10	10	10	0.32
1,2,3-Trichlorobenzene			10	0.26	0.31				
1,2,4-Trichlorobenzene			10	0.78	0.93				30
1,3,5-Trichlorobenzene			10	1.9	1.3				
1,2,3,4-Tetrachlorobenzene			10	0.042	0.05				
1,2,3,5-Tetrachlorobenzene			10	0.37	0.7				
1,2,4,5-Tetrachlorobenzene			10	0.19	0.37				
Pentachlorobenzene			10	3.7	4.5				
Hexachlorobenzene	10	10	10	3.6	6	10	10	10	0.76
2,4-Dichlorophenol				0.0029	0.0034				0.3
2,4,6-Trichlorophenol				0.19	0.37				0.66
2,3,4,6-Tetrachlorophenol				0.039	0.047				
Pentachlorophenol	7.6	7.6	0.2 - 750,000 (matrix standard)	0.024	0.029	7.6	7.6	7.6	5
Dioxins & Furans	4	4	0.0025 (matrix standard)	0.000004	0.000004		4	4	1
PCBs	33	33	50 (matrix standard)	33	33	33	33	33	
<b>Pesticides</b>									
Aldicarb				0.041	0.065				
Aldrin				5.9	7.4				0.05
Atrazine and metabolites				0.0088	0.01				
Azinphos-methyl				0.41	0.75				
Bendiocarb				0.14	0.21				
Bromoxynil				0.044	0.052				
Carbaryl				1.9	3.6				
Carbofuran				0.68	1.2				
Chlorothalonil				0.0084	0.01				
Chlorpyrifos				49	95				
Cyanazine				0.12	0.21				
2,4-D				0.43	0.67				

**Contaminated Industrial Soil - Federal and Provincial Comparison of Guidelines and Standards**

Contaminants	CCME (Guidelines)		British Columbia (Standards)	Alberta (Guidelines)		Saskatchewan (Guidelines)	Manitoba (Guidelines)		Ontario (Guidelines)
	Fine grained soil (mg/kg)	Coarse grained soil (mg/kg)	Generic and matrix numerical soil standards (µg/g)	Fine grained soil (mg/kg)	Coarse grained soil (mg/kg)	Standard (µg/g)	Fine grained soil (mg/kg)	Coarse grained soil (mg/kg)	Surface soil criteria for potable water condition (µg/g)
DDT	12	12	15 (matrix standard)	0.015	0.018	12	12	12	2
Diazinon				2.2	4.2				
Dicamba				0.5	0.79				
Dichlofop-methyl				2	2.4				
Dieldrin				0.011	0.014				0.05
Dimethoate				0.0058	0.0055				
Dinoseb				2.8	5.5				
Diquat				11	21				
Diuron				1.9	3.5				
Endosulfan				0.0085	0.01				0.18
Endrin				0.0075	0.009				0.05
Glyphosate				0.054	0.049				
Heptachlor epoxide				0.039	0.076				0.09
Lindane				0.31	0.6				
Linuron				0.051	0.059				
Malathion				0.82	1.3				
MCPA				0.02	0.032				
Methoxychlor				0.046	0.056				4
Metolachlor				0.048	0.055				
Metribuzin				0.024	0.028				
Paraquat (as dichloride)				1.1	2.2				
Parathion				7.2	14				
Phorate				0.075	0.14				
Picloram				0.024	0.022				
Simazine				0.033	0.038				
Tebuthiuron				2.5	3.7				
Terbufos				0.08	0.15				
Toxaphene				3.3	6.3				
Triallate				0.0077	0.0092				
Trifluarin				0.038	0.045				
<b>Other Organics</b>									
Aniline				0.36	0.6				
Bis(2-ethyl-hexyl)phthalate				34	41				100
Dibutyl phthalate				0.54	0.65				
Dichlorobenzidine				4.2	8.1				1.3
Diisopropanolamine	180	180		14	17				
Ethylene glycol	960	960	1,500 - 20,000 (matrix standard)	60	62	960	960	960	
Hexachlorobutadiene				0.026	0.031				(2.2) 0.38
Methylmethacrylate				1.3	1.3				
MTBE				0.044	0.062				
Nonylphenol + ethoxylates	14	14		2.7	3.3				
Phenol	3.8	3.8		0.0028	0.0024	3.8	3.8	3.8	40
Sulfolane	0.8	0.8		0.18	0.21	0.8	0.8	0.8	
<b>Radionuclides</b>									
Uranium-238 Series (all progeny)				0.3	0.3				
Uranium-238 (238U, 234Th, 234pa, 234U)				10	10				
Thorium-230				10	10				
Radium-226 (in equilibrium with its progeny)				0.3	0.3				
Lead-210 (in equilibrium with 210B1 and 210Po)				0.3	0.3				
Thorium-232 Series (all progeny)				0.3	0.3				

**Contaminated Industrial Soil - Federal and Provincial Comparison of Guidelines and Standards**

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	Fine grained soil (mg/kg)	Coarse grained soil (mg/kg)	Generic and matrix numerical soil standards (µg/g)	Fine grained soil (mg/kg)	Coarse grained soil (mg/kg)	Standard (µg/g)	Fine grained soil (mg/kg)	Coarse grained soil (mg/kg)	Surface soil criteria for potable water condition (µg/g)
Thorium-232				10	10				
Radium-228 (in equilibrium with 228 progeny)				0.3	0.3				
Thorium-228 (in equilibrium with its progeny)				0.3	0.3				
Potassium-40				17	17				
<b>Miscellaneous contaminants</b>									
Conductivity	4	4				4	4	4	
Sodium adsorption ratio	12	12				12	12	12	
1,3-Dichlorobenzene	10	10				10	10	10	
Chlorophenols	5	5				5	5	5	1.4
Nonchlorinated Phenols	10	10	10			10	10	10	12
Cyanide (WAD)			100						
Cyanide (SAD)			500						
VPHs			200						
LEPHs			2000						
HEPHs			5000						
Monochlorobenzene			10						
Chlorinated phenols			50						
Chloride ion			90 - 2,500 (matrix standard)						
Dichlorobenzenes			10						
Sodium Ion			1,000 - 15,000 (matrix standard)						
Monocyclic Aromatic Hydrocarbons (MAHs)									
Acetone									3.5
Biphenyl, 1,10.89									0.89
Bis(2-chloroethyl)ether									0.66
Bis(2-chloroisopropyl)ether									0.66
Bromodichloromethane									0.12
Bromoform									0.11
Bromomethane									(0.38) 0.061
Chlordane									0.29
Chloroaniline, p									1.3
Chlorophenol, 2									0.1
DDD									3.5
DDE									2.4
Dichloroethylene, CIS-1,2									2.3
Dichloroethylene, Trans-1,2,4.1									4.1
Dichloropropane, 1,2	50	50	50			50	50	50	(0.12) 0.019
Dichloropropene, 1,3	50	50	50			50	50	50	(0.04) 0.0066
Diethyl phthalate									0.71
Dimethyl phthalate									0.7
Dimethylphenol, 2,4									0.94
Dinitrophenol, 2,4									0.2
Dinitrotoluene, 2,4									0.66
Ethylene dibromide									(0.012) 0.0056
Heptachlor									(0.15) 0.084
Hexachlorocyclohexane, Gamma									0.49
Hexachloroethane									(8.5) 3.8
Methyl ethyl ketone									0.27
Methyl isobutyl ketone									0.48
Methyl mercury									10++
Methyl tert butyl ether									5.7



**Contaminated Industrial Soil - Federal and Provincial Comparison of Guidelines and Standards**

Contaminants	CCME (Guidelines)		British Columbia (Standards)	Alberta (Guidelines)		Saskatchewan (Guidelines)	Manitoba (Guidelines)		Ontario (Guidelines)
	Fine grained soil (mg/kg)	Coarse grained soil (mg/kg)	Generic and matrix numerical soil standards (µg/g)	Fine grained soil (mg/kg)	Coarse grained soil (mg/kg)	Standard (µg/g)	Fine grained soil (mg/kg)	Coarse grained soil (mg/kg)	Surface soil criteria for potable water condition (µg/g)
Methylnaphthalene, 2-(1-)									1.2
Polychlorinated biphenyls									25
Tetrachloroethane, 1,1,1,2									(0.12) 0.019
Tetrachloroethane, 1,1,2,2									0.01
Trichloroethane, 1,1,1	50	50	50			50	50	50	(34) 26
Trichloroethane, 1,1,2	50	50	50			50	50	50	0.28
Trichlorophenol, 2,4,5									3.2
Nitrate									N/V
Nitrite									N/V

**Contaminated Freshwater Sediment - Federal and Provincial Comparison of Guidelines and Criteria  
(µg/kg unless stated otherwise)**

Substance	CCME		BC		AB	SK	MB	ON
	ISQG (Guidelines) (µg/g)	PEL (Guidelines) (µg/g)	Sensitive (SedQCss) (µg/g) (Criteria)	Typical (SedQCts) (µg/g) (Criteria)				
Aldrin								0.002
Anthracene								0.22
Arsenic	5.9 (mg/kg)	17 (mg/kg)	11	20				6
Benzo(a)anthracene								0.32
Benzo(a)pyrene								0.37
(Benzo(g,h,i)perylene								0.17
Benzo(k)fluoranthene								0.24
Cadmium	0.6 (mg/kg)	3.5 (mg/kg)	2.2	4.2				0.6
Chlordane	4.5	8.87						0.007
Chromium	37.3 (mg/kg)	90 (mg/kg)	56	110				26
Chrysene								0.34
Cobalt								50
Copper	35.7 (mg/kg)	197 (mg/kg)	120	240				16
Cyanide (free)								0.1
DDD	3.54	8.51	0.0053	0.01				0.008
DDE	1.42	6.75	0.0042	0.0081				0.005
DDT	1.19	4.77	0.003	0.0057				0.007
Dibenzo (a,h) anthracene								0.06
Dieldrin	2.85	6.67	0.0041	0.008				0.002
Endrin	2.67	62.4	0.039	0.075				0.003
Flouranthene								0.75
Flourene								0.19
Heptachlor	0.6	2.74	0.0017	0.0033				0.005
Heptachlor epoxide								0.005
Hexachlorobenzene								0.2
Hexachlorocyclohexane			0.00086	0.0017				
Indeno(1,2,3-cd)pyrene								0.2
Lead	35 (mg/kg)	91.3 (mg/kg)	57	110				31
Lindane	0.94	1.38	0.00086	0.0017				
Mercury	0.17 (mg/kg)	0.486 (mg/kg)	0.3	0.58				0.2
Nickel								16
Nonylphenol and its ethoxylates (TEQ)	1.4 (mg/kg)							
PAHs - 2-Methylnaphthalene			0.12	0.24				
PAHs - Acenaphthene	6.71	88.9	0.055	0.011				
PAHs - Acenaphthylene	5.87	128	0.08	0.15				
PAHs - Anthracene	46.9	245	0.15	0.29				
PAHs - Benzo(a)anthracene	31.7	385	0.24	0.46				
PAHs - Benzo(a)pyrene	31.9	782	0.48	0.94				
PAHs - Chrysene	57.1	862	0.53	1				

Substance	CCME		BC		AB	SK	MB	ON
	ISQG (Guidelines)	PEL (Guidelines)	Sensitive (SedQCss) (µg/g) (Criteria)	Typical (SedQCts) (µg/g) (Criteria)				
PAHs - Dibenz(a,h)anthracene	6.22	135	0.084	0.16				
PAHs - Fluoranthene	111	2355	1.5	2.8				
PAHs - Fluorene	21.2	144	0.089	0.17				
PAHs - Naphthalene	34.6	391	0.24	0.47				
PAHs - Phenanthrene	41.9	515	0.32	0.62				
PAHs - Pyrene	53	875	0.54	1.1				
Pentachlorophenol			0.4	0.8				
Phenanthrene								0.56
Polychlorinated biphenyls (Aroclor 1254)	60	340						
Polychlorinated biphenyls (PCBs) (total)								0.07
PCBs	34.1	277	0.17	0.33				
Polychlorinated dibenzo-p-dioxins and dibenzofurans (TEQ)	0.00085	0.0215	0.00013	0.00026				
Pyrene								0.49
Silver								0.5
Toxaphene	0.1							
Zinc	123 (mg/kg)	315 (mg/kg)	200	380				120

**Contaminated Marine Sediment - Federal and Provincial Comparison of Guidelines and Criteria  
(µg/kg unless stated otherwise)**

Contaminant	CCME		BC		AB	SK	MB	ON
	ISQG (Guidelines) (µg/g)	PEL (Guidelines) (µg/g)	Sensitive (SedQCSS) (µg/g) (Criteria)	Typical (SedQCts) (µg/g) (Criteria)				
Aldrin								0.002
Anthracene								0.22
Arsenic	5.9 (mg/kg)	17 (mg/kg)	26	50				
Benzo(a)anthracene								0.32
Benzo(a)pyrene								0.37
(Benzo(g,h,i)perylene								0.17
Benzo(k)fluoranthene								0.24
Cadmium	0.6 (mg/kg)	3.5 (mg/kg)	2.6	5				
Chlordane	4.5	8.87	0.003	0.0057				
Chromium	37.3 (mg/kg)	90 (mg/kg)	99	190				
Chrysene								0.34
Cobalt								50
Copper	35.7 (mg/kg)	197 (mg/kg)	67	130				
Cyanide (free)								0.1
DDD	3.54	8.51	0.0048	0.0094				
DDE	1.42	6.75	0.23	0.45				
DDT	1.19	4.77	0.003	0.0057				
Dibenzo (a,h) anthracene								0.06
Dieldrin	2.85	6.67	0.0027	0.0052				
Endrin	2.67	62.4	0.039	0.075				
Flouranthene								0.75
Flourene								0.19
Heptachlor	0.6	2.74	0.0017	0.0033				
Heptachlor epoxide								0.005
Hexachlorobenzene								0.2
Hexachlorocyclohexane			0.00061	0.0012				
Indeno(1,2,3-cd)pyrene								0.2
Lead	35 (mg/kg)	91.3 (mg/kg)	69	130				
Lindane	0.94	1.38	0.00061	0.0012				
Mercury	0.17 (mg/kg)	0.486 (mg/kg)	0.43	0.84				
Nickel								16
Nonylphenol and its ethoxylates (TEQ)	1.4 (mg/kg)							
PAHs - 2-Methylnaphthalene			0.12	0.24				
PAHs - Acenaphthene	6.71	88.9	0.055	0.11				
PAHs - Acenaphthylene	5.87	128	0.079	0.15				
PAHs - Anthracene	46.9	245	0.15	0.29				
PAHs - Benzo(a)anthracene	31.7	385	0.43	0.83				
PAHs - Benzo(a)pyrene	31.9	782	0.47	0.92				
PAHs - Chrysene	57.1	862	0.52	1				
PAHs - Dibenz(a,h)anthracene	6.22	135	0.084	0.16				
PAHs - Fluoranthene	111	2355	0.93	1.8				
PAHs - Fluorene	21.2	144	0.089	0.17				
PAHs - Naphthalene	34.6	391	0.24	0.47				

Contaminant	CCME		BC		AB	SK	MB	ON
	ISQG (Guidelines) (µg/g)	PEL (Guidelines) (µg/g)	Sensitive (SedQCSS) (µg/g) (Criteria)	Typical (SedQCts) (µg/g) (Criteria)				
PAHs - Phenanthrene	41.9	515	0.34	0.65				
PAHs - Pyrene	53	875	0.87	1.7				
Pentachlorophenol			0.36	0.69				
Phenanthrene								0.56
Polychlorinated biphenyls (Aroclor 1254)	60	340						
Polychlorinated biphenyls (PCBs) (total)								0.07
PCBs	34.1	277	0.12	0.23				
Polychlorinated dibenzo-p-dioxins and dibenzofurans (TEQ)	0.00085	0.0215	0.00013	0.00026				
Pyrene								0.49
Silver								0.5
Toxaphene	0.1							
Zinc	123 (mg/kg)	315 (mg/kg)	170	330				120

Drinking Water Quality - Federal and Provincial Comparison of Guidelines, Objectives, and Standards

Contaminant	CCME Guidelines (mg/L)	British Columbia Standards (mg/L)	Alberta Guidelines (mg/L)	Saskatchewan Standards/ Objectives (mg/L)	Manitoba Guidelines/ Objectives (mg/L)	Ontario Standards/ Objectives (mg/L)
Acrolien						
Alachlor						5
Aldicarb	9		9		9	9
Aldrin + dieldrin	0.7		0.7		0.7	0.7
Aluminuma	(1,000 / 2,000)	200	(1,000 / 2,000)			1,000 (O)
Antimony	6	6			6	6
Antimony - 125					100 Bq/L	100 Bq/L
Arsenic	10	10	10	25 (S)	25	25
Atrazine + metabolites	5		5	5 (S)	5	5
Azinphos-methyl	20		20		20	20
Barium	1,000	1,000	1,000	1,000 (S)	1,000	1,000
Bendiocarb	40		40		40	40
Benzene	5	5	5	5 (S)	5	5
Benzo[a]pyrene	0.01		0.01	0.01 (S)	0.01	0.01
Beryllium						
Boron	5,000	5,000	5,000	5,000 (S)	5,000	5,000
Bromate	10	10	10		10	10
Bromodichloromethane (BDCM)	16	16				
Bromoxynil	5		5	5 (S)	5	5
Cadmium	5	5	5	5 (S)	5	5
Calcium						
Carbaryl	90		90		90	90
Carbofuran	90		90	90 (S)	90	90
Carbon tetrachloride	5		5	5 (S)	5	5
Cerium-141					100 Bq/L	100 Bq/L
Cerium-144					20 Bq/L	20 Bq/L
Cesium-134					7 Bq/L	7 Bq/L
Cesium-137					10 Bq/L	10 Bq/L
Chloramines (total)	3,000		3,000			3,000
Chlorate	1,000		1,000			
Chlordane						7
Chloride	250,000	250,000	250,000	250,000 (O)		250,000
Chlorine (total residual chlorine)						
Chlorite	1,000		1,000			
Chlorpyrifos	90		90	90 (S)	90	90
Chromium	50	50	50	50 (S)	50	50
Cobalt				50 (S)		
Cobalt - 60					2 Bq/L	2 Bq/L
Colour	<15 TCU		<15 TCU		< 15 TCU	5 TCU
Copper	<1,000	< 1000	<1,000	1,000 (O)	< 1,000 (O)	1,000 (O)
Cyanazine	10		10		10	10
Cyanide	200	200	200	200 (S)	200	200
Cyanobacterial toxins-Microcystin-LRc	1.5		1.5			
Diazinon	20		20		20	20
Dicamba	120		120	120 (S)	120	120
Dichloromethane	50	50	50	50 (S)	50	50
2,4-Dichlorophenol,	900		900	900 (S)	900	900
2,4-Dichlorophenoxyacetic acid (2,4-D)	100		100	100 (S)	100	100
Diclofop-methyl	9		9	9 (S)	9	9
Dimethoate	20		20	20 (S)	20	20
Dinoseb	10		10		10	10
Dinitrotoluenes						
Dioxins and Furan						0.000015
Diphenylhydrazine						
Diquat	7		7		70	70
Dissolved Oxygen						

Contaminant	CCME Guidelines (mg/L)	British Columbia Standards (mg/L)	Alberta Guidelines (mg/L)	Saskatchewan Standards/ Objectives (mg/L)	Manitoba Guidelines/ Objectives (mg/L)	Ontario Standards/ Objectives (mg/L)
Diuron	150		150		150	150
DDT						30
Endosulfan						
Endrin						
Ethylbenzene	< 2.4	< 2.4	< 2.4	2.4 (O)	< 2.4	2.4
Fluoride	1500	1500	1500	1,500 (S)	1500	1500
Glyphosate	280		280		280	280
Haloacetic Acids-Total (HAAs)	80		80			
Halogenated ethers						
Heptachlor + Heptachlor epoxide						3
Heptachlorocyclohexane isomers		4				
Hexachlorocyclopentadiene						
Iodine-125					10 Bq/L	10 Bq/L
Iodine-131					6 Bq/L	6 Bq/L
Iron	< 300	< 300	< 300	300 (O)	< 300	300 (O)
Lead	10	10	10	10 (S)	10	10
Lindane						4
Lithium						
Malathion	190		190	190 (S)	190	190
Magnesium		100,000		200,000 (O)		
Manganese	< 50	<50	< 50	50 (O)		50 (O)
Manganese-54					200 Bq/L	200 Bq/L
Mercury	1	1	1	1 (S)	1	1
Methoxychlor	900		900		900	900
Methyl tertiary-butyl ether (MTBE)	15	15	15			
Metolachlor	50		50		50	50
Metribuzin	80		80		80	80
Microcystin-LR						1.5
Molybdenum		250				
Molybdenum-99					70 Bq/L	70 Bq/L
Monochlorobenzene	80		80	80 (S)	80	80
Nickel						
Niobium-95					200 Bq/L	200 Bq/L
Nitrate	45,000	10000	45,000	45,000 (S)	45,000	10,000
Nitrogen - Ammonia (total)						
Nitrite		3200			3200	1000
Nitrotriacetic acid (NTA)	400	400	400		400	400
Nitrosodimethylamine (NDMA)						0.009
Odour	Inoffensive		Inoffensive			Inoffensive
Paraquat (as dichloride)	10		10		10	10
Parathion	50		50		50	50
Pentachlorophenol	6		6	60 (S)	60	60
pH	6.5-8.5		6.5-8.5	6.5 - 8.5	6.5 - 8.5	6.5 - 8.5
Phenols (total)						
Phenocly herbicides (2,4 D)						
Phthalate esters						
Di-n-butyl phthalate						
Di(2-ethyl hexyl) phthalate						
Phorate	2		2		2	2
Picloram	190		190	190 (S)	190	190
Polychlorinated biphenyls (PCBs)						3
Prometryne						1
Radium-224					2 Bq/L	2 Bq/L
Radium-226					0.6 Bq/L	0.6 Bq/L
Radium-228					0.5 Bq/L	0.5 Bq/L
Ruthenium-103					100 Bq/L	100 Bq/L

Drinking Water Quality - Federal and Provincial Comparison of Guidelines, Objectives, and Standards

Contaminant	CCME Guidelines (mg/L)	British Columbia Standards (mg/L)	Alberta Guidelines (mg/L)	Saskatchewan Standards/ Objectives (mg/L)	Manitoba Guidelines/ Objectives (mg/L)	Ontario Standards/ Objectives (mg/L)
Ruthenium-106					10 Bq/L	10 Bq/L
Selenium	10	10	10	10 (S)	10	10
Silver						
Simazine	10		10		10	10
Sodium	< 200,000	< 200,000	< 200,000	200,000 (O)	< 200,000	
Strontium-90					5 Bq/L	5 Bq/L
Sulphate	< 500,000	< 500,000	< 500,000	500,000 (O)	< 500,000	500,000
Sulphide (as H <sub>2</sub> S)	< 50	< 50	< 50	50 (O)	< 50	50 (O)
Taste	Inoffensive		Inoffensive			Inoffensive
Temephos						280
Temperature	< 15C		< 15C		< 15C	15C
Terbufos	1		1		1	1
Tetrachloroethylene	30		30		30	30
2,3,4,6-Tetrachlorophenol	100		100	100 (S)	100	100
Thallium						
Thorium-228					2 Bq/L	2 Bq/L
Thorium-230					0.4 Bq/L	0.4 Bq/L
Thorium-232					0.1 Bq/L	0.1 Bq/L
Thorium-234					20 Bq/L	20 Bq/L
Toluene	< 24	< 24	< 24	24 (O)	< 24	24
Total dissolved solids (TDS)	< 500,000		< 500,000	1,500,000 (O)	< 500,000	500,000
Toxaphene						
Trichloroethylene	5		5	50 (S)	50	5
2,4,5 Trichlorophenoxy acetic acid (2,4,5-T)						280
2,4,6-Trichlorophenol	5		5	5 (S)	5	5
Triallate						230
Trifluralin	45		45	45 (S)	45	45
Trihalomethanes-total (THMs)k	100		100	100 (S)	100	100
Turbidity						5 NTU
Uranium	20	20	20	20 (S)	20	20
Uranium-234					4 Bq/L	4 Bq/L
Uranium-235					4 Bq/L	4 Bq/L
Uranium-238					4 Bq/L	4 Bq/L
Vanadium						
Vinyl chloride	2	2	2	2 (S)	2	2
Xylenes-total	< 300	< 300	< 300	300 (O)	< 300	300
Zinc	< 5,000	< 5000	< 5,000	5,000 (O)	< 5000	5000 (O)
Zirconium-95					100 Bq/L	100 Bq/L
<b>Chlorinated Hydrocarbons</b>						
Chlorinated benzenes		3				
Monochlorobenzene		30			80	
Dichlorobenzene 1,2 & 1,3				200 (S)	200	200
Dichlorobenzene 1,4		1		5 (S)	5	5
Trichlorobenzene 1,2,3						
Trichlorobenzene 1,2,4						
Trichlorobenzene 1,3,5						
Tetrachlorobenzene 1,2,3,4						
Tetrachlorobenzene 1,2,3,4,5						
Pentachlorobenzene						
Hexachlorobenzene						
<b>Chlorinated ethylenes</b>						
Tetrachloroethylene		30				
Di and trichloroethylenes		14				
<b>Chlorinated phenols</b>						
Monochlorophenols		0.11				
Dichlorophenols		0.3			900	0.3
Trichlorophenols		2			5	
Tetrachlorophenols		1				1
Pentachlorophenol		30			60	

Contaminant	CCME Guidelines (mg/L)	British Columbia Standards (mg/L)	Alberta Guidelines (mg/L)	Saskatchewan Standards/ Objectives (mg/L)	Manitoba Guidelines/ Objectives (mg/L)	Ontario Standards/ Objectives (mg/L)
<b>Chlorinated ethanes and ethylenes</b>						
Monochloroethane (vinyl chloride)					2	
1,2-Dichloroethane	5		5	5 (S)	5	5
1,1-Dichloroethylene	14		14	14 (S)	14	14
1,1,2-Trichloroethene [Trichloroethylene, TCE]					50	
1,1,2,2-Tetrachloroethene [Tetrachloroethylene, PCE]					30	30

**Aquatic Life Water Quality - Federal and Provincial Comparison of Guidelines, Objectives, and Standards**

Contaminant	Federal Guidelines (mg/L)	British Columbia Standards (mg/L)	Alberta Guidelines (mg/L)	Saskatchewan Objectives (mg/L)	Manitoba Guidelines/ Objectives (mg/L)	(MB) Aquatic Life Tissue Residue: Wildlife Consumers (mg/L)	(MB) Aquatic Life Tissue Residue: Human Consumers (mg/L)	Ontario Water Quality Objectives (mg/L)
Acetamide								30
Acetanilide								100
Acrolien								0.03
Aldicarb	1 (freshwater) , 0.15 (marine)	10 (freshwater), 1.5 (marine/estuarine)	1		1			
Aldrin + dieldrin	4	0.04						0.001
Aluminum	5 - 100		5 - 100	5 - 100	5 - 100			15 - 75
Aminoazobenzene								0.8
Aminoethyl piperazine								2400
Ammonia		1,310 - 200,000	1.37 - 2.20	1.37- 2.2				20
Aniline		20	2.2		2.2			2
Antimony		200						20
Antimony - 125								
Arsenic	50	50 (freshwater), 120 (marine/estuarine)	5	5			3,500	5 to 100
Atrazine + metabolites		20 (freshwater), 100 (marine/estuarine)	1.8		1.8			
Azinphos-methyl								
Barium		5,000 (marine/estuarine) - 10,000 (freshwater)						
Bendiocarb								
Benzaldehyde								0.09
Benzene	300	1,000 (marine/estuarine) - 4,000 (freshwater)		300	370			100
Benzidene								20
Benzothiazole								100
Benzo [g,h,i] perylene								0.00002
Benzo[a]pyrene								
Benzo[k]fluoranthene								0.0002
Benzyl alcohol								8
Beryllium		53 (freshwater) - 1,000 (marine/estuarine)						11 to 1,100
Biphenyl								0.2
Bisphenol A								5
Boron		50,000						200
Bromate								
Bromodichloromethane (BDCM)								200
Bromocil		50	5		5			
Bromoform								60
Bromomethane								0.9
Bromophenyl phenylether-4								0.05
Bromoxynil		50	5	5	5			
Butanal								10
Butyl benzyl phthalate								0.2
Cadmium	0.2 - 1.8	0.1 - 0.6	0.005 - 0.097	0.2 - 1.8				0.1 to 0.5
Cadmium		1 (marine)						
Calcium								
Camphene								2
Captan		28	1.3		1.3			

**Aquatic Life Water Quality - Federal and Provincial Comparison of Guidelines, Objectives, and Standards**

Contaminant	Federal Guidelines (mg/L)	British Columbia Standards (mg/L)	Alberta Guidelines (mg/L)	Saskatchewan Objectives (mg/L)	Manitoba Guidelines/ Objectives (mg/L)	(MB) Aquatic Life Tissue Residue: Wildlife Consumers (mg/L)	(MB) Aquatic Life Tissue Residue: Human Consumers (mg/L)	Ontario Water Quality Objectives (mg/L)
Carbaryl		2 (freshwater) - 3 (marine/estuarine)	0.2		0.2			0.2
Carbofuran		18	1.8		1.8			
Carbon tetrachloride			13.3					
Cerium-141								
Cerium-144								
Cesium-134								
Cesium-137								
Chloramines--total								
Chlorate								
Chlordane	6	0.06						0.06
Chloride		1,500,000						
Chlorine (total residual chlorine)	2			0.5				2
Chlorite								
Chlorodibromomethane								40
Chloromethane								700
Chloronaphthalene, 1-								0.1
Chloronaphthalene, 2-								0.2
Chlorophenyl phenylether, 4-								0.05
Chloro-3-methyl phenol, 4-								3
Chlorothalonil		2 (freshwater) - 4 (marine/estuarine)	0.18		0.18			
Chlorpyrifos		0.035 (freshwater) - 0.02 (marine/estuarine)	0.0035	0.0035	0.0035			0.001
Chromium VI	2 to 20	10 (freshwater) to 150 (marine/estuarine)		2 to 20				1
Chromium III		90 (freshwater) - 560 (marine/estuarine)	8.9					8.9
Cineole								100
Cobalt		40	1					0.9
Cobalt - 60								
Colour								
Copper	2 - 4	20 - 90	2- 4	2 - 4				1 to 5
Cresol								1
Cyanazine		20	2		2			
Cyanide	5	50 (freshwater) - 10 (marine/estuarine)	5					5
Cyclohexanamine								50
Cyclohexanol								1000
Cyanobacterial toxins-Microcystin-LRc								
Dalapon								110
DDT	1	0.01				14 (µg/kg)	5000 (µg/kg)	0.003
Deltamethrin		0.1	0.0004		0.0004			
Diazinon		0.03						0.08
Dibenzofuran								0.3
Dibutylamine								8
Dibutylphthalate								4
Dicamba		100	10	10	10			200
Monochloroethane (vinyl chloride)								
Dichlorobut-3-ene, 1,2								10
Dichloromethane		980	98.1		98.1			
Dichloroguaiacol, 4,5								6
Dichloropropane, 1,2								0.7
Dichloropropylene, trans 1,3								7

**Aquatic Life Water Quality - Federal and Provincial Comparison of Guidelines, Objectives, and Standards**

Contaminant	Federal Guidelines (mg/L)	British Columbia Standards (mg/L)	Alberta Guidelines (mg/L)	Saskatchewan Objectives (mg/L)	Manitoba Guidelines/ Objectives (mg/L)	(MB) Aquatic Life Tissue Residue: Wildlife Consumers (mg/L)	(MB) Aquatic Life Tissue Residue: Human Consumers (mg/L)	Ontario Water Quality Objectives (mg/L)
2,4-Dichlorophenoxyacetic acid (2,4 -D)		40						4
Diclofop-methyl		61	6.1	6.1	6.1			
Diethylene glycol								11,000
Diethylhexylphthalate								0.6
Dimethoate		62	6.2	6.2	6.2			
Diethyl-m-toluidide, N, N (DEET)								200
Dimethyl disulphide								0.2
Dimethylamine								3
Dimethyl benzylamine								40
Dimethylformamide, N, N								5,000
Dimethylnaphthalene, 1,3								0.09
Dimethylnaphthalene, 2,6								
Dinitrobenzene, m, o								1
Dinitrobenzene, p								2
Dinitrotoluene, 2,4								4
Dinitrotoluene, 2,6								6
Dinitro-o-cresol								0.2
Dinoseb		0.5	0.05		0.05			
Dinitrotoluenes								
Dioxane, 1,4								20
Dioxins & Furans							0.02 (µg/kg)	
Diphenyl ether								0.03
Diphenylamine								3
Diphenylhydrazine, 1,2								0.3
Diquat								0.5
Dissolved Oxygen	6,000 - 9,500		5,500 - 9,500	5,500 - 9,500				4,000 to 8,000
Diuron								1.6
Divinyl benzene								8
Di-t-butyl-4-methylphenol								-0.2
Endosulfan	0.02	0.2	0.02		0.02			0.003
Endrin	2.3	0.023						0.002
EPHw 10-19		5,000						
Ethanolamine								200
Ethylbenzene	700	2,000 (fresh water) 2,500 (marine/estuarine)	90	700	90			8
Ethylene diamine								0.1
Ethylene dibromide								5
Ethylene glycol		1,920,000	192,000		192,000			2000
Ethylene thiourea								60
Eugenol								30
Fenthion								0.006
Fluoride		2,000 - 3,000 (freshwater) & 15,000 (marine/estuarine)					150000 (µg/kg)	
Formaldehyde								0.8
Furfuryl alcohol								1
Glyphosate		650	65	65	65			
Guaiacol								1
Guthion								0.005
Haloacetic Acids-Total (HAAs)								
Halogenated ethers								
Heptachlor + Heptachlor epoxide	0.01	0.1						0.0001
Heptachlorocyclohexane isomers	0.01	0.1						



**Aquatic Life Water Quality - Federal and Provincial Comparison of Guidelines, Objectives, and Standards**

Contaminant	Federal Guidelines (mg/L)	British Columbia Standards (mg/L)	Alberta Guidelines (mg/L)	Saskatchewan Objectives (mg/L)	Manitoba Guidelines/ Objectives (mg/L)	(MB) Aquatic Life Tissue Residue: Wildlife Consumers (mg/L)	(MB) Aquatic Life Tissue Residue: Human Consumers (mg/L)	Ontario Water Quality Objectives (mg/L)
Hexachlorobutadiene			1.3		1.3			0.009
Hexachlorocyclopentadiene								0.06
Hydrogen sulphide								2
Hydroxybiphenyl, 2-								6
Iodine								100
Iodine-125								
Iodine-131								
Iron	300		300	300	300			300
Isopropyl alcohol								
Lead	1 - 7	40 to 160 (freshwater) and 20 (marine/estuarine)	1 - 7	1 - 7			500 (µg/kg)	1 to 5
LEPHw		500						
Limonene								4
Lindane		0.1	0.01	0.01	0.01			0.01
Linuron		70	7		7			
Lithium								
Malathion		1						0.1
Magnesium								
Manganese								
Manganese-54								
MCPA		26 (freshwater) - 42 (marine)	2.6		2.6			
Mercury	0.1	1	0.1	0.1	0.1		500 (µg/kg)	0.2
Methanol								200
Methylmercury						33 (µg/kg)		
Methoxychlor								0.04
Methyl ethyl ketone								400
Methylene chloride								100
Methylnaphthalene, 1,2								2
Methyl-2-pentanol, 4								600
Methyl tertiary-butyl ether (MTBE)		34,000 (freshwater) - 4,400 (marine/estuarine)						200
Metolachlor		80	7.8		7.8			3
Metribuzin		10	1		1			
Mirex								0.001
Molybdenum		10,000	73		73			40
Molybdenum-99								
Monochloramine		5						
Monomethylamine								50
Morpholine								4
Nickel	25 - 150	250 - 1,500 (freshwater) & 83 (marine/estuarine)	25 - 150	25 - 150				25
Niobium-95								
Nitrogen - Ammonia (total)	1.37 - 2.2							
Nitrite (as N)	0.06	200 - 2,000	0.06	0.06	60			
Nitrate (as N)		400,000						
Nitrioltriacetic acid (NTA)								
Nitrobenzene								0.02
Nitroaphthalene, 1								7
Nitrophenol, 2								0.5
Nitrophenol, 3								20

**Aquatic Life Water Quality - Federal and Provincial Comparison of Guidelines, Objectives, and Standards**

Contaminant	Federal Guidelines (mg/L)	British Columbia Standards (mg/L)	Alberta Guidelines (mg/L)	Saskatchewan Objectives (mg/L)	Manitoba Guidelines/ Objectives (mg/L)	(MB) Aquatic Life Tissue Residue: Wildlife Consumers (mg/L)	(MB) Aquatic Life Tissue Residue: Human Consumers (mg/L)	Ontario Water Quality Objectives (mg/L)
Nitrophenol, 4								50
Nitrosodimethylamine, N								15
Nitrosodiphenylamine, N								7
Nitrosomorpholine, N								0.9
Nonyl phenol								0.04
Odour								
Oleic acid								1
Paraquat (as dichloride)								
Parathion								0.008
pH	6.5 to 9		6.5 to 9	6.5 to 9	6.5 to 9			6.5 - 8.5
Phenols (total)	1		4	4	4			1
Phenocly herbicides (2,4 D)	4			4	4			
Phthalate esters								
Di-n-butyl phthalate	4	190			19			
Di(2-ethyl hexyl) phthalate	0.6	160			16			
Other phthalate esters	0.2							0.2
Phorate								
Phosphorus (total)								20 to 30
Picloram		290	29	29	29			
Polychlorinated biphenyls (PCBs)*	1			1		0.79 (ng TEQ/kg diet), 2.4 (ng TEQ/kg diet)	2000 (µg/kg)	0.001
Polychlorinated naphthalenes								0.0002
Polycyclic aromatic hydrocarbons								
Propyl diphenyl								0.1
Propylene glycol 1,2		5,000,000	500,000		500,000			44,000
Propylene glycol 1,3								10,000
Pyrethrum								0
Quinoline								10
Radium-224								
Radium-226								
Radium-228								
Resin acids								1 to 62
Ruthenium-103								
Ruthenium-106								
Selenium	1	10 (freshwater) - 540 (marine/estuarine)	1	1	1			100
Silver	0.1	0.5 - 15 (freshwater) and 15 (marine/estuarine)	0.1	0.1	0.1			0.1
Simazine		100	10		10			10
Sodium								
Strontium-90								
Styrene		720	72		72			4
Sulphate		1,000,000						
Sulphide (as H <sub>2</sub> S)		20						
Taste								
Tebuthiuron		16	1.6		1.6			
Temperature								
Terbufos								
Tetrachloroguaiacol								0.009
Tetrachloromethane (carbon tetrachloride)		130			13.3			
2,3,4,6-Tetrachlorophenol								
2,4,5-T								
Tetraethyl lead								0.0007

**Aquatic Life Water Quality - Federal and Provincial Comparison of Guidelines, Objectives, and Standards**

Contaminant	Federal Guidelines (mg/L)	British Columbia Standards (mg/L)	Alberta Guidelines (mg/L)	Saskatchewan Objectives (mg/L)	Manitoba Guidelines/ Objectives (mg/L)	(MB) Aquatic Life Tissue Residue: Wildlife Consumers (mg/L)	(MB) Aquatic Life Tissue Residue: Human Consumers (mg/L)	Ontario Water Quality Objectives (mg/L)
Tetramethyl lead								0.006
Thallium		3	0.8		0.8			0.3
Thorium-228								
Thorium-230								
Thorium-232								
Thorium-234								
Titanium		1,000						
Toluene	300	390 (freshwater) - 3,300 (marine/estuarine)	2	300	2			0.8
Tolyltiazole								3
Total dissolved solids (TDS)								
Toxaphene	8	0.08				6.3 (µg/kg)	1600 (µg/kg)	0.008
Tributyl phosphate								0.6
Trichloromethane (chlorform)		20	1.8		1.8			
2,4,6-Trichlorophenol								
Triallate		2.4	0.24	0.24	0.24			
Triethyl lead								0.4
Trifluralin		1	0.2	0.2	0.2			
Trihalomethanes (total THMs)								
Trimethyl benzene								3
Tungsten								30
Turbidity								
Uranium		3,000 (freshwater) - 1,000 (marine/estuarine)		15				5
Uranium-234								
Uranium-235								
Uranium-238								
Vanadium								6
Vinyl chloride								600
VHW 6-10		15,000						
VPHw		1,500						
Xylenes (total)								
Xylene, m								2
Xylene, o								40
Xylene, p								30
Zinc		75 - 2,400 (freshwater) and 100 (marine/estuarine)	30	30				30
Zirconium								4
Zirconium-95								
<b>Organotins</b>								
Di-n-butyltin		0.8	19					0.08
Tributyltin		0.08, 0.05			0.008			0.000005
Tricyclohexyltin								
Triethyltin		4						0.4
Triphenyltin		0.2	0.022		0.022			
<b>Polycyclic Aromatic Hydrocarbons</b>								
Acenaphthene		60	5.8		5.8			
Acridine		0.5	4.4		4.4			
Anthracene		1	0.012		0.012			0.0008
Benzo[a]anthracene		1	0.018		0.018			0.0004
Benzo[a]pyrene		0.1	0.015		0.015			
Chrysene		1						0.0001

**Aquatic Life Water Quality - Federal and Provincial Comparison of Guidelines, Objectives, and Standards**

Contaminant	Federal Guidelines (mg/L)	British Columbia Standards (mg/L)	Alberta Guidelines (mg/L)	Saskatchewan Objectives (mg/L)	Manitoba Guidelines/ Objectives (mg/L)	(MB) Aquatic Life Tissue Residue: Wildlife Consumers (mg/L)	(MB) Aquatic Life Tissue Residue: Human Consumers (mg/L)	Ontario Water Quality Objectives (mg/L)
D-benz[a,h]anthracene								0.002
Fluoranthene		2	0.04		0.04			0.0008
Fluorene		120	3		3			0.2
Naphthalene		10	1.1		1.1			7
Perylene								0.00007
Phenanthrene		3	0.4		0.4			0.03
Pyrene		0.2	0.025		0.025			
Quinoline		34	3.4		3.4			
<b>Chlorinated benzenes</b>								
Chlorobenzene								15
Monochlorobenzene	15	13 (freshwater) - 120 (marine/estuarine)	1.3		1.3			
Dichlorobenzene 1,2	1.2	7 (freshwater) - 460 (marine/estuarine)	0.7		0.7			2.5
Dichlorobenzene 1,3		1,500	150		150			2.5
Dichlorobenzene 1,4	4	260	26		26			4
Dichlorbenzidine, 3,3-								0.6
Trichlorobenzene 1,2,3	0.9		8		8			0.9
Trichlorobenzene 1,2,4	0.5		24		24			0.5
Trichlorobenzene 1,3,5	0.65							0.65
Tetrachlorobenzene 1,2,3,4	0.1	18	1.8		1.8			0.1
Tetrachlorobenzene 1,2,4,5	0.15	240 (freshwater) - 54 (marine/estuarine)						0.15
Pentachlorobenzene	0.03	60	6		6			0.03
Hexachlorobenzene	0.0065							0.0065
<b>Chlorinated phenols</b>								
Monochlorophenols	7	8.5 - 650	7		7			7
2,4-Dichlorophenol,								
Dichlorophenols	0.2	2.5 - 340	0.2		0.2			0.2
Dimethylphenol, 2,4								10
Dimethylphenol, 2,6								8
Dimethylphenol, 3,4								20
Trichlorophenols	18	1 - 270	18		18			18
Tetrachlorophenols	1	1 - 180	1		1			1
Pentachlorophenol	0.5		0.5	0.5	0.5			0.5
<b>Chlorinated ethanes and ethylenes</b>								
1,2-Dichloroethane		1,000	100		100			100
1,1-Dichloroethylene								40
1,2-Dichloroethylene								200
1,1,1 Trichloroethane								10
1,1,2-Trichloroethane [Trichloroethylene, TCE]			21		21			800
Tetrachloroethane 1,1,1,2								20
1,1,2,2-Tetrachloroethene [Tetrachloroethylene, PCE]	260	1,100	111		111			70
Hexachloroethane								1
Phenylxylethane								0.02
Tetrachloroethylene								50
Trichloroethylene								20
Trichloroguaiacol, 3,4,5								0.1
Trichloroguaiacol, 4,5,6								0.8

Irrigation Water Quality - Federal and Provincial Comparison of Guidelines and Objectives

Contaminant	Federal Guidelines (mg/L)	British Columbia Standards (mg/L)	Alberta Guidelines (mg/L)	Saskatchewan Objectives (mg/L)	Manitoba Guidelines/ Objectives (mg/L)	Ontario Guidelines (mg/L)
Acenaphthene						
Acridine						
Acrolien						
Aldicarb			54.9		54.9	
Aldrin + dieldrin						
Aluminum		5,000	5,000	5,000	5,000	
Ammonia						
Ammonia						
Aniline						
Anthracene						
Antimony						
Antimony - 125						
Arsenic		100	100	100	100	
Atrazine + metabolites			10		10	
Azinphos-methyl						
Barium						
Bendiocarb						
Benzene						
Benzo[a]pyrene						
Beryllium		100	100	100	100	
Boron		500 - 6,000	500 - 6,000	500 - 6,000	500 - 6,000	
Bromate						
Bromodichloromethane (BDCM)						
Bromocil			0.2		0.2	
Bromoform						
Bromoxynil			0.33	0.33	0.33	
Cadmium		5	5.1	10	5.1	
Calcium						
Captan						
Carbaryl						
Carbofuran						
Carbon tetrachloride						
Cerium-141						
Cerium-144						
Cesium-134						
Cesium-137						
Chloramines--total						
Chlorate						
Chlordane						
Chloride		100,000	100,000 - 700,000	100,000 - 700,000	100,000 - 700,000	
Chlorine (total residual chlorine)		1000				
Chlorite						
Chloroform						
Chlorothalonil			5.8		5.8	
Chlorpyrifos						

Contaminant	Federal Guidelines (mg/L)	British Columbia Standards (mg/L)	Alberta Guidelines (mg/L)	Saskatchewan Objectives (mg/L)	Manitoba Guidelines/ Objectives (mg/L)	Ontario Guidelines (mg/L)
Chromium	100					100
Chromium VI		8	8	8	8	
Chromium III		5	4.9		4.9	
Cobalt	50	50	50	50	50	50
Cobalt - 60						
Colour						
Copper	200 - 1,000	200	200 - 1,000	200 - 1,000	200 - 1,000	200 - 1,000
Cyanazine			0.5		0.5	
Cyanide						
Cyanobacterial toxins-Microcystin-LRc						
DDT						
Deltamethrin						
Diazinon						
Dicamba			0.006	0.006	0.006	
Monochloroethane (vinyl chloride)						
Dichloromethane						
2,4-Dichlorophenol, 2,4-Dichlorophenoxyacetic acid (2,4-D)						
Diclofop-methyl			0.18	0.18	0.18	
Dimethoate						
Dinoseb			16		16	
Dinitrotoluenes						
Dioxins & Furans						
Diphenylhydrazine						
Diquat						
Dissolved Oxygen						
Diuron						
Endosulfan						
Endrin						
EPHw 10-19						
Ethylbenzene						
Ethylene glycol						
Fluoride	1,000	1,000	1,000	1,000	1,000	1,000
Glyphosate						
Haloacetic Acids-Total (HAAs)						
Halogenated ethers						
Heptachlor + Heptachlor epoxide						
Heptachlorocyclohexane isomers						
Heptachlorobenzene						
Hexachlorobutadiene						
Hexachlorocyclopentadiene						
Iodine-125						
Iodine-131						
Iron	5,000	5,000	5,000	5,000	5,000	5,000
Lead	200	200	200	200	200	200

Irrigation Water Quality - Federal and Provincial Comparison of Guidelines and Objectives

Contaminant	Federal Guidelines (mg/L)	British Columbia Standards (mg/L)	Alberta Guidelines (mg/L)	Saskatchewan Objectives (mg/L)	Manitoba Guidelines/ Objectives (mg/L)	Ontario Guidelines (mg/L)
LEPHw						
Lindane						
Linuron			0.071		0.71	
Lithium	2,500	2,500	2,500	2,500	2,500	2,500
Malathion						
Magnesium						
Manganese	200	200	200	200	200	200
Manganese-54						
MCPA			0.025		0.025	
Mercury		1				
Methylmercury						
Methoxychlor						
Methyl tertiary-butyl ether (MTBE)						
Metolachlor			28		28	
Metribuzin			0.5		0.5	
Molybdenum		10 - 30		10 - 50	10 - 50	
Molybdenum-99						
Monochloramine						
Nickel	200	200	200	200	200	200
Niobium-95						
Nitrogen - Ammonia (total)						
Nitrite (as N)						
Nitrate (as N)						
Nitritotriacetic acid (NTA)						
Odour						
Paraquat (as dichloride)						
Parathion						
pH						
Phenols (total)						
Phenocly herbicides (2,4 D)						
<b>Phthalate esters</b>						
DBP						
DEHP						
Other phthalate esters						
Phorate						
Picloram						
Polychlorinated biphenyls (PCBs)						
Polycyclic aromatic hydrocarbons						
Propylene glycol 1,2						
Radium-224						
Radium-226						
Radium-228						
Ruthenium-103						
Ruthenium-106						
Selenium	20 - 50	20 - 50	20 - 50	20 - 50	20 - 50	20 - 50
Silver						
Simazine			0.5		0.5	

Contaminant	Federal Guidelines (mg/L)	British Columbia Standards (mg/L)	Alberta Guidelines (mg/L)	Saskatchewan Objectives (mg/L)	Manitoba Guidelines/ Objectives (mg/L)	Ontario Guidelines (mg/L)
Sodium						
Strontium-90						
Styrene						
Sulphate						
Sulphide (as H <sub>2</sub> S)						
Taste						
Temperature						
Terbufos						
Tetrachloromethane (carbon tetrachloride)						
2,3,4,6-Tetrachlorophenol						
2,4,5-T						
Tebuthiuron			0.27		0.27	
Thallium						
Thorium-228						
Thorium-230						
Thorium-232						
Thorium-234						
Titanium						
Toluene						
Total dissolved solids (TDS)	500,000 - 3,500,000		500,000 - 3,500,000	500,000 - 3,500,000	500,000 - 3,500,000	500,000 - 3,500,000
Toxaphene						
Trichloromethane (chlorform)						
2,4,6-Trichlorophenol						
Triallate						
Trifluralin						
Trihalomethanes (total THMs)						
Turbidity						
Uranium	10	10	10	10	10	10
Uranium-234						
Uranium-235						
Uranium-238						
Vanadium	100	100	100	100	100	100
Vinyl chloride						
VHW 6-10						
VPHw						
Xylenes--total						
Zinc	1,000 - 5,000	1,000 - 5,000	1,000 - 5,000	1,000 - 5,000	1,000 - 5,000	1,000 - 5,000
Zirconium-95						
<b>Organotins</b>						
Di-n-butyltin						
Tributyltin						
Tricyclohexyltin						
Triethyltin						
Triphenyltin						
<b>Polycyclic Aromatic Hydrocarbons</b>						
Acenaphthene						
Acridine						

**Irrigation Water Quality - Federal and Provincial Comparison of Guidelines and Objectives**

Contaminant	Federal Guidelines (mg/L)	British Columbia Standards (mg/L)	Alberta Guidelines (mg/L)	Saskatchewan Objectives (mg/L)	Manitoba Guidelines/ Objectives (mg/L)	Ontario Guidelines (mg/L)
Anthracene						
Benzo[a]anthracene						
Benz[a]pyrene						
Chrysene						
Fluoranthene						
Fluorene						
Naphthalene						
Phenanthrene						
Pyrene						
Quinoline						
<b>Chlorinated benzenes</b>						
Monochlorobenzene						
Dichlorobenzene 1,2						
Dichlorobenzene 1,3						
Dichlorobenzene 1,4						
Trichlorobenzene 1,2,3						
Trichlorobenzene 1,2,4						
Trichlorobenzene 1,3,5						
Tetrachlorobenzene 1,2,3,4						
Tetrachlorobenzene 1,2,4,5						
Pentachlorobenzene						
Hexachlorobenzene						
<b>Chlorinated phenols</b>						
Monochlorophenols						
Dichlorophenols						
Trichlorophenols						
Tetrachlorophenols						
Pentachlorophenol						
<b>Chlorinated ethanes and ethylenes</b>						
1,2-Dichloroethane						
1,1-Dichloroethylene						
1,1,2-Trichloroethene [Trichloroethylene, TCE]						
1,1,2,2-Tetrachloroethene [Tetrachloroethylene, PCE]						
Trichloroethylene						

Contaminant	Federal Guidelines (mg/L)	British Columbia Standards (mg/L)	Alberta Guidelines (mg/L)	Saskatchewan Objectives (mg/L)	Manitoba Guidelines/ Objectives (mg/L)	Ontario Guidelines (mg/L)
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Livestock Water Quality - Federal and Provincial Comparison of Guidelines and Objectives

Contaminant	Federal Guidelines (mg/L)	British Columbia Standards (mg/L)	Alberta Guidelines (mg/L)	Saskatchewan Objectives (mg/L)	Manitoba Guidelines/ Objectives (mg/L)	Ontario Guidelines (mg/L)
Acenaphthene						
Acridine						
Acrolien						
Aldicarb			11		11	
Aldrin + dieldrin						
Aluminum	5,000	5,000	5,000	5,000	5,000	5,000
Ammonia						
Ammonia						
Aniline						
Anthracene						
Antimony						
Antimony - 125						
Arsenic	500 - 5,000	25	25	25	25	
Atrazine + metabolites			5		5	
Azinphos-methyl						
Barium						
Bendiocarb						
Benzene						
Benzo[a]pyrene						
Beryllium	100	100	100	100	100	100
Boron	5,000	5,000	5,000	5,000	5,000	5,000
Bromate						
Bromodichloromethane (BDCM)						
Bromocil			1100		1100	
Bromoform			100		100	
Bromoxynil			11	11	11	
Cadmium	20	80	80	20	80	20
Calcium	1,000,000	1,000,000	1,000,000		1,000,000	1,000,000
Captan			13		13	
Carbaryl			1100		1100	
Carbofuran			45		45	
Carbon tetrachloride			5			
Cerium-141						
Cerium-144						
Cesium-134						
Cesium-137						
Chloramines--total						
Chlorate						
Chlordane						
Chloride		600,000				
Chlorine (total residual chlorine)						
Chlorite						
Chloroform			100			
Chlorothalonil			170		170	
Chlorpyrifos			24		24	
Chromium	1,000	50				1,000
Chromium VI			50	50	50	
Malathion						

Contaminant	Federal Guidelines (mg/L)	British Columbia Standards (mg/L)	Alberta Guidelines (mg/L)	Saskatchewan Objectives (mg/L)	Manitoba Guidelines/ Objectives (mg/L)	Ontario Guidelines (mg/L)
Chromium III			50		50	
Cobalt	1,000	1,000	1,000	1,000	1,000	1,000
Cobalt - 60						
Colour						
Copper	500 - 5,000	300		500 - 5,000	500 - 5,000	500 - 5,000
Cyanazine			10		10	
Cyanide						
Cyanobacterial toxins-Microcystin-LRc						
DDT						
Deltamethrin			2.5		2.5	
Diazinon						
Dicamba			122	122	122	
Monochloroethane (vinyl chloride)						
Dichloromethane			50		50	
2,4-Dichlorophenol, 2,4-Dichlorophenoxyacetic acid (2,4 -D)						
Diclofop-methyl			9	1 to 2	9	
Dimethoate					3	
Dinoseb			150		150	
Dinitrotoluenes						
Dioxins & Furans						
Diphenylhydrazine						
Diquat						
Dissolved Oxygen						
Diuron						
Endosulfan						
Endrin						
EPHw 10-19						
Ethylbenzene			2.4		2.4	
Ethylene glycol						
Fluoride	1,000 - 2,000	1,000		1,000 - 2,000	1,000 - 2,000	1,000 - 2,000
Glyphosate			280	280	280	
Haloacetic Acids-Total (HAAs)						
Halogenated ethers						
Heptachlor + Heptachlor epoxide						
Heptachlorocyclohexane isomers						
Heptachlorobenzene			0.52		0.52	
Hexachlorobutadiene						
Hexachlorocyclopentadiene						
Iodine-125						
Iodine-131						
Iron						
Lead	100	100	100	100	100	100
LEPHw						
Lindane			4	4	4	
Linuron						
Lithium		5,000				
2,3,4,6-Tetrachlorophenol						



Livestock Water Quality - Federal and Provincial Comparison of Guidelines and Objectives

Contaminant	Federal Guidelines (mg/L)	British Columbia Standards (mg/L)	Alberta Guidelines (mg/L)	Saskatchewan Objectives (mg/L)	Manitoba Guidelines/ Objectives (mg/L)	Ontario Guidelines (mg/L)
Magnesium						
Manganese						
Manganese-54						
MCPA			25		25	
Mercury	3	2	3	3	3	3
Methylmercury						
Methoxychlor						
Methyl tertiary-butyl ether (MTBE)						
Metolachlor			50		50	
Metribuzin			80		80	
Molybdenum	500	50	500	500	500	500
Molybdenum-99						
Monochloramine						
Nickel	1000	1000	1000	1000	1000	1000
Niobium-95						
Nitrogen - Ammonia (total)						
Nitrite (as N)	10,000	10,000	10,000	10,000	10,000	10,000
Nitrate (as N)	100,000	100,000	100,000	100,000	100,000	100,000
Nitritotriacetic acid (NTA)						
Odour						
Paraquat (as dichloride)						
Parathion						
pH						
Phenols (total)			2	2	2	
Phenocly herbicides (2,4 D)			100	100	100	
Phthalate esters						
DBP						
DEHP						
Other phthalate esters						
Phorate						
Picloram			190	190	190	
Polychlorinated biphenyls (PCBs)						
Polycyclic aromatic hydrocarbons						
Propylene glycol 1,2						
Radium-224						
Radium-226						
Radium-228						
Ruthenium-103						
Ruthenium-106						
Selenium	50	50	50	50	50	50
Silver						
Simazine			10		10	
Sodium						
Strontium-90						
Styrene						
Sulphate			1,000,000	1,000,000	1,000,000	
Sulphide (as H <sub>2</sub> S)	1,000,000	1,000,000				1,000,000

Contaminant	Federal Guidelines (mg/L)	British Columbia Standards (mg/L)	Alberta Guidelines (mg/L)	Saskatchewan Objectives (mg/L)	Manitoba Guidelines/ Objectives (mg/L)	Ontario Guidelines (mg/L)
2,4,5-T						
Tebuthiuron			130		130	
Thallium						
Thorium-228						
Thorium-230						
Thorium-232						
Thorium-234						
Titanium						
Toluene			24		24	
Total dissolved solids (TDS)	3,000,000		3,000,000	3,000,000	3,000,000	3,000,000
Toxaphene						
Trichloromethane (chloroform)						
2,4,6-Trichlorophenol						
Triallate			230	230	230	
Trifluralin			45	45	45	
Trihalomethanes (total THMs)						
Turbidity						
Uranium	200	200	200	200	200	200
Uranium-234						
Uranium-235						
Uranium-238						
Vanadium	100	100	100	100	100	100
Vinyl chloride						
VHW 6-10						
VPHw						
Xylenes (total)						
Zinc	50,000	2,000	50,000	50,000	50,000	50,000
Zirconium-95						
Organotins						
Di-n-butyltin						
Tributyltin			250		250	
Tricyclohexyltin			250		250	
Triethyltin						
Triphenyltin			820		820	
Polycyclic Aromatic Hydrocarbons						
Acenaphthene						
Acridine						
Anthracene						
Benzo[a]anthracene						
Benz[a]pyrene						
Chrysene						
Fluoranthene						
Fluorene						
Naphthalene						
Phenanthrene						
Pyrene						
Quinoline						

**Livestock Water Quality - Federal and Provincial Comparison of Guidelines and Objectives**

Contaminant	Federal Guidelines (mg/L)	British Columbia Standards (mg/L)	Alberta Guidelines (mg/L)	Saskatchewan Objectives (mg/L)	Manitoba Guidelines/ Objectives (mg/L)	Ontario Guidelines (mg/L)
Taste						
Temperature						
Terbufos						
Tetrachloromethane (carbon tetrachloride)					5	
<b>Chlorinated benzenes</b>						
Monochlorobenzene						
Dichlorobenzene 1,2						
Dichlorobenzene 1,3						
Dichlorobenzene 1,4						
Trichlorobenzene 1,2,3						
Trichlorobenzene 1,2,4						
Trichlorobenzene 1,3,5						
Tetrachlorobenzene 1,2,3,4						
Tetrachlorobenzene 1,2,4,5						
Pentachlorobenzene						
Hexachlorobenzene						
<b>Chlorinated phenols</b>						
Monochlorophenols						
Dichlorophenols						
Trichlorophenols						
Tetrachlorophenols						
Pentachlorophenol						
<b>Chlorinated ethanes and ethylenes</b>						
1,2-Dichloroethane			5		5	
1,1-Dichloroethylene						
1,1,2-Trichloroethene [Trichloroethylene, TCE]					50	
1,1,1,2-Tetrachloroethene [Tetrachloroethylene, PCE]						
Trichloroethylene						

Contaminant	Federal Guidelines (mg/L)	British Columbia Standards (mg/L)	Alberta Guidelines (mg/L)	Saskatchewan Objectives (mg/L)	Manitoba Guidelines/ Objectives (mg/L)	Ontario Guidelines (mg/L)
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**Air Quality - Federal and Provincial Comparison of Guidelines ( $\mu\text{g}/\text{m}^3$  unless stated otherwise)**

Contaminant	Period of Time Contaminant is Measured	Canada			British Columbia			Alberta Objectives	Saskatchewan Standards	Manitoba			Ontario Standards & Guidelines (G)
		Maximum Tolerable Level Concentration	Maximum Acceptable Level Concentration	Maximum Desirable Level Concentration	Level A	Level B	Level C			Maximum Tolerable Concentration	Maximum Acceptable Concentration	Maximum Desirable Concentration	
Acetaldehyde	1/2 hour												500
	1 hour							90					
	24 hour												500
Acetic acid	1/2 hour												2,500
	1 hour							250					
Acetone	1/2 hour												48,000 / 35,640
	1 hour							5,900					
	24 hour												118,800
Acrylamide	1/2 hour												45
	24 hour												15
Acrolein	1/2 hour												0.24
	24 hour												0.08
Acrylic acid	1 hour							60					
	annual average							1					
Acrylonitrile	1/2 hour												180 / 1.8
	1 hour							43					
	24 hour												0.6 (health)
	annual average							2					
Adipic acid	1/2 hour												3,500 (G)
	24 hour												1,167 (G)
Ammonia	1/2 hour												3600 / 300
	1 hour							1,400			1,400		
Antimony	1/2 hour												75
Arsenic	1/2 hour												1 (G)
	1 hour							0.1					
	24 hour										0.3		0.3 (G)
	annual average							0.01					
	24 hour												5
Asbestos (fibres > 5 $\mu\text{m}$ in length)	24 hour												0.04 fibres/cm <sup>3</sup>
Asbestos total	1/2 hour												5
Barium - total water soluble	1/2 hour												30
	24 hour												24
Benzene	1 hour							30					
Beryllium	1/2 hour												0.03
	24 hour												0.01
Bromine	1/2 hour												70
	24 hour												20
Cadmium	1/2 hour												0.75
	24 hour										2		0.25
Carbon monoxide	1/2 hour												6,000
	1 hour		35,000	15,000	14,300	28,000	35,000	15,000	15,000		35,000	15,000	
	8 hour	20,000	15,000	6,000	5,500	11,000	14,300	6,000	6,000	20,000	15,000	6,000	
Chlorine	1/2 hour												300 / 30
	1 hour							15					
Chlorine dioxide	1/2 hour												60
	1 hour							28					
	24 hour												20

**Air Quality - Federal and Provincial Comparison of Guidelines ( $\mu\text{g}/\text{m}^3$  unless stated otherwise)**

Contaminant	Period of Time Contaminant is Measured	Canada			British Columbia			Alberta Objectives	Saskatchewan Standards	Manitoba			Ontario Standards & Guidelines (G)
		Maximum Tolerable Level Concentration	Maximum Acceptable Level Concentration	Maximum Desirable Level Concentration	Level A	Level B	Level C			Maximum Tolerable Concentration	Maximum Acceptable Concentration	Maximum Desirable Concentration	
Chloroform	1/2 hour												300 / 3
	24 hour												1
Chromic acid	1 hour										4.5		
Chromium	1/2 hour												5 (G)
	1 hour							1					1.5 (G)
	24 hour												0.1 (G)
Copper	1/2 hour												100
	24 hour										50		50
Dichlorobenzene, 1,2-	1/2 hour												37,000 (G)
	1 hour												30,500 (G)
Dichlorobenzene, 1,4-	1/2 hour												285
	24 hour												95
Dichloroethane, 1,1-	1/2 hour												4,950
	24 hour												1,650
Dimethyl ether	1/2 hour												2,100 (G)
	1 hour							19,100					
	24 hour												2,100 (G)
2-Ethylhexanol	1/2 hour												600 (G)
	1 hour							600					
Ethylbenzene	1/2 hour												3,000 / 1,400
	1 hour							2,000					
	24 hour												1,000
Ethyl chloroformate	1 hour							0.57					
Ethylene	1 hour							1,200					
	24 hour												40 (G)
	3-day average annual mean							45					
Ethylene oxide	1/2 hour												15 (G)
	1 hour							15					
	24 hour												0.2
Formic Acid	1/2 hour												1,500
	24 hour												500
Flourides (as HF)	1/2 hour												4.3
	24 hour										0.85	0.4	0.86
	7 day average										0.55	0.22	
	30 day average										0.35		0.69
	70 day average										0.2		
Formaldehyde	1/2 hour												65
	1 hour							60 (action level) - 370 (episode level)	65		60		
	24 hour												65
n-Hexane	1/2 hour												22,500
	1 hour							21,000					
	24-hour average							7,000					7,500
Hydrogen chloride	1/2 hour												100 / 60
	1 hour							75			100		
	24 hour												20
Hydrogen cyanide	1/2 hour												24
	1 hour										40		
	24 hour												8
	annual average										3		
Hydrogen fluoride	24 hour							5					
Hydrogen sulphide	1/2 hour												30 / 10
	1 hour		15	1	7.5-14	28-45	42-75	14	15	14	15	1	
	24 hour		5		4	6-7.5	7.5-8	4	5		5		7
Lead	1/2 hour												6 / 1.5
	1 hour							2			2		

**Air Quality - Federal and Provincial Comparison of Guidelines ( $\mu\text{g}/\text{m}^3$  unless stated otherwise)**

Contaminant	Period of Time Contaminant is Measured	Canada			British Columbia			Alberta Objectives	Saskatchewan Standards	Manitoba			Ontario Standards & Guidelines (G)
		Maximum Tolerable Level Concentration	Maximum Acceptable Level Concentration	Maximum Desirable Level Concentration	Level A	Level B	Level C			Maximum Tolerable Concentration	Maximum Acceptable Concentration	Maximum Desirable Concentration	
	24 hour				4	4	4				0.7		2 / 0.5
	30 day geometric mean												0.7 / 0.2
	Annual geometric mean				2	2	2						
Lithium hydrides	1/2 hour												7.5
	24 hour												2.5
Manganese	1/2 hour												7.5 (G)
	1 hour							2					
	24 hour												2.5 (G)
	annual average							0.2					
Methanol	1/2 hour												12,000
	1 hour							2,600					
	24 hour												4,000
Methylene bisphenyl diisocyanate	1/2 hour												7
	1 hour							0.51			3		
	24 hour												7 / 0.7
	annual average										0.5		
Methyl chloride	1/2 hour												9,600
	24 hour												3,200
Methylene chloride	1/2 hour												660
	24 hour												220
Monoethylamine	1/2 hour												25
	1 hour							1.19					
Nickel	1/2 hour												5
	1 hour							6					
	24 hour										2		2
	annual average							0.05					
Nitrogen dioxide	1/2 hour												500
	1 hour	1,000	400					400	400	1000	400		
	24 hour	300	200					200			200		200
	annual arithmetic mean		100	60				60	100		100		
Ozone	1/2 hour												200
	1 hour	300	160	100				160	160	400	160		165
	8 hour		65 ppb								128		
	24 hour		50	30									

**Air Quality - Federal and Provincial Comparison of Guidelines ( $\mu\text{g}/\text{m}^3$  unless stated otherwise)**

Contaminant	Period of Time Contaminant is Measured	Canada			British Columbia			Alberta Objectives	Saskatchewan Standards	Manitoba			Ontario Standards & Guidelines (G)
		Maximum Tolerable Level Concentration	Maximum Acceptable Level Concentration	Maximum Desirable Level Concentration	Level A	Level B	Level C			Maximum Tolerable Concentration	Maximum Acceptable Concentration	Maximum Desirable Concentration	
	annual arithmetic mean		30								30		
Phosphoric Acid	1/2 hour												210
	24 hour												70
Polychlorinated biphenyls (PCBs)	1/2 hour												0.45 (G)
	24 hour												0.15 (G)
Potash	30 days								0.15 mg/cm <sup>2</sup>				
Propylene													120,000
													40,000
Total reduced sulphur	1/2 hour												40 (G)
	1 hour				7	28							
	24 hour				3	6							14
Particulate matter (PM)													
Fine < 2.5 microns	24 hour	15 (RF)						30			30		
	8 hour							65 ppb					
Medium < 10 microns	24 hour										50		
Total suspended particulate	24 hour	400	120		150	200	260	100	120	400	120		
	annual geometric mean		70	60	60	70	75	60	70		70		
Pentachlorophenol	1/2 hour												60 (G)
	1 hour							5					
	24 hour												20 (G)
	annual average							0.5					
Phenol	1/2 hour												100
	1 hour							100			63		
	24 hour												30
Phosgene	1/2 hour												130
	1 hour							4					
	24 hour												45
Propylene oxide	1/2 hour												450 / 4.5
	1 hour							480					
	24 hour												1.5
	annual average							30					
Styrene	1/2 hour												400
	1 hour							215					
	24 hour										400		400
Sulphur dioxide	1/2 hour												830
	1 hour							450	450	800	900		
	24 hour							150	150		300		275
	annual average							30	30		60		
Sulphuric acid	1/2 hour												30
	1 hour							10			100		
	24 hour												15
Toluene	1/2 hour												2,000
	1 hour							1,880					
	24 hour							400					

**Air Quality - Federal and Provincial Comparison of Guidelines ( $\mu\text{g}/\text{m}^3$  unless stated otherwise)**

Contaminant	Period of Time Contaminant is Measured	Canada			British Columbia			Alberta Objectives	Saskatchewan Standards	Manitoba			Ontario Standards & Guidelines (G)
		Maximum Tolerable Level Concentration	Maximum Acceptable Level Concentration	Maximum Desirable Level Concentration	Level A	Level B	Level C			Maximum Tolerable Concentration	Maximum Acceptable Concentration	Maximum Desirable Concentration	
Trimethylbenzene 1,2,3-	1/2 hour												6,600
	24 hour												2,200
Xylenes	1/2 hour												2,300 / 2,200
	1 hour							2,300					
	24 hour							700					730
Vinyl Chloride	1/2 hour												3
	1 hour							130					
	24 hour												1
Zinc	1/2 hour												100
	24 hour										120		120



## LAND CODE SUMMARY

**There are 9 Sections in this Land Code:**

### *Part 1: Preliminary Matters*

This introduces the Land Code to the reader and defines how the document should be read. There is a description of the terms that will be used in the document, an explanation of where the authority to govern comes from, what the purpose of the Land Code is and what lands the Land Code applies to (the reserve land description).

### *Part 2: First Nations Legislation*

This section outlines what law making power the First Nation will have out of the Land Code and the procedure for how new land laws will be created and implemented (including where they will be published and when they take effect) under the Land Code.

### *Part 3: Community Consultation and Approvals*

This section defines how and what the process is for implementing various elements of the Land Code. For example, approving a land use plan or enacting land laws requires community approval under the conditions defined in this section. Furthermore, this section touches on the procedures for a “meeting of members”, and the ratification process and approval thresholds are for passing laws or other matters such as: i.e. development of a heritage site, amendment to the Land Code, or any other matter.

### *Part 4: Protection of Land*

This section outlines some of the key protections the Land Code offers- and the special conditions by which the First Nation could expropriate land (only by community approval through ratification vote) and the conditions for calculating compensation, but also the rights that may not be expropriated. This section also defines the necessity for a law on heritage sites, and ensures no development or amendment can be made to the land use plan to get rid of a heritage site created under this law. Finally this section states that an agreement is necessary for the First Nation to exchange land with another party (i.e. First Nation, Province, and Federal Government) and there are conditions to be met for lands to be received (such as the need for an appointed negotiator, freedom of receiving additional compensation or land in trust, and federal commitment to add any lands to the existing reserve base).

### *Part 5: Accountability*

This section really has to do with how the Land Code is administered by First Nation including the rules for a “conflict of interest” and the duty to report and abstain from participation in land matters where there is a conflict. Also in the context of conflict of interest this section defines the non-application of these rules for common interests, dealing with disputes and penalties.

This section also applies to how financial management, audit and financial reporting will be conducted – establishing separate lands bank accounts, signing officers, bonding, signing





authorities, and the adoption of the fiscal year for operations and reporting. This section also goes into detail about the specific rules for a year to year lands budget and financial policy. The final part of this section is about financial records and the member's right to access information on year to year financial statements, audit report, the annual report on lands, and the penalties for interference or obstructing the inspection of these records by another member- and the coordination and roles responsible for creating and making these documents public (i.e. auditor and council).

#### *Part 6: Land Administration*

This section starts off by establishing the Lands Committee - it defines the composition, eligibility requirements, selection method, term of office and dealing with vacancies. This section also defines how revenue monies from lands will be handled (from fees, leases etc.), how the registration of land interests (leases, permits, licences) will be conducted and how it is captured through First Nations Land Registry System (FNLRs) and a duplicate register if directed.

#### *Part 7: Interests in Land*

This section relates more to the operation of the First Nation's lands administration and how it will address existing interests (e.g. CPs) and new land related interests (e.g. CPs or allocations). This section defines that there will need to be written documents, standards created, and that consent will be necessary to process any granting or disposing of assignments of land. This section defines the rights of CP holders and the procedure for cancelling a CP, the transfer and use of a CP, and the situation when a CP holder ceases to be a member. This section also defines the limits on mortgages and seizures, transfers upon death, and the principles for spousal property law (to be made into a Matrimonial Real Property law)

#### *Part 8: Dispute Resolution*

This section is created to address how possible disputes that could arise by any benefactor (e.g. First Nation member) of the Land Code and how the process for addressing disputes will be conducted. For example, an adjudicator would be established to resolve disputes in relation to lands unless members could come to some resolve by way of an informal resolution of disputes. The section sets out the powers for the adjudicator, adjudication procedures and decisions and the member's ability to appeal these decisions and expectations around costs.

#### *Part 9: Other Matters*

This section defines four (or more) items to address common issues such as:

1. Liability- the need for director and officers insurance for Lands Committee members,
2. Offences and enforcement- what are offences and what is the penalty,
3. Amendments to Land Code- specifically the process for amending this Land Code,
4. Commencement- defines when the actual start date will be.



**FRAMEWORK AGREEMENT**  
**DEVELOPMENTAL PHASE**  
 COMPLETING YOUR LAND CODE & INDIVIDUAL AGREEMENT

**SUPPORT & FACILITATION**  
 LABRC

- PROVIDE EXPERTISE
- RESOLVE DIFFICULTIES
- DEVELOP MODEL
  - Law
  - Land codes
  - Land mgmt systems

• ASSIST FN'S TO DEVELOP & IMPLEMENT:

- Laws
- Land code
- Land mgmt systems
- Curriculum & training
- Environmental assessments
- Protection regimes

**DEVELOPMENTAL roles & responsibilities**

**LANDS COMMITTEE**

- DEVELOP:
  - Land code
  - Ratification process
- OVERSEE RATIFICATION PROCESS
- ENSURE FA COMPLIANCE
- CERTIFY LAND CODES
- RESOLVE DISPUTES

**LANDS COORDINATOR**

- COORDINATE:
  - Land code development
  - Individual agreement negotiation

**INDEPENDENT VERIFIER**

- OVERSEE RATIFICATION PROCESS
- ENSURE FA COMPLIANCE
- CERTIFY LAND CODES
- RESOLVE DISPUTES

**NEGOTIATION** • GOC PROVIDES

- Land description
- ESA Phase 1
- OFF Statement
- Revenue Account Statement

**GOVT OF CANADA**

