ENVIRONMENTAL MANAGEMENT FRAMEWORK 2007

Lheidli T'enneh First Nation



EXECUTIVE SUMMARY

An Environmental Management Framework (EMF) document was completed by the Lheidli T'enneh First Nation (LTN) in 2007 to address environmental management issues highlighted by band members during environmental task committee meetings and from responses in a questionnaire distributed in the community asking for feedback on environmental issues on reserve. The EMF also concentrated on issues highlighted from previous environmental site assessments (ESAs) completed at Shelley North, Shelley South, Clesbanichek and Salaquo between 2000 and 2007.

The ESAs completed on LTN lands highlighted a number of areas where soils had been contaminated from improper storage and handling of fuels, waste oil and domestic garbage. The Phase I ESA completed in 2000 identified areas where potential environmental impacts existed on reserve, the Phase II ESA investigated if any contamination existed at those areas identified in the Phase I ESA (i.e., collection of soil and water samples at locations suspected to be contaminated), and the Phase III ESA involved the excavation and removal of any impacted soils from reserve.

The EMF was developed to provide the LTN a reference document to manage environmental issues, promote sustainable development, raise environmental awareness among Band members and protect the environment. The main goal of the EMF was to provide the band with a step by step reference document to manage environmental management issues on reserve.

A task committee of LTN band members was established to develop the EMF, regular meetings took place to gather information on existing environmental concerns on Reserve and to discuss the EMF document and provide band feedback. A questionnaire asking band members for their opinions on environmental matters on reserve was developed and distributed among band members to establish what environmental issues were of highest importance and concern to the community. Fifty questionnaires were distributed to band members; 19 questionnaires were completed and returned.

The results of the questionnaire highlighted nine main environmental topics that band members were concerned with: Solid Waste Management, Ground and Surface Water Protection, Wastewater Management, Air Quality, Landfills and Soil Management, Habitat, Fuel Handling and Storage, Environmental Impact Assessment, and Environmental Emergency Response.

i



September 20, 2007

Section 2 of the EMF provides a background for the LTN Land Code Ratification. It discusses how the L'heidli T'enneh, under the First Nation Land Management Act (FNMLA), have formally decided to take control of their land and resources and therefore negotiate an Environmental Management Agreement (EMA) with the federal government in order to enact their own environmental protection laws. The EMF is the first step towards environmental management for the L'heidli T'enneh Nation. Section 2 provides further detail around the FNMLA, the LTN Land Code, the EMA and related legislation.

Environmental Operational Procedures (EOPs) provided in Section 3 of the EMF were designed to provide guidance to band members on how to manage environmental issues on reserve. The EOPs provide step by step flow charts to allow for simple management of environmental issues by band members or to provide contact names in cases where outside expertise is required.

The conclusions and recommendations of the EMF indicate the need for additional environmental work on reserve including baseline information assessments (e.g., ecological inventory and an assessment of areas of cultural and spiritual significance on reserve), construction projects (e.g., waste management compounds) and band capacity building. Local legislation (i.e., environmental laws passed under the Land Code) will be essential to introducing effective environmental initiatives on reserve. The L'heidli T'enneh currently rely on outside support to manage many environmental issues; there is a need to increase capacity within the Band to manage day to day environmental issues.



TABLE OF CONTENTS

				Page
EXE	CUTIVE	SUMMARY		i
1.	SEC	TION ONE – INTE	RODUCTION	1
	1.1.	Introduction		1
	1.2.		ne Environmental Management Framework	2
	1.3.		nmental Site Assessment	3
		1.3.1. Shelley		3
		1.3.2. Shelley		3
		1.3.3. Clesbar		4
		1.3.4. Salaquo		4
	1.4.	•	nmental Site Assessment	4
		1.4.1. Shelley	South	4
		•	Fuel Storage	5
			Oil Spills	5
		1.4.1.3.	Waste Batteries	6
		1.4.2. Old Dur	np Area	7
		1.4.3. Shelley	North	7
		1.4.3.1.	Waste Oil Storage	7
		1.4.3.2.	Old Vehicles	8
		1.4.3.3.	Fuel Handling and Storage	9
	1.5.	Phase III Enviro	onmental Site Assessment	9
		1.5.1. Shelley	South	10
		1.5.1.1.	Residence #1028	10
		1.5.1.2.	Old Dump Site	10
		1.5.2. Shelley	North	11
		1.5.2.1.	Old Pump House	11
		1.5.2.2.	Agricultural Shed	11
		1.5.3. Clesbar		12
			Old Dump Site	12
	1.6.	Lheidli T'enneh	Commitment to Environment – Mission Statement	13
	1.7.	• •	Community Input to EMF	
			nnaire Responses	15
		1.7.1.1.	<u> </u>	16
		1.7.1.2.	9 , 1	18
		1.7.1.3.	•	19
		1.7.1.4.	,	22
		1.7.1.5.		25
		1.7.1.6.	Fuel and Oil Storage and Handling	27



TABLE OF CONTENTS (Cont'd)

			Page
2.	SECT	ΓΙΟΝ TWO – LEGISLATION	31
	2.1.	First Nations Land Management Act (FNMLA)	31
		2.1.1. Lheidli T'enneh Land Code	31
	2.2.	Environmental Legislation Register	32
		2.2.1. Federal Environmental Register	32
		2.2.2. BC Provincial Environmental Register	32
3.	SECT	TION THREE – ENVIRONMENTAL OPERATIONAL PROCEDURES	34
	3.1.	Solid Waste Management	35
	3.2.	Ground & Surface Water Protection	35
	3.3.	Waste Water Management	36
	3.4.	Air Quality	36
	3.5.	Landfill and Soil Management	37
	3.6.	Habitat	37
	3.7.	Fuel Handling and Storage	38
	3.8.	Environmental Impact Assessment	38
	3.9.	Environmental Emergency Response	39
4.	CAPA	ACITY BUILDING	40
	4.1.	Challenges to Managing Environmental Impacts on Lhedli T'enneh Lands	40
5.	SECT	TION FIVE – CONCLUSIONS AND RECOMMENDATIONS	47
	5.1.	Environmental Personnel	47
		5.1.1. Environmental Manager	47
		5.1.2. Trained Environmental Technicians from the Band	47
	5.2.	Environmental Management Requirements	48
		5.2.1. Waste Management	48
		5.2.2. Ground and Surface Water Protection	49
		5.2.3. Wastewater Management	50
		5.2.4. Air Quality Management	50
		5.2.5. Soil Management and Landfills	51
		5.2.6. Habitat and Cultural Heritage Management	51
		5.2.7. Fuel Handling and Storage	52
		5.2.8. Environmental Emergency Response	52
	53	Recommendations	52



TABLE OF CONTENTS (Cont'd)

		Page
FIG	GURES	
1:	Environmental Improvements on Lheidli T'enneh Lands	15
2:	Method of Waste Disposal	16
3:	Recycling on Reserve	17
4:	Materials Recycled on Reserve	17
5:	Environmental Emergency Plan	18
6:	Environmental Emergency Contacts	19
7:	Main Groundwater Quality Concerns on Reserve	20
8:	Main Sources of Contamination of Surface Water on Reserve	21
9:	Waste Water Management	22
10:	Air Quality on Reserve	22
11:	Air Contaminant Sources	23
12:	Poor Air Quality Related to Poor Health	24
13:	Perceived Medical Problems Related to Poor Air Quality	24
14:	Percentage of Band Members that Hunt and trap on Reserve Lands	25
15:	Wildlife Population Observations	26
16:	Changes in Wildlife Populations	27
17:	Home Heating	28
18:	Fuel Storage	28
19:	Vehicle Servicing	29
20:	Disposal of Vehicle Servicing Wastes	30
TAI	BLE	
A:	Band Recommendations from EMF	53
DR.	AWING	
1:	Lheidli T'enneh Reserve Lands	
API	PENDICES	
I	Environmental Questionnaire	
	Environmental Legislation Register	
III IV	Environmental Contact Information Required Documentation from Waste Contractors	
V	Burn Plan Example	
VI	Environmental Impact Assessment Guidelines	
	BC Flood Plan 2007	
VIII	72 Hour Emergency Pack Contents	

P:\CURRENT PROJECTS\OTHER PROJECTS\132034\WORDPRO\R920JRA.DOC



Environmental Management Framework – Section 1				
Document Ref.:	EMF- SEC01	Document Date:	070531	
Responsibility:	EMF Manager	Rev. Date:		

1. SECTION ONE – INTRODUCTION

1.1. Introduction

Canada and a number of First Nations including Lheidli T'enneh signed the Framework Agreement on First Nation Land Management with Canada in February 1996. The Framework Agreement was embodied in the First Nation Land Management Act in 1999 allowing the signatory First Nations to the Framework Agreement to enact their own Land Codes and assume land management responsibility for reserves. Lheidli T'enneh enacted their Land Code in 2000 by community vote resulting in this Code becoming the land law for the Lheidli T'enneh First Nation.

Under the First Nation Land Management Act and the Lheidli T'enneh First Nation Land Code, the Lheidli T'enneh has land management control over its reserves including all aspects of environment management including law making powers over land use planning and zoning, heritage sites, environmental assessment and protection, and approval of third party interests and leases on reserves. In 2005, Lheidli T'enneh members approved a Land Use Plan for all reserves, which provided some initial land use policy direction to protect environmental sensitive areas.

Since 2000, INAC and Lheidli T'enneh have worked together to complete environmental impact investigations to remediate a number of contaminated sites that previously existed on the reserves. To allow for the prevention, mitigation and control of future environmental impacts from activities on reserve, an Environmental Management Framework (EMF) has been developed by the Lheidli T'enneh and Morrow Environmental Consultants Inc. (Morrow) to allow for all members of the community to be actively involved in the band's commitment to environmental protection and sustainable development. This EMF will also provide the basis for the negotiation of an environmental management agreement between Canada and Lheidli T'enneh as specifically required under the First Nation Land Management Act. Following successful negotiation of this environmental management agreement, Lheidli T'enneh will be able to enact their own environmental laws on reserve lands, see Drawing 1.



Environmental Management Framework – Section 1				
Document Ref.:	EMF- SEC01	Document Date:	070531	
Responsibility:	EMF Manager	Rev. Date:		

1.2. Objectives of the Environmental Management Framework

The main objectives of the EMF were:

- to develop a document that would implement procedures for environmental protection and management on reserve;
- to promote the principle of sustainable development on reserve (i.e., to ensure that all development on reserve lands ensures the preservation and protection of the environment for future generations). If sustainable development is to be achieved, it will be important to include environmental considerations into the decision process for all developments on reserve;
- to raise the environmental awareness of band members:
- to highlight environmental deficiencies on reserve (e.g., baseline ecological information and requirements to monitor wastewater systems); and
- to increase capacity of band members in the management, mitigation and control of environmental issues on reserve.

It is the intention of the Lheidli T'enneh Nation to set environmental goals and measure their progress in realizing these goals, the required actions and procedures required to meet these goals are outlined in Section 3. The EMF document will be reviewed on an annual basis to ensure that the environmental needs of the band are addressed in an ongoing basis. If new procedures are required or changes to environmental legislation or guidelines have occurred, the EMF will be revised accordingly, and the revision will be recorded. The EMF belongs to the Lheidli T'enneh people and as such will be accessible to all band members.

2



Environmental Management Framework – Section 1				
Document Ref.:	EMF- SEC01	Document Date:	070531	
Responsibility:	EMF Manager	Rev. Date:		

1.3. Phase I Environmental Site Assessment

The requirement for an EMF has been developed following the completion of Phase I Environmental Site Assessments (ESA) in 2000, Phase II ESA in 2005 and Phase III ESA in 2006/2007. The Phase I assessments were completed for Shelley North, Shelley South, Clesbanichek and Salaquo to identify areas of potential environmental concern (APEC) that existed on Lheidli T'enneh Band lands. The assessments highlighted the following APECs:

1.3.1. Shelley South

- possible contamination of soil from above ground storage tank at residence #1028;
- heavy surface staining at greasing area on CN rail right-of-way;
- burial of domestic refuse in nearby ravine and old hand dug wells;
- application of hydrocarbon based dust control agent on roads; and
- possible contamination of reserve land from old Shelley sawmill site.

1.3.2. Shelley North

- possible contamination close to oil and gas pipeline pigging station;
- surface staining near diesel above ground storage tank (AST) at agricultural shed;
- diesel contamination at old pump house;
- disposal of domestic refuse in old wells at residences;
- contamination of part of the agricultural shed floor;
- application of hydrocarbon based dust control agent on roads; and
- abandoned vehicles at various locations at Shelley North.



Environmental Management Framework – Section 1				
Document Ref.:	EMF- SEC01	Document Date:	070531	
Responsibility:	EMF Manager	Rev. Date:		

1.3.3. Clesbanichek

- burial of domestic refuse in unauthorized dump sites; and
- application of hydrocarbon based dust control agent on roads.

1.3.4. Salaquo

- possible leaching of creosote from railway ties on CN right-of-way (ROW);
- surface staining along CN ROW; and
- use of herbicides on CN ROW.

1.4. Phase II Environmental Site Assessment

Based on results of the Phase I ESA, selected APECs were investigated in the Summer 2005 as part of a Phase II ESA to determine if they posed an environmental concern on Reserve lands. The completion of the Phase II ESA highlighted a number of areas that required remediation and also highlighted a number of areas that existed in addition to those APECs identified as part of the Phase I process. The issues identified were:

1.4.1. Shelley South

A number of locations on Shelley south were identified from the Phase I ESA as areas of potential environmental concern. The main potential environmental contamination sources identified were:

- fuel contamination of soil;
- waste oil contamination of soil; and
- old domestic waste disposal area.

The following sections outline the results of completed environmental investigations at indicated APECs.



Environmental Management Framework – Section 1				
Document Ref.:	EMF- SEC01	Document Date: 070531		
Responsibility:	EMF Manager	Rev. Date:		

1.4.1.1. Fuel Storage

Historical leaks and spills from an old AST resulted in fuel contamination of the soil beneath. Investigation and analysis of the soils indicated that the soil was contaminated and that contaminated soils must be removed and disposed of, see Photograph 1 below. In 2005, impacted soil was excavated from the side of the building. The resulting excavation was filled with clean backfill material. It was discovered during site work that soil contamination extended beneath the porch of the building and it was planned to remove the porch structure and excavate the remaining soils during the next stage of work in 2006.



Photograph 1: Old AST at residence #1028.

1.4.1.2. Oil Spills

During the ESA investigation, an area of contamination was highlighted by a local resident on the road leading to the reservoir, see Photograph 2. A number of waste oil containers had been disposed of on the roadside. Machinery clearing bush from the roadside, had ruptured these containers resulting in contamination of the surrounding soil. This contamination still remains on Reserve.



Environmental Management Framework – Section 1				
Document Ref.:	EMF- SEC01	Document Date: 070531		
Responsibility:	EMF Manager	Rev. Date:		



Photograph 2: Waste oil contamination on road leading to reservoir.

1.4.1.3. Waste Batteries

A number of old car batteries were found at Shelley South, see Photograph 3. These batteries were removed as part of the cleanup operation completed by the Lheidli T'enneh Band in Summer 2006.



Photograph 3: Waste Lead Acid Batteries in Bushes.



Environmental Management Framework – Section 1				
Document Ref.:	EMF- SEC01	Document Date: 070531		
Responsibility:	EMF Manager	Rev. Date:		

1.4.2. Old Dump Area

During the Phase I ESA, an area adjacent to the Band office was identified as a potential area where people had disposed of domestic refuse. Three groundwater wells were installed to determine if the old dump site was affecting groundwater quality, see Photograph 4. No significant affects on groundwater quality were found from the Phase II investigation.



Photograph 4: Groundwater well on reported old dump site.

1.4.3. Shelley North

1.4.3.1. Waste Oil Storage

Poor storage of oil containers resulted in contamination of the soil inside the agricultural shed, see Photograph 5. The soil in the contaminated area was excavated and disposed of. Waste oil containers and filters were also observed outside the agricultural shed that could have contaminated soils and groundwater, see Photograph 6. These were removed in the cleanup completed by the Band in Summer 2006.



Environmental Management Framework – Section 1				
Document Ref.:	EMF- SEC01	Document Date:	070531	
Responsibility:	EMF Manager	Rev. Date:		



Photograph 5: Waste oil containers in Ag Shed.



Photograph 6: Waste Oil outside Ag Shed.

1.4.3.2. Old Vehicles

Approximately 15 old vehicles were dumped beside the agricultural shed, see Photograph 7. These vehicles had the potential to leak engine or transmission fluids including antifreeze, oils and fuel. The majority of these vehicles were removed in the cleanup operation completed by the Band in Summer 2006. However, one vehicle remains at this location and is a potential source of contamination, see Photograph 8.



Photograph 7: Old Abandoned Cars.



Photograph 8: After Site Cleanup (one car remains).



Environmental Management Framework – Section 1				
Document Ref.:	EMF- SEC01	Document Date: 070531		
Responsibility:	EMF Manager	Rev. Date:		

1.4.3.3. Fuel Handling and Storage

Poor fuel storage and handling at the site of the old pump house at Shelley North resulted in contamination of the soil. In 2006, the investigation and excavation of these soils was involved in the ESA process, see Photograph 9.



Photograph 9: Excavation of soil at old pump house.

1.5. Phase III Environmental Site Assessment

Areas of contamination identified from the results of the Phase II ESA were excavated and remediated in the winter of 2006 and Spring 2007. The completion of the Phase III ESA resulted in the removal of contaminated soils from a number of areas identified as part of the Phase II process. The areas excavated were:

- Residence #1028 on Shelley South;
- Reported Dump site adjacent to the Band office on Shelley South;
- Old Pump house on Shelley North;
- Agricultural Shed on Shelley North; and
- Dump Site at Clesbanichek.



Environmental Management Framework – Section 1			
Document Ref.:	EMF- SEC01	Document Date:	070531
Responsibility:	EMF Manager	Rev. Date:	

1.5.1. Shelley South

1.5.1.1. Residence #1028

In Winter 2006, the porch structure on the residence was removed and the remaining contaminated soils were excavated (approximately 15 m³). Confirmatory sampling and analyses completed in the excavation basin indicated that all impacted soils had been removed. The excavation basin was lined with a plastic liner and backfilled with clean soil material. All excavated soils were stockpiled on poly and removed from reserve for remedial treatment, see Photographs 10 and 11.



Photograph 10: Poly Lined Excavation.



Photograph 11: Backfilled Excavation.

1.5.1.2. Old Dump Site

From the Phase I ESA, there was anecdotal evidence that a domestic waste dump area existed adjacent to the Band office. In 2005, three environmental monitoring wells were completed on the boundaries of the alleged dump area. The analytical results for soil and groundwater samples collected from boreholes and monitoring wells did not indicate gross contamination of soils or groundwater. Further investigation (17 test pits) of the area was completed in November 2006 using a rubber-tired backhoe, see Photograph 12. The supplemental investigation found no domestic garbage buried in the suspected dump area.



Environmental Management Framework – Section 1			
Document Ref.:	EMF- SEC01	Document Date: 070531	
Responsibility:	EMF Manager	Rev. Date:	



Photograph 12: Test Pit Excavation.

1.5.2. Shelley North

1.5.2.1. Old Pump House

A test pit investigation completed at the old pump house as part of the Phase II investigation in 2005 indicated that soils were impacted with hydrocarbons. More test pits were completed in Winter 2006 as part of the Phase III ESA to delineate (i.e., find extent of contamination) of the impacted soil, see Photograph 9.

Once the extent of contamination was established the impacted soil was excavated. Confirmatory sampling and laboratory analysis was completed in the excavation basin. Results indicated that all impacted soils had been removed. The excavation basin was lined with a plastic liner and backfilled with clean soil material. All excavated soils were stockpiled on poly and removed from reserve for remedial treatment.

1.5.2.2. Agricultural Shed

An investigation of stained soil in the agricultural shed was completed as part of the Phase II investigation in 2005. Analysis results indicated that soils were impacted with hydrocarbons. Impacted soils were excavated in Winter 2006 as part of the Phase III ESA.



Environmental Management Framework – Section 1			
Document Ref.:	EMF- SEC01	Document Date: 070531	
Responsibility:	EMF Manager	Rev. Date:	

Once the extent of contamination was established and the impacted soil was excavated, see Photograph 13, confirmatory sampling and laboratory analysis was completed in the excavation basin. Analysis results indicated that all impacted soils had been removed. The excavation basin was lined with a plastic liner and backfilled with clean soil material. All excavated soils were stockpiled on poly and removed from reserve for remedial treatment.



Photograph 13: Excavation of Impacted Soil from Agriculture Shed.

1.5.3. Clesbanichek

1.5.3.1. Old Dump Site

A test pit investigation completed as part of the Phase II ESA indicated that an historical dump area for domestic waste existed at Clesbanichek. Further investigation (test pits) of the area was completed in November 2006 using a rubber-tired backhoe, see Photographs 14 and 15. The supplemental investigation completed in Winter 2006 as part of the Phase III ESA found substantial volumes of domestic garbage buried in the dump area. The impacted soil and garbage was excavated and transported to Foothills landfill, Prince George, BC. Confirmatory sampling and laboratory analysis was completed in the excavation basin. Analysis results indicated that all impacted soils and domestic refuse had been removed. The excavation basin was lined with a plastic liner and backfilled with clean soil material.



Environmental Management Framework – Section 1			
Document Ref.:	EMF- SEC01	Document Date: 070531	
Responsibility:	EMF Manager	Rev. Date:	





Photograph 14: Excavation at Clesbanichek.

Photograph 15: Waste Material encountered.

1.6. Lheidli T'enneh Commitment to Environment – Mission Statement

We are Lheidli T'enneh – the people where the two rivers flow together. Like the rivers, we aspire to move ahead as an organized, highly motivated, determined and self-reliant Nation. We are a proud, united people whose purpose is to ensure a future that will provide a better quality of life while flourishing with our environment. Our traditions and cultural beliefs are the driving force of our success and destiny.

The Lheidli Tenneh First Nation's environmental mission is to promote development on their lands while protecting traditional practices of land stewardship, and the strengthening of cultural and spiritual heritage. We view the environment as a provider that must be respected and protected. The natural environment on our lands provide for continued traditional practices of fishing and trapping and also contain many of the sites viewed by the Lheidli T'enneh First Nation as being of cultural significance.

We will seek to identify environmental aspects of our current and future activities on our lands to work towards reducing or eliminating environmental impacts on air, water, soil, ecosystems, areas of cultural significance and the local community.



Environmental Management Framework – Section 1			
Document Ref.:	EMF- SEC01	Document Date: 070531	
Responsibility:	EMF Manager	Rev. Date:	

Through the implementation of an Environmental Management Framework we have created the first step towards combining economic development on Lheidli T'enneh lands with protecting our natural resources and heritage for today's generation and generations to come.

1.7. Community Input to EMF

As part of the consultation process, a task Committee comprising of band members was established to oversee the development of the EMF. Four task committee meetings were held to discuss the development of the document, and to discuss environmental issues that band members considered important. The first two meetings collected the initial information from members of the community on environmental issues existing on reserve lands. The third and fourth meetings allowed the committee members to view the draft document and to make comments on the content and design. The committee was established with band members from various locations of Reserve land, involved with the design and content of the EMF, those members included:

- Patricia Wight Off Reserve
- Melody Buzas Off Reserve
- Helen Buzas Off Reserve
- Jordan Buzas Off Reserve

- Louella Nome Shelley North
- Ron Seymour Shelley North
- Regina Toth Off Reserve
- Leonard Nome Shelley North

Lheidli T'enneh Band members were involved in all aspects of the EMF document development. As part of a wider community initiative a questionnaire on environmental issues on reserve was developed and distributed to band members living on reserve lands.

Fifty questionnaires were distributed to band members with 19 returned completed (38% of questionnaires were completed). Each questionnaire had 27 questions about environmental management issues on reserve lands. The questionnaire requested band members to provide their input and comments. A copy of the questionnaire is provided in Appendix I. Results of the questionnaire responses are outlined below.



Environmental Management Framework – Section 1			
Document Ref.:	EMF- SEC01	Document Date: 070531	
Responsibility:	EMF Manager	Rev. Date:	

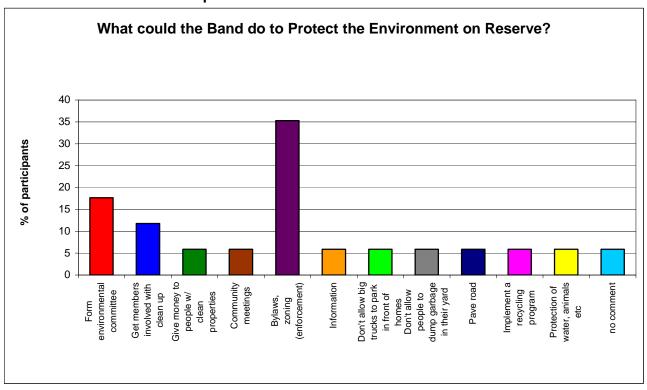
1.7.1. Questionnaire Responses

From the questionnaire responses received, the following were highlighted in the community:

• 95% of respondents think the environment is an important resource to protect and that the Band could do more to conserve the environment on Reserve lands.

A number of ideas around how the Band could improve the environment on Reserve lands were put forward; these are presented in Figure 1 below.

FIGURE 1: Environmental Improvements on Lheidli T'enneh Lands





Environmental Management Framework – Section 1			
Document Ref.:	EMF- SEC01	Document Date: 070531	
Responsibility:	EMF Manager	Rev. Date:	

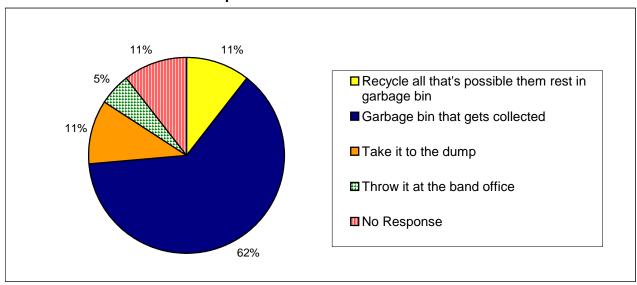
1.7.1.1. Waste Management

95% of respondents viewed waste management as an important issue on Reserve. Of the 19 respondents, the following were the results for waste management:

- 84% disposed of waste off reserve;
- 74% recycled waste materials;
- 84% knew what composting was; and
- 15% have composted waste materials.

Band members were asked to indicate their methods of waste disposal on reserve. The results are outlined in Figure 2.

FIGURE 2: Method of Waste Disposal

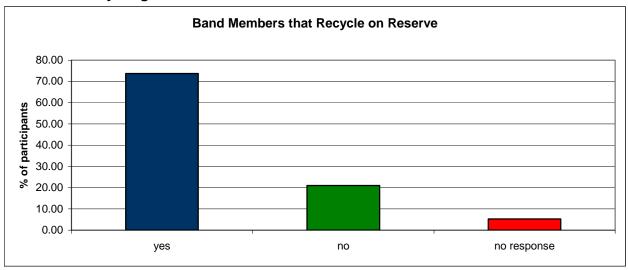


When asked about waste recycling on reserve, 74% of those who completed the questionnaire indicated that they recycle, and 21% did not recycle, see Figure 3.



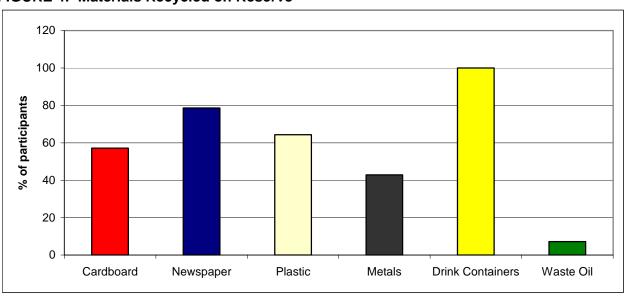
Environmental Management Framework – Section 1			
Document Ref.:	EMF- SEC01	Document Date: 070531	
Responsibility:	EMF Manager	Rev. Date:	

FIGURE 3: Recycling on Reserve



The materials recycled by the Band members are outlined in Figure 4. Drink containers are the most recycled material, and waste oil being the least recycled material.

FIGURE 4: Materials Recycled on Reserve



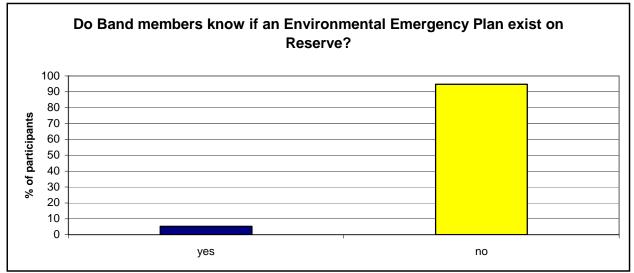


Environmental Management Framework – Section 1			
Document Ref.:	EMF- SEC01	Document Date: 070531	
Responsibility:	EMF Manager	Rev. Date:	

1.7.1.2. Environmental Emergency Response

In the event of an environmental emergency on Reserve (flood, train derailment or forest fire) 74% of respondents did not know whom they should contact, and 95% did not know if an evacuation plan existed for the Reserve. In the event that a fuel spill or other potential environmental accident occurred, 84% did not know whom they should contact, see Figure 5.

FIGURE 5: Environmental Emergency Plan

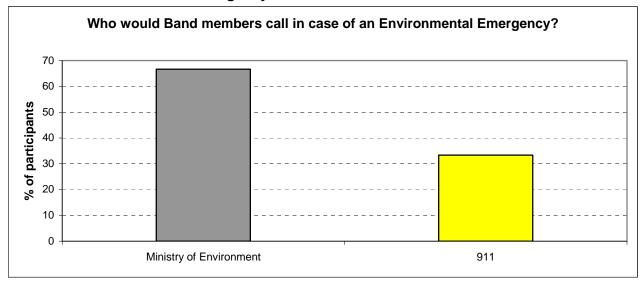


When asked if they knew whom they should call in the event of an environmental emergency (e.g., train derailment, forest fire etc.), 16% of Band members responded that they knew whom to call. Of the 16% respondents who felt they knew whom to call in the event of an emergency, 68% would call the Ministry of Environment, and 32% would call 911, see Figure 6.



Environmental Management Framework – Section 1			
Document Ref.:	EMF- SEC01	Document Date: 070531	
Responsibility:	EMF Manager	Rev. Date:	

FIGURE 6: Environmental Emergency Contacts



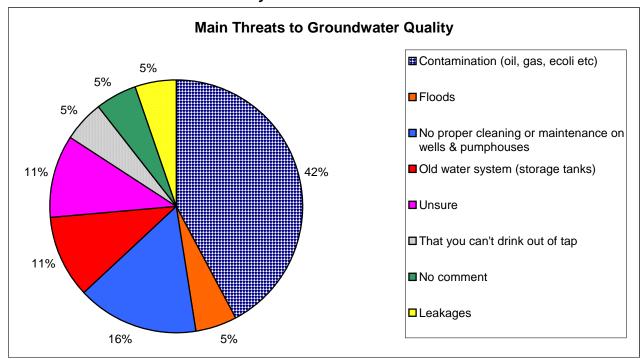
1.7.1.3. Water Quality

90% of respondents felt that water quality is an issue on Reserve. The main threats outlined by from the results of the survey, the main concerns band members had in relation to ground water quality was contamination from spills and leaks (e.g., oil). There was also some concern expressed on the lack of proper cleaning and maintenance of drinking water wells and pumphouses on reserve, see Figure 7.



Environmental Management Framework – Section 1			
Document Ref.:	EMF- SEC01	Document Date:	070531
Responsibility:	EMF Manager	Rev. Date:	

FIGURE 7: Main Groundwater Quality Concerns on Reserve

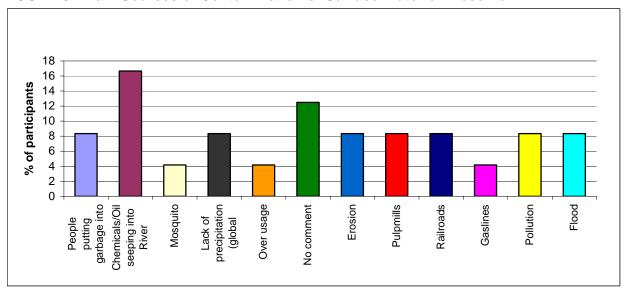


Similar to the responses relating to threats to groundwater quality, the main perceived threat to surface water (i.e., rivers, lakes, ponds and streams) on reserve is from leaks and spills of oil and chemicals. Concern was also expressed about people disposing of garbage in and around rivers and ponds, threats from railroad use (e.g., possible derailment), see Figure 8.



Environmental Management Framework – Section 1			
Document Ref.:	EMF- SEC01	Document Date:	070531
Responsibility:	EMF Manager	Rev. Date:	

FIGURE 8: Main Sources of Contamination of Surface Water on Reserve



When asked how often respondents emptied or checked the operation of their septic systems:

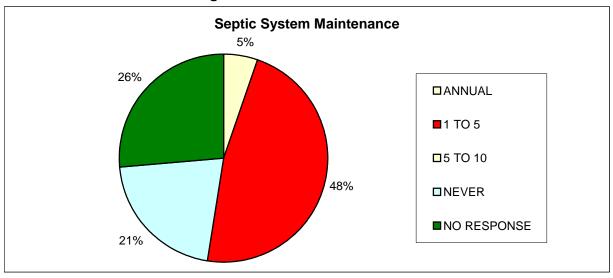
- 5% had their system checked every year;
- 48% had their systems checked every 1 to 5 years;
- 21% have never had their septic systems checked; and
- 26% did not respond to the question.

Figure 9 outlines all responses received from band members that completed questionnaires.



Environmental Management Framework – Section 1			
Document Ref.:	EMF- SEC01	Document Date: 070531	
Responsibility:	EMF Manager	Rev. Date:	

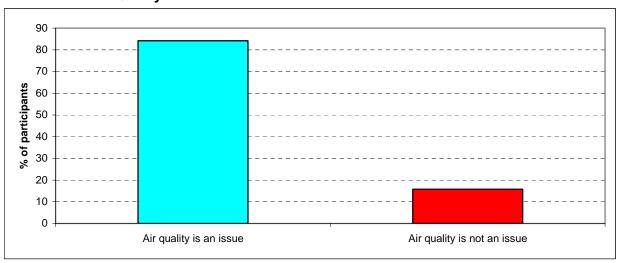
FIGURE 9: Waste Water Management



1.7.1.4. Air Quality

To assess if air quality was deemed to be an environmental issue on Reserve, members were asked for their feedback. 85% of respondents said they considered poor air quality an environmental issue, see Figure 10.

FIGURE 10: Air Quality on Reserve

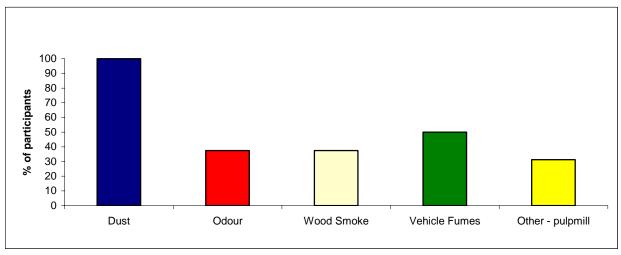




Environmental Management Framework – Section 1			
Document Ref.:	EMF- SEC01	Document Date: 070531	
Responsibility:	EMF Manager	Rev. Date:	

When asked to identify the main types and sources of air pollutants, respondents identified sources detailed in Figure 11 below. Dust was identified as the main air contaminant on reserve with 100% of respondents identifying it as an issue, see Figure 11.

FIGURE 11: Air Contaminant Sources

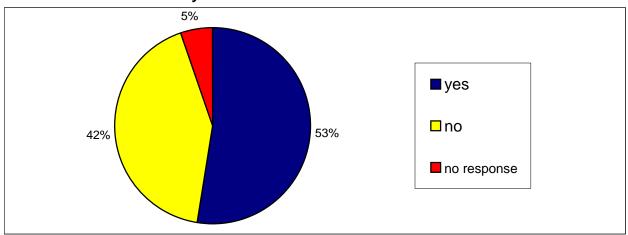


Band members were asked if they, or members of their household had medical conditions they thought were either directly or indirectly related to poor air quality. 53% of respondents indicated that they or a member of their household had health issues they thought were related to poor air quality, see Figure 12.



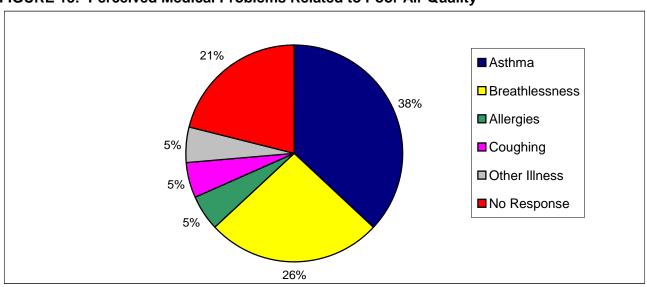
Environmental Management Framework – Section 1			
Document Ref.:	EMF- SEC01	Document Date:	070531
Responsibility:	EMF Manager	Rev. Date:	

FIGURE 12: Poor Air Quality Related to Poor Health



Of the 53% of respondents that indicated that health problems from poor air quality was an issue the main health problems were identified as asthma and breathlessness, see Figure 13.

FIGURE 13: Perceived Medical Problems Related to Poor Air Quality



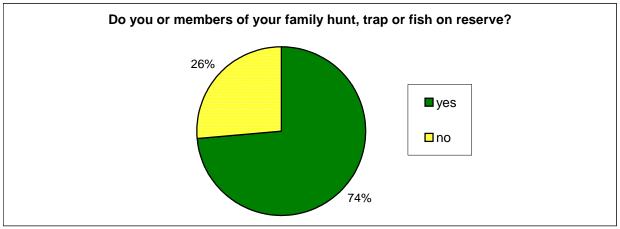


Environmental Management Framework – Section 1			
Document Ref.:	EMF- SEC01	Document Date: 070531	
Responsibility:	EMF Manager	Rev. Date:	

1.7.1.5. Habitat

The health of habitat on reserve is important as it sustains animals and fish that the Band hunts and traps. Members of the community were asked questions relating to habitat health and animal populations. 74% of Band members surveyed hunted, trapped or fished on reserve lands, see Figure 14.

FIGURE 14: Percentage of Band Members that Hunt and trap on Reserve Lands

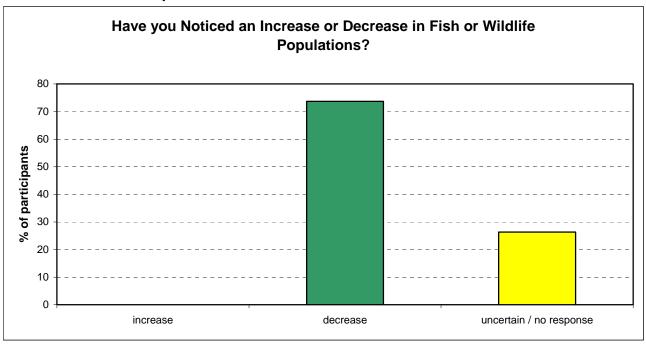


Over 70% of Band members surveyed responded that they had observed decreases in wildlife populations, see Figure 15.



Environmental Management Framework – Section 1			
Document Ref.:	EMF- SEC01	Document Date:	070531
Responsibility:	EMF Manager	Rev. Date:	

FIGURE 15: Wildlife Population Observations

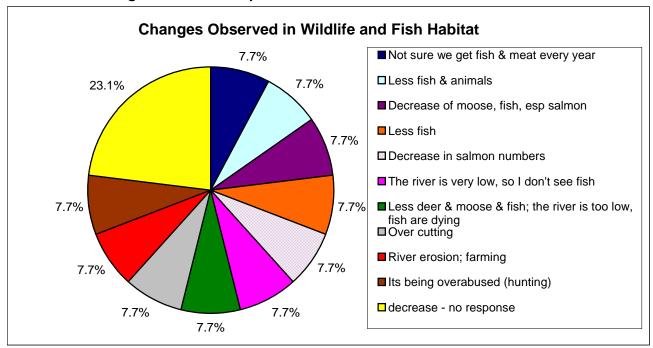


When asked to identify what they thought were the causes of wildlife population decreases there were a number of responses ranging from over hunting to reduced water levels in the rivers, see Figure 16.



Environmental Management Framework – Section 1			
Document Ref.:	EMF- SEC01	Document Date:	070531
Responsibility:	EMF Manager	Rev. Date:	

FIGURE 16: Changes in Wildlife Populations



1.7.1.6. Fuel and Oil Storage and Handling

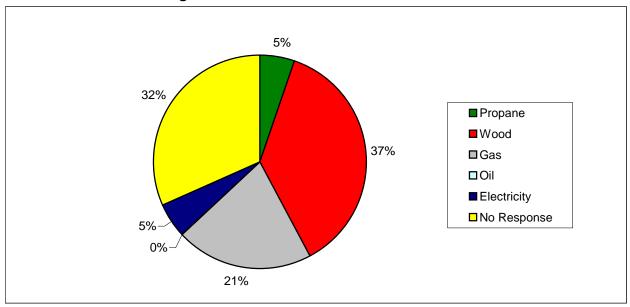
Many of the environmental issues highlighted from the Phase I and Phase II ESAs identified poor fuel storage or handling as one of the main sources of environmental impacts on reserve. Band members were asked a number of questions related to the types of fuel they use to heat their homes, and the activities on reserve that may require storage and handling of fuels or waste oils. The responses to the questions are presented in the graphs below.

The majority (37%) of Band members surveyed used wood as their main source of heat with gas (21%) being the next main source, see Figure 17 below. None of the Band members surveyed used home heating oil to heat their homes.



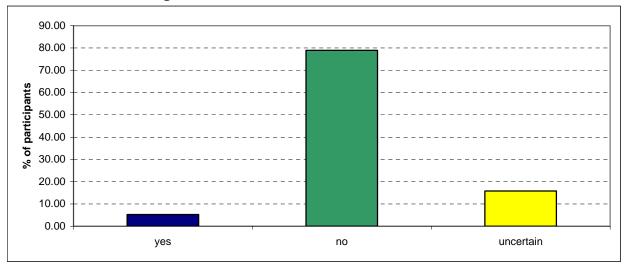
Environmental Management Framework – Section 1			
Document Ref.:	EMF- SEC01	Document Date: 070531	
Responsibility:	EMF Manager	Rev. Date:	

FIGURE 17: Home Heating



When asked about storage of fuels on reserve, 5% of those surveyed had fuels storage tanks at their homes, see Figure 18.

FIGURE 18: Fuel Storage

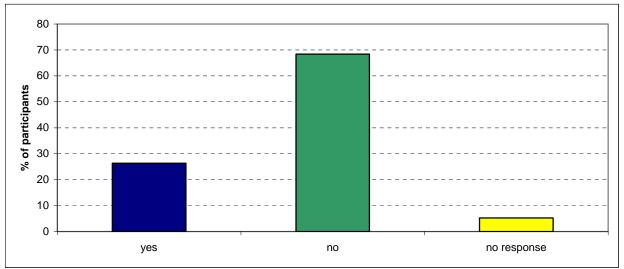




Environmental Management Framework – Section 1			
Document Ref.:	EMF- SEC01	Document Date: 070531	
Responsibility:	EMF Manager	Rev. Date:	

Vehicle servicing on reserve was identified from the Phase I and II ESAs as a potential source of contamination (e.g., waste oils and oil filters). Over 25% of Band members surveyed indicated that they serviced vehicles at home.

FIGURE 19: Vehicle Servicing

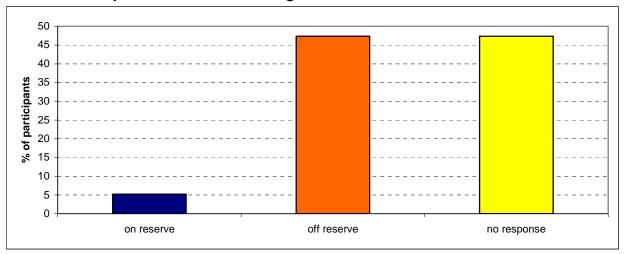


5% of respondents indicated that they disposed of vehicle servicing wastes on reserve with over 45% of respondents disposing of wastes off reserve lands; however, there was a large number of members surveyed that did not respond to the question (over 45%).



Environmental Management Framework – Section 1			
Document Ref.:	EMF- SEC01	Document Date:	070531
Responsibility:	EMF Manager	Rev. Date:	

FIGURE 20: Disposal of Vehicle Servicing Wastes



The survey responses were used to identify the main areas of environmental concern on reserve. Based on these responses the Environmental Operating Procedures (EOPs) were developed to provide guidance to all Band members in avoiding, identifying mitigating and controlling environmental issues on reserve. The EOPs developed from the responses of Band members are provided in Section 3 of the EMF. All procedures were developed in consultation with members of the Band, as outlined in Section 1.7.



	Environmental Ma	nagement Framework	- Section 2
Document Ref.:	EMF- 002	Document Date:	070531
Responsibility:	EMF Manager	Rev. Date:	

2. SECTION TWO – LEGISLATION

2.1. First Nations Land Management Act (FNMLA)

The Lheidli T'enneh First Nation has been operating under the *First Nations Land Management Act* since the ratification of their Land Code and Individual Transfer Agreement in 2000. As a signatory to the *First Nations Land Management Act* the Lheidli T'enneh have opted to take over the management and control of their land and resources, formally under the land and resource management sections in the *Indian Act*. This includes the protection and management of the Reserve land environment. When an Environmental Management Agreement has been negotiated between the First Nation and the Federal Government the Lheidli T'enneh will be able to enact environmental protection laws on their lands. This Environmental Management Framework will outline the operating procedures for the protection and management of the Lheidli T'enneh Reserve land environment.

The EMF is an initial step towards the Lheidli T'enneh First Nation actively dealing with environmental management issues on their lands. The EMF is designed as a working document that allows for easy understanding of the steps to be taken to appropriately manage, mitigate and control environmental issues arising on LTN land. The EMF is designed to be accessible to all members of the community to provide instruction on how the actions of each individual can impact the LTN's goal of environmental sustainability.

2.1.1. Lheidli T'enneh Land Code

Under the First Nation Land Management Act and the Lheidli T'enneh First Nation Land Code the Lheidli T'enneh have control over their Reserve land, the environment and natural resources. The current Land Code under which the Lheidli T'enneh governs their lands was amended in March 2003. Under the amended Land Code the Lheidli T'enneh have power over the following areas that may affect the environment on their lands:

 Law Making Powers – including laws governing heritage sites, environmental assessment and protection;



Environmental Management Framework – Section 2			
Document Ref.:	EMF- 002	Document Date:	070531
Responsibility:	EMF Manager	Rev. Date:	

- land use planning and zoning; and
- interests and licenses for third parties using Lheidli T'enneh land.

2.2. Environmental Legislation Register

The Lheidli T'enneh Reserve land is federally regulated and all environmental issues are compared with federal criteria. However, because the Reserve land is located within the Province of British Columbia, provincial standards are also used for general comparison purposes. Table A summarizes all federal and provincial environmental legislation, regulations, codes of practice and guidelines pertaining to environmental management on Reserve land.

2.2.1. Federal Environmental Register

A register of Federal environmental legislation, regulations, guidelines and codes of practice relating to Lheidli T'enneh lands has been compiled and is included in Appendix II. The register was completed through research of applicable web based information located on the following websites:

- http://www.justice.gc.ca/en/
- http://canadagazette.gc.ca/index-e.html
- http://www.ccme.ca/publications/list_publications.html

The table is set up as a matrix so that certain activities on Lheidli Tenneh lands can be compared with the applicable legislation, code of practice or guideline.

2.2.2. BC Provincial Environmental Register

Although not legally binding on Lheidli T'enneh lands, a Provincial register of environmental regulations, guidelines and codes of practice has also been compiled for comparison purposes and is included in Appendix II. The register was completed through research of applicable web based information located on the following websites:



Environmental Management Framework – Section 2			
Document Ref.:	EMF- 002	Document Date:	070531
Responsibility:	EMF Manager	Rev. Date:	

- http://www.qp.gov.bc.ca/statreg/default.htm
- http://ilmbwww.gov.bc.ca/risc/index.htm

The table for provincial environmental information is also set up as a matrix so that certain activities on Lheidli Tenneh lands can be compared against the requirements of provincial legislation, codes of practice or guidelines.



	Environmental Ma	nagement Framework	- Section 3
Document Ref.:	EMF- 003	Document Date:	070531
Responsibility:	EMF Manager	Rev. Date:	

3. SECTION THREE – ENVIRONMENTAL OPERATIONAL PROCEDURES

To mitigate and prevent future impacts to the LTN environment from activities on and off reserve lands, a number of Environmental Operating Procedures were designed to provide guidance for the band on environmental management issues. The main environmental issues dealt with in the EOPs are those highlighted from the distributed environmental questionnaire. For issues that could not be managed directly by the band, external expertise may be required. A list of environmental contacts in the Prince George area is provided in Appendix III.

Nine main environmental topics were highlighted from the questionnaire and environmental task committee meetings, each of the nine topics were colour coded and are outlined below.

- Solid Waste Management (RED).
- Ground and Surface Water Protection (BLUE).
- Wastewater Management (PURPLE).
- Air Quality (LIGHT BLUE).
- Landfills and Soil Management (PINK).
- Habitat (BLACK).
- Fuel Handling & Storage (ORANGE).
- Environmental Impact Assessment (DARK GREEN).
- Environmental Emergency Response (YELLOW).

Each main section is discussed in detail below:



Environmental Management Framework – Section 3			
Document Ref.:	EMF- 003	Document Date:	070531
Responsibility:	EMF Manager	Rev. Date:	

3.1. Solid Waste Management

The issue of waste management on reserve lands was highlighted from the ESA process and indicated as an issue in the questionnaire responses, see Section 1.7.1.1. Poor storage of hazardous wastes (waste oil, car batteries etc.), has resulted in environmental impacts requiring remediation, see Section 1.5. EOP01 outlines procedures for the handling, storage and disposal of waste materials, and will provide Band members guidance on how certain waste materials can be managed on reserve lands. The main waste management areas covered in EOP01 are:

- Hazardous Waste;
- Biohazardous Waste:
- Recycling;
- Composting; and
- General Waste.

3.2. Ground & Surface Water Protection

Rivers and steams on reserve are a natural resource used everyday by Band members. Response to the environmental questionnaire indicated the quality of ground and surface water as a concern, see Section 1.7.1.3. The protection of rivers and streams on reserve will ensure a healthy aquatic environment. Groundwater is used for drinking at Shelley North and South, and any impacts on groundwater quality can severely impact drinking water quality. The main areas covered by EOP02 for the protection of surface and groundwater, are:

- Leaks Threatening Surface and Groundwater Quality;
- Future Industrial/Residential Developments; and
- Non-point Sources.



	Environmental Ma	nagement Framework	- Section 3
Document Ref.:	EMF- 003	Document Date:	070531
Responsibility:	EMF Manager	Rev. Date:	

3.3. Waste Water Management

Wastewater comes in several forms; storm water, septic system sewage, and other water runoff that travels across the landscape from non-point sources, making it difficult to trace. While in travel, the runoff water will pick up dirt, residue and other contaminants in its path, depositing them into the waterways. It is important to have proper storage and treatment of wastewater systems, to put less stress on existing water sources (rivers and streams) and to return the treated wastewater back to the receiving environment. The main areas covered by EOP03 for wastewater management are:

- Storm Water;
- Septic Systems;
- Future Industrial/Residential Developments; and
- Non-point sources.

3.4. Air Quality

Environmental questionnaire responses from Band members indicated air quality as an issue on reserve, see Section 1.7.1.4. Current potential impacts on air quality from existing sources on and off reserve, and potential impacts from future development, have been identified and require management as part of the EMF process. The main areas of concern relating to air quality are:

- Backyard and Debris Burning;
- Road Dust;
- Future Developments on LTN Lands; and
- Wood Burning Stoves.



	Environmental Ma	anagement Framework	- Section 3
Document Ref.:	EMF- 003	Document Date:	070531
Responsibility:	EMF Manager	Rev. Date:	

3.5. Landfill and Soil Management

The environmental issues surrounding waste materials buried in back yards and in central locations on reserve land, were identified in the ESA process. Contamination of soils can result from buried waste, and the EOP developed, EOP05, aims to prevent or reduce future impacts for soils on reserve. The main soil management areas covered in EOP05 include:

- Landfill Management;
- Outgoing Soil;
- Incoming Soil;
- Soil Quality Management for 3rd party Lease/Contract on LTN Lands; and
- Relocation of Soils within LTN Lands.

3.6. Habitat

The protection of habitat on reserve is of significant importance for the protection of hunting and fishing grounds. A number of habitat issues were identified in the questionnaire responses (Section 1.7.1.5). EOP06 was developed and designed to mitigate environmental impacts that affect various habitats on reserve, and to prevent impacts to identified habitats. The main areas covered in EOP06 are:

- Habitat/Wetland Protection;
- Invasive/Noxious Plant Species;
- Fish Population Monitoring and Protection; and
- Animal Habitat-Trapping and Hunting.



Environmental Management Framework – Section 3			
Document Ref.:	EMF- 003	Document Date:	070531
Responsibility:	EMF Manager	Rev. Date:	

3.7. Fuel Handling and Storage

One of the main environmental impacts identified from the ESA program was the contamination of soils from poor fuel handling and storage. Fuel is stored in a number of different ways on reserve (e.g., tidy tanks, above ground storage tanks etc.). Questionnaire responses in Section 1.7.1.6 indicate that there is still servicing of vehicles on reserve and a small number of houses with fuel storage tanks. EOP07 was designed to prevent poor handling and storage of fuels and mitigate any spills that might occur. The main areas covered by the EOP07 are:

- Fuel Storage Tanks General Requirements; and
- Environmental Procedures for Fuel Tank Inspections.

3.8. Environmental Impact Assessment

The questionnaire responses from Band members indicate that further measures need to be taken to protect the environment on reserve (see Section 7.1.1). Any new industrial, commercial and large scale residential developments on reserve land must be assessed to determine if an Environmental Impact Assessment is required to ensure appropriate consideration is taken to protect the natural environment. The main area covered by EOP08 is:

Environmental Impact Assessment.

It is recognized that the area of Environmental Impact Assessment is complex and each submission will vary with each proposed development, however the main LTN EIA requirements will mirror the requirements of the CEAA, outlined below:

- Project Description;
- Alternative Developments;
- Scoping Document;
- Environmental Description;



	Environmental Ma	anagement Framework	- Section 3
Document Ref.:	EMF- 003	Document Date:	070531
Responsibility:	EMF Manager	Rev. Date:	

- Public Participation;
- Perceived Environmental Impacts;
- Perceived Social Impacts;
- Impact Significance;
- Cumulative Effects Assessment; and
- Environmental Monitoring.

3.9. Environmental Emergency Response

The questionnaire responses in Section 1.7.1.2 highlighted the lack of a formal environmental emergency response procedure for the evacuation of Band members from residential areas in the event of an environmental emergency situation. The emergency response procedure was developed as part of the Regional District emergency response plan. All Members must be familiar with the environmental emergency response procedure. The main areas covered by EOP09 are:

- Flooding;
- Forest/Wild Fires;
- Pipeline Explosion; and
- CN Derailment Shelley South only.



	EMF Proce	dure: Waste Management	
Section Ref.:	EMF-Sec 03	Document Date: 070331	
Document Ref:	EOP01	Revision Date:	

Waste Management

Environmental Operating Procedure – Hazardous Waste

Purpose

- □ To identify hazardous waste materials produced at LTN;
- □ To generally identify locations where hazardous wastes are produced and stored;
- To provide mechanisms to store and collect these wastes in the community while protecting human health and the environment;
- □ To provide procedures for handling hazardous wastes;
- □ To measure the volumes and types of waste materials being produced at the LTN;
- □ To develop targets for handling, storage and transport of hazardous waste materials.

Scope

This procedure covers all hazardous waste materials produced from various businesses and homes within LTN. This document provides information to members of the LTN on proper handling procedures and contact information when dealing with potential hazardous waste.

Main Goals

To minimize the impacts of LTN on the environment from the production, poor storage, transport and disposal of hazardous waste with reference to:

- Indian Act Indian Reserve Waste Disposal Regulations
- Canadian Environmental Protection Act Part 7: Controlling Pollution and Managing Wastes and Part 9: Government Operations and Federal and Aboriginal Land
- Transportation of Dangerous Goods Act 5. Safety Requirements, Standards and Marks
- Hazardous Waste Regulations Part 4, Part 6

Definition

Correctional Services Canada Environmental Guidelines for Hazardous Waste Management defines a Hazardous Waste as:

□ A waste that is potentially hazardous to human health and/or the environment. A hazardous waste can be explosive, gaseous, flammable, toxic, radioactive, corrosive, combustible or leachable.

	EMF Proce	dure: Waste Management	
Section Ref.:	EMF-Sec 03	Document Date: 070331	
Document Ref:	EOP01	Revision Date:	

General Procedures

Materials

The main potential hazardous wastes produced at the LTN are:

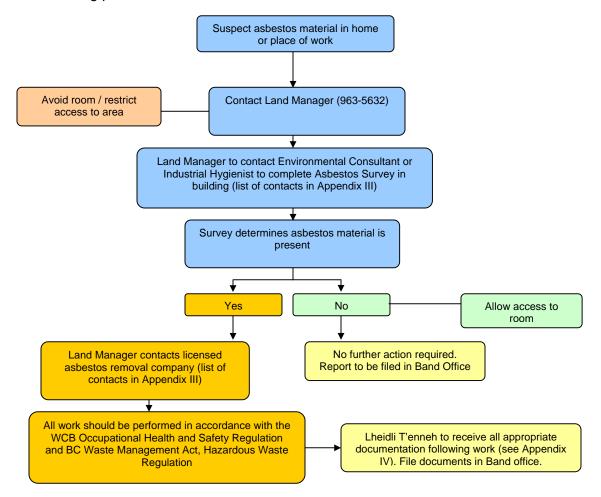
Asbestos	• PCBs
Waste Oils	Mercury
Pesticides/Herbicides	Solvents / Antifreeze
Paints	Car Batteries

Basic procedures for managing hazardous waste materials are outlined below:

EMF Procedure: Waste Management			
Section Ref.:	EMF-Sec 03	Document Date: 070331	
Procedure Ref:	EOP01-01	Revision Date:	

Asbestos

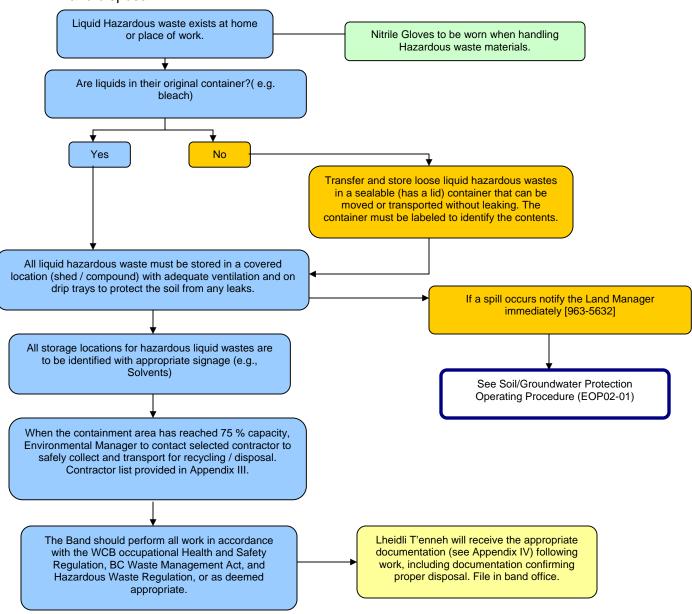
If a person suspects that asbestos material exists in their home or place of work the following procedure will be followed;



EMF Procedure: Waste Management			
Section Ref.:	EMF-Sec 03	Document Date:	070331
Document Ref:	EOP01-02	Revision Date:	

Liquid Hazardous Wastes

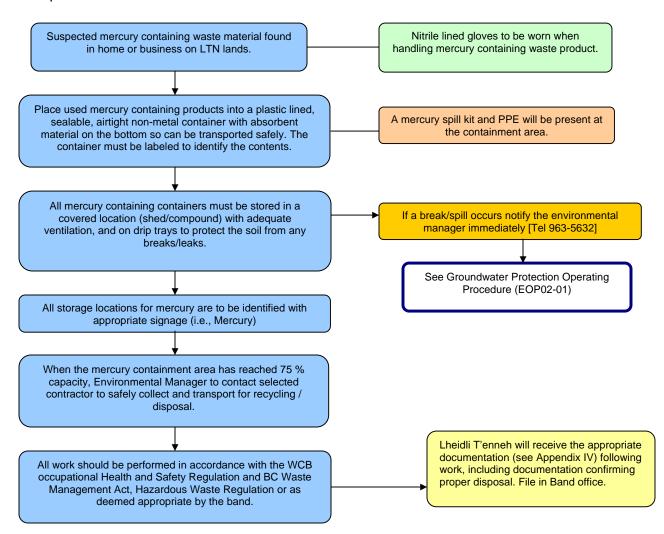
Waste oils, anti-freeze, paints, solvents and household cleaners (e.g. bleach) produced from servicing domestic, agricultural and commercial vehicles, and day-to-day use in households and businesses on LTN land require appropriate handling, storage, transport and disposal.



EMF Procedure: Waste Management			
Section Ref.:	EMF-Sec 03	Document Date: 07033	1
Procedure Ref:	EOP01-03	Revision Date:	

Mercury Waste

Mercury waste can be found in fluorescent lights, barometers, vacuum gauges, batteries, flame sensors and thermometers in households and businesses on LTN land. Mercury-containing waste materials require appropriate handling, storage, transport and disposal.



EMF Procedure: Waste Management			
Section Ref.:	EMF-Sec 03	Document Date: 070331	
Document Ref:	EOP01	Revision Date:	

Standard Operating Procedure –Biohazardous Infectious Material / Medical Waste

Purpose

- To identify medical waste materials produced at LTN;
- □ To generally identify locations where medical wastes are stored;
- □ To provide mechanisms to store and collect these wastes in the community while protecting human health and the environment;
- To provide procedures for handling medical wastes;
- □ To develop targets for handling, storage and transport of medical waste materials.

Scope

This procedure covers all Medical waste materials within LTN. This document provides information to members of the LTN on proper handling procedures and contact information when dealing with a potential medical waste.

Main Goals

To minimize the impacts of biohazardous waste on individual health by proper storage, transport and disposal of medical waste with reference to:

- Indian Act Indian Reserve Waste Disposal Regulations
- Canadian Environmental Protection Act Part 7: Controlling Pollution and Managing Wastes and Part 9: Government Operations and Federal and Aboriginal Land
- Transportation of Dangerous Goods Act Safety Requirements, Standards and Marks and Emergency Response Assistance Plans
- Hazardous Waste Regulations

Definition

Health Canada defines Biohazardous Infectious Material as:

 An organism that has been shown to cause disease or believed to cause disease in persons or animals and the toxins of such an organism fall into Division 3 of Class D – Poisonous and Infectious material.

General Procedures

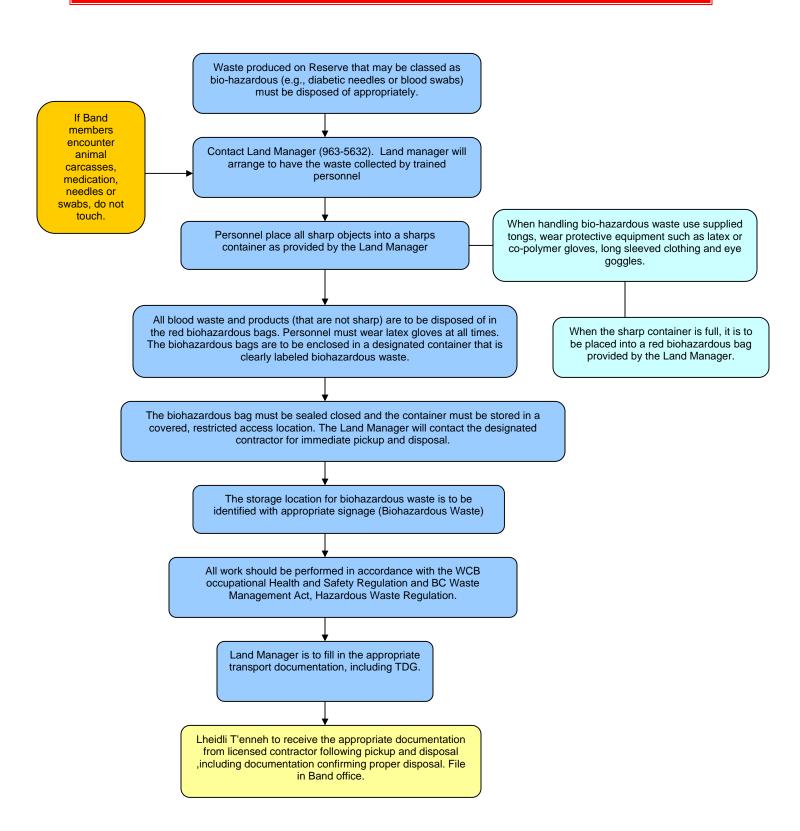
Materials

The main potential biohazardous wastes produced at the LTN are:

 Loose razors 	 Human Blood Products
 Medical Needles / Syringes 	Animal carcasses

Section Ref.: EMF-Sec 03 Document Date: 070331

Procedure Ref: EOP01-04 Revision Date:



EMP Procedure: Solid Waste Management

Section Ref.: EMF-SEC 03 Document Date: 070331

Document Ref: EOP01 Revision Date:

Waste Management

Environmental Operating Procedure – Recycling

Purpose

- □ To identify recycling materials produced at LTN;
- □ To generally identify locations where recycling materials are stored;
- □ To provide mechanisms to store and collect these materials in the community while protecting human health and the environment;
- To measure the volumes and types of recycling materials being produced at the LTN;

Scope

This procedure covers all recyclable materials produced from various businesses and homes within LTN. This document provides information to all members of the LTN on preferred procedures and contact information for disposing of recyclable goods.

Main Goals

To decrease the volume of waste entering landfills, increase recycling awareness, and handle, store and transport recyclable materials with reference to:

Definition

The Government of Canada defines recyclable materials as:

□ Products such as paper, glass, plastic, used oil, and metals that can be reprocessed instead of being disposed of as waste.

General Procedures

Materials

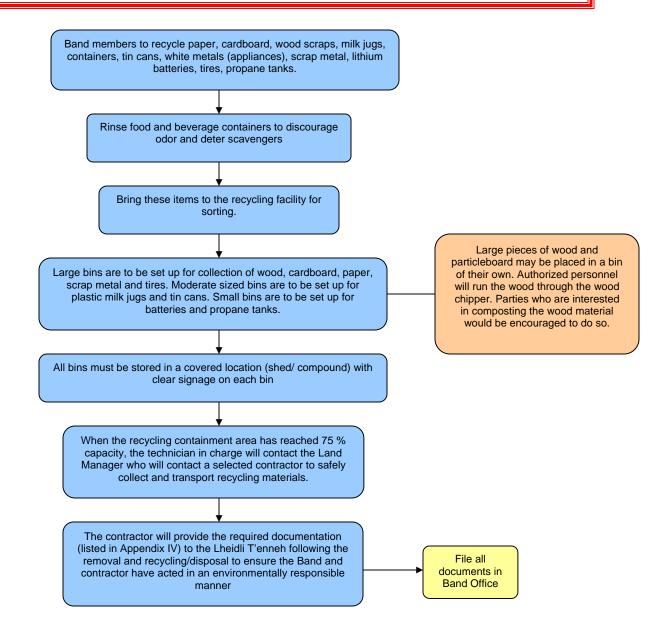
The main recyclable produced at the LTN are:

 Paper / Cardboard 	Appliances
 Milk / Juice Containers 	Tires
Tin cans	Propane tanks
 Pop cans / bottles 	Lithium Batteries

EMP Procedure: Solid Waste Management

Section Ref.: EMF-SEC 03 Document Date: 070331

Document Ref: EOP01-05 Revision Date:



EMF Procedure: Solid Waste Management

Section Ref.: EMF-SEC 03 Document Date: 070331

Document Ref: EOP01 Revision Date:

Solid Waste Management

Environmental Operating Procedure – Composting

Purpose

- □ To identify composting materials produced at LTN;
- □ To provide mechanisms to operated and maintain composters in the community

Scope

This procedure covers general composting materials produced from various businesses and domestic homes within LTN. This document provides information to all members of the LTN on suggested composting procedures and contact information when dealing with composting

Main Goals

To reduce the amount of waste entering the LTN landfill, and to recycle natural nutrients with reference to:

Definition

The Composting Council of Canada defines composting as:

- Decomposition and transformation of organic material into a soil-like product called humus.
- □ R.E.A.P.S Recycling and Environmental Action Planning Society

General Procedures

Materials

The main composting materials produced at the LTN are:

 Carbon rich materials 	 Nitrogen rich materials
Dry leaves	 Grass clippings
 Sawdust / wood chips 	 Plant trimmings
Straw	Kitchen scraps
Paper	

The pilot-composting program will be set up as follows:

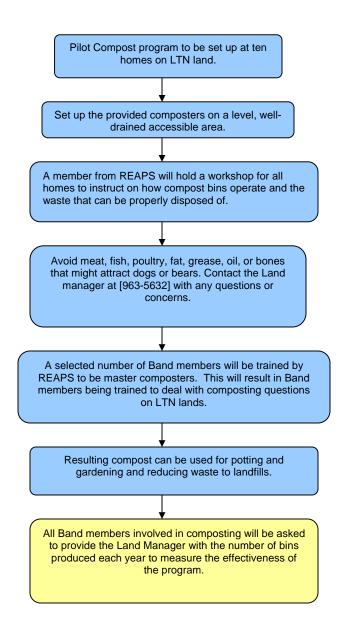
EMF Procedure: Solid Waste Management

Section Ref.: EMF-SEC 03 Document Date: 070331

Document Ref: EOP01-06 Revision Date:

• 5-6 household volunteers who are interested in composting will receive a household composter.

- R.E.A.P.S. representatives will come to the community and lead a composting workshop with those selected individuals.
- Participants of the program will receive a training certificate and will be future contacts for anyone in the community who subsequently chooses to participate in the composting program.
- The trained participants will be available for any troubleshooting issues with the composters.



EMP Procedure: Solid Waste Management

Section Ref.: EMF-SEC 03 Document Date: 070331

Document Ref: EOP01 Revision Date:

Solid Waste Management Standard Operating Procedure – General Waste

Purpose

- □ To provide mechanisms to store and collect large waste items in the community while protecting human health and the environment;
- □ To provide procedures for handling large waste items;
- □ To measure the volumes and types of waste material being produced at the LTN;
- □ To develop targets for handling, storage and transport of general waste materials.

Scope

This procedure covers all large general waste items (e.g. couches, mattresses etc.) from various businesses and domestic homes within LTN. This document provides information to members of the LTN on handling procedures and contact information when disposing of these items.

Main Goals

To minimize the impacts of LTN on the environment from the production, poor storage, transport and disposal of general waste with reference to:

- Indian Act Indian Reserve Waste Disposal Regulations
- Canadian Environmental Protection Act Part 7: Controlling Toxic Substances and Part 9: Government Operations and Federal and Aboriginal Land

Definition

The Government of Canada defines Waste as:

 General Waste is any substance for which the owner/generator has no further use, and which he discards.

General Procedures

Materials

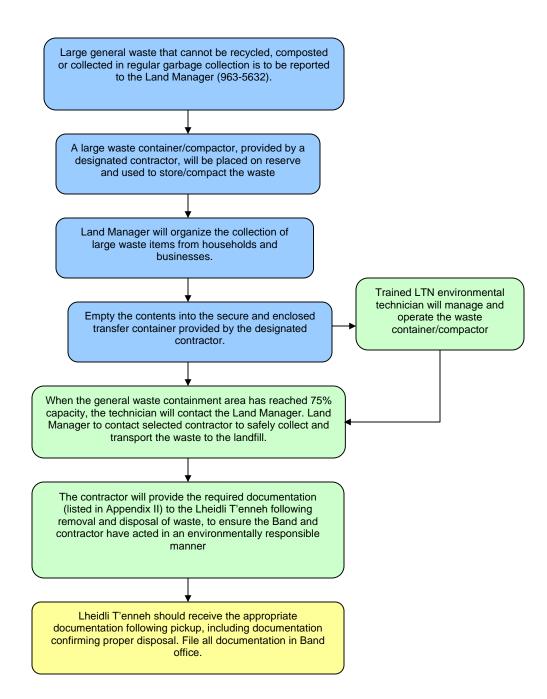
The main potential general wastes produced at the LTN are:

Furniture	 Other large waste items
Old Cars	
 Large volumes of wood 	

EMP Procedure: Solid Waste Management

Section Ref.: EMF-SEC 03 Document Date: 070331

Document Ref: EOP01-07 Revision Date:



Section Ref.: EMF-SEC03 Document Date: 070331

Document Ref.: EOP02 Revision Date:

Ground and Surface Water Management Environmental Operating Procedure

Purpose

- □ To protect ground and surface water on LTN lands;
- □ To generally identify locations where ground or surface water could be impacted;
- □ To provide for sampling and analysis of surface and groundwater to assess quality;
- □ To provide for response to spills or leaks that might threaten ground and/or surface water:
- □ To develop targets for treatment and disposal of wastewater (See Section 6).

Scope

This procedure covers ground and surface water on LTN lands. This document provides information to all members on proper measures to protect ground and surface water on LTN lands.

Main Goals

To minimize the impacts on the environment from poor storage and treatment of wastes and other materials that might impact ground or surface water quality with reference to:

- Canadian Environmental Protection Act Part 7: Controlling Pollution and Managing Wastes
- Canada Water Act 85
- Water Protection Act Section 12: Unlicensed category ground water registrations
- Groundwater Protection Regulations Part 2: Ground Water Protection
- Fisheries Act Fish Habitat Protection and Pollution Prevention
- Navigable Water Protection Act 92

Definitions

Surface Water - Surface water includes all streams, rivers, creeks and open ditches on LTN lands.

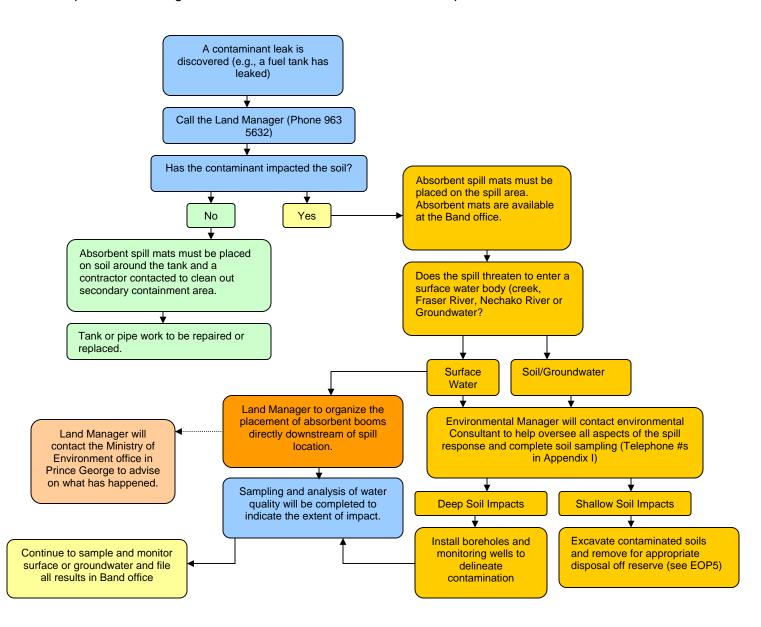
Groundwater – Groundwater flows underground, it can be shallow, flowing to rivers and creeks, and deep, which can be used for drinking water.

Section Ref.: EMF-SEC03 Document Date: 070331

Document Ref.: EOP02-01 Revision Date:

Leaks Threatening Surface and Groundwater Quality

Release of contaminants from leaks, spills and other accidents can have a major impact on surface water quality in open ditches, streams, creeks and rivers. Not only is surface water quality extremely important for fish populations and habitat, but also for Band members and other animal species that rely on the rivers and streams for hunting and drinking. Impacts on groundwater can affect drinking water in wells and may result in the water being unfit for consumption. This EOP outlines a number of procedures to ensure that surface and groundwater are as protected as possible from accidental spills/leaks during current activities, and for all future development on Reserve land.

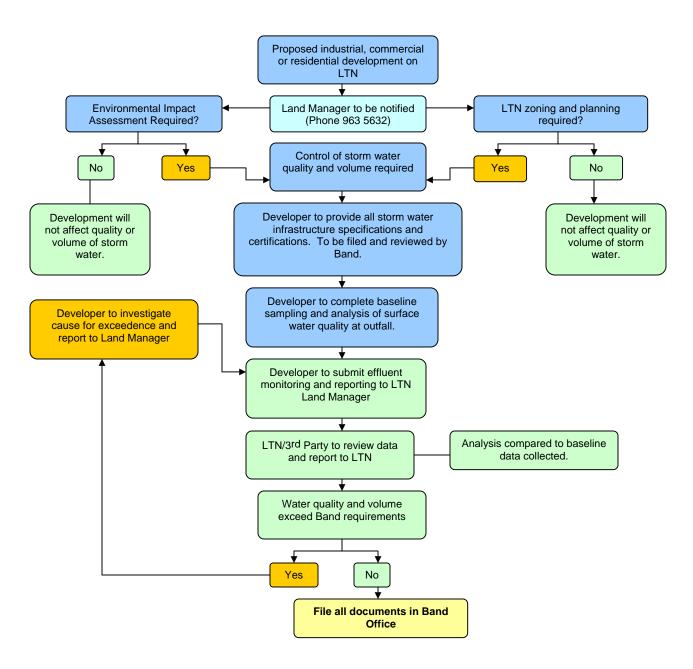


Section Ref.: EMF-SEC03 Document Date: 070331

Document Ref.: EOP02-02 Revision Date:

Future Industrial /Residential Developments

Any industrial, commercial or residential developments that may be constructed on LTN lands will require controls in terms of storm water quality and volume entering surface water bodies. To be certain that future developments do not negatively impact local surface water bodies on LTN lands, they will require appropriate design and management. The following EOP outlines procedures to ensure efficient control and environmental protection.

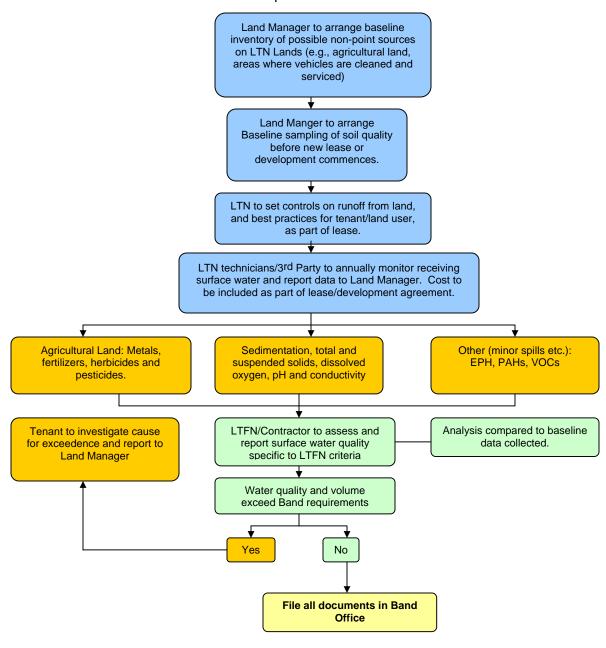


Section Ref.: EMF-SEC03 Document Date: 070331

Document Ref.: EOP02-03 Revision Date:

Non-point Sources

A non-point water source is one that has no obvious or visible location where the wastewater enters a local surface water body (river or creek) or flows directly into the ground. The non-point runoff comes from rain and other water washing over land, picking up any contaminants that exist on the surface. To be certain that non point sources on LTN lands are managed, the following EOP outlines procedures to ensure efficient control and environmental protection.



Section Ref.: EMF-SEC03 Document Date: 070331

Document Ref.: EOP03 Revision Date:

Wastewater Management Environmental Operating Procedure

Purpose

- □ To identify various wastewater sources at LTN;
- □ To generally identify locations where wastewater is produced and stored;
- □ To provide mechanisms to collect, store and effectively treat wastewater in the community while protecting human health and the environment;
- □ To provide procedures for treating wastewater;
- □ To measure the quality of areas receiving wastewater produced at the LTN;
- □ To develop targets for treatment and disposal of wastewater (See Section 6).

Scope

This procedure covers all wastewater produced from various businesses and homes within LTN. This document provides information to members of the LTN on proper collection procedures and contact information when dealing with on-reserve wastewater.

Main Goals

To minimize the impacts of LTN on the environment from poor storage and treatment of wastewater, with reference to:

- Canadian Environmental Protection Act Part 7: Controlling Pollution and Managing Wastes
- Canada Water Act 85 Parts 3, 4, and 5.
- Fisheries Act Fish Habitat Protection and Pollution Prevention
- Municipal Sewage Regulation Part 4: Standards for Effluent Reuse and Discharges to the Environment; Part 7 – Monitoring; Schedule 2, 3 & 4.

Definitions

Storm water- Storm water is the term used to describe the rainfall and other sources of water that are generated by urban runoff from areas such as streets, parking lots and roof drains on houses and other buildings.

Septic system- also referred to as an onsite wastewater system. A septic system treats your sewage right in your own yard and releases the treated effluent back into the groundwater.

Non-point source pollution- As water travels across the landscape, it picks up oil residues, pesticides, dirt, animal wastes, toxic chemicals, salt, and trash and unloads all

Section Ref.: EMF-SEC03 Document Date: 070331

Document Ref.: EOP03 Revision Date:

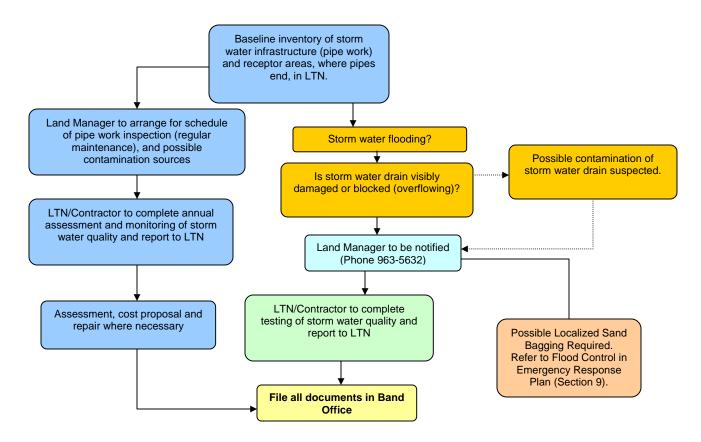
of these residues in our waterways. Since each residue comes from a different source and enters waterways over a dispersed area, it can be difficult to trace.

Section Ref.: EMF-SEC03 Document Date: 070331

Document Ref.: EOP03-01 Revision Date:

Storm Water

Storm water is produced from rainfall and snow melt on the ground surface. The resulting water drains to the installed drainage pipe work or ditch. These usually drain to a local surface water body (river or creek) or directly into the ground. To ensure that the storm water drains (culverts, ditches) are in proper working order, and that water from the drainage system does not have a negative impact on the receiving creek or river, this EOP has outlined a number of procedures to be implemented.

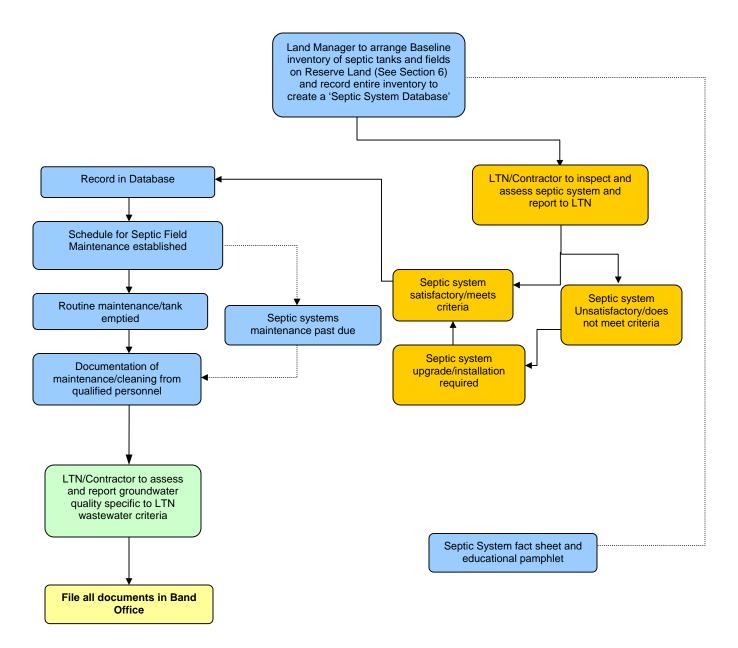


Section Ref.: EMF-SEC03 Document Date: 070331

Document Ref.: EOP03-02 Revision Date:

Septic Systems

All houses and businesses on LTN lands have septic tanks and fields to treat produced wastewater. A number of septic systems were reported as functioning inefficiently. If the systems are not operating at the appropriate level this can result in contamination of soils and/or groundwater. To implement a system for management of septic systems on LTN lands the following EOP outlines procedures to ensure efficient operation and environmental protection.

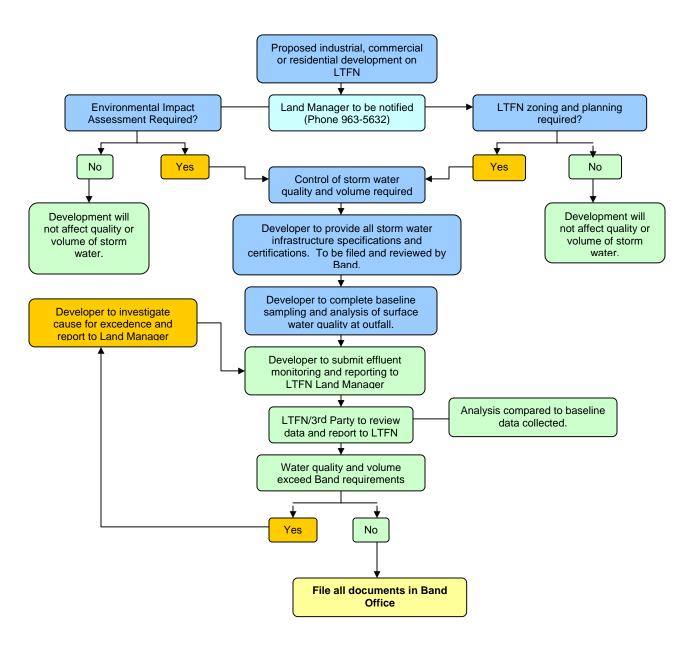


Section Ref.: EMF-SEC03 Document Date: 070331

Document Ref.: EOP03-03 Revision Date:

Future Industrial /Residential Developments

Any industrial, commercial or residential developments that may be constructed on LTFN lands will require controls in terms of storm water quality and volume entering surface water bodies on LTFN lands. To implement a system for ensuring that future developments do not negatively impact local surface water bodies on LTFN lands they will require appropriate design and management. The following EOP outlines procedures to ensure efficient control and environmental protection.

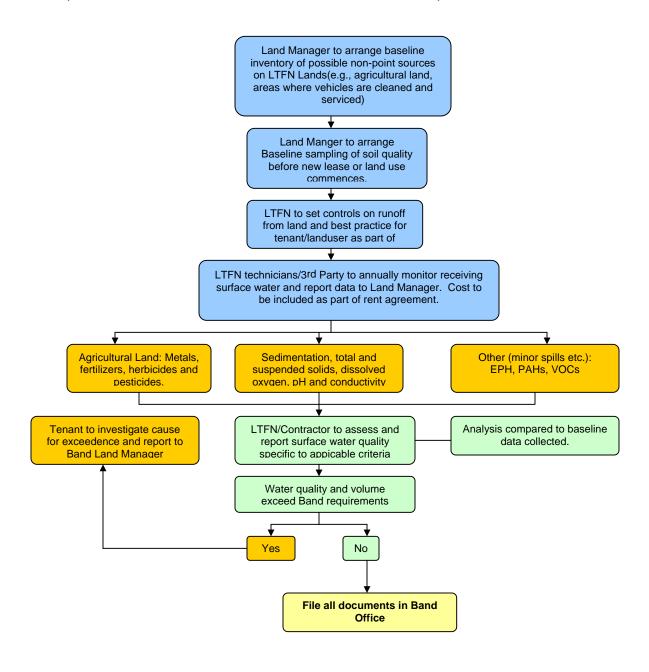


Section Ref.: EMF-SEC03 Document Date: 070331

Document Ref.: EOP03-04 Revision Date:

Non-point Sources

A non-point water source is one that has no obvious or visible location where the waste water enters a local surface water body (river or creek) or directly into the ground. The non-point runoff comes from rain and other water washing over land surface and picking up any contaminants that may exist on the land surface. To implement a system for ensuring that non point sources on LTFN lands are managed the following EOP outlines procedures to ensure efficient control and environmental protection.



EOP Procedure: Air Quality Management

Section Ref.: EMF-SEC03 Document Date: 070331

Document Ref.: EOP04 Revision Date:

Air Quality Management Environmental Operating Procedure

Purpose

- □ To identify air quality issues affecting LTN;
- □ To generally identify locations where air quality issues are produced;
- □ To provide mechanisms to reduce or control dust in the community while protecting human health and the environment;
- □ To provide procedures for remediation of air quality issues;
- □ To measure the volumes and types of air particulates being produced at the LTN;
- □ To develop targets to improve air quality at LTN (See Section 6).

Scope

This procedure covers all air quality issues from various industries and domestic homes within LTN. This document provides information to all members of the LTN on proper procedures and contact information when dealing with air quality issues.

Main Goals

To minimize environmental impacts from air quality issues to LTN with reference to:

- Canadian Environmental Protection Act Part 7: Controlling Pollution and Managing Wastes and Part 9: Government Operations and Federal and Aboriginal Land
- Ozone-depleting Substance Regulations Part 1: Controlled Substances and Part 2: Specific Uses of Controlled Substances
- Open Burning Smoke Control Regulations

Definition

Fine Particulates

- Particulates are tiny dust particles that come in many shapes and sizes from both natural and man-made sources. The main types of dusts are:
 - Total Suspended Particulate ranging from large to small dust particles
 - o PM₁₀ particulate matter 10 micrometers or less in diameter e.g. road dust.
 - o PM_{2.5} particulate matter 2.5 micrometers or less in diameter e.g. smoke.

EOP

Environmental Operating Procedure

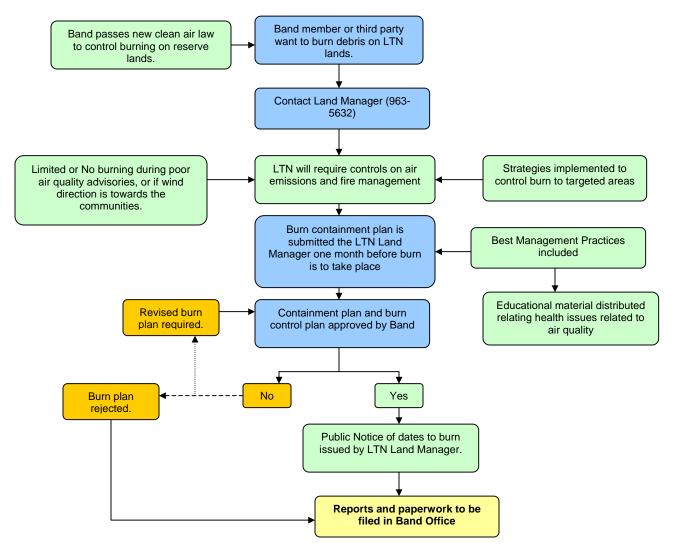
EOP Procedure: Air Quality Management

Section Ref.: EMF-SEC03 Document Date: 070331

Document Ref.: EOP04-01 Revision Date:

Backyard and Debris Burning

The EOP recognizes the need to eliminate or limit the practice of backyard and debris burning on LTN that can be a significant source air pollution. High concentrations of fine dusts and chemicals are produced when garbage and other non-clean wood products are burned.



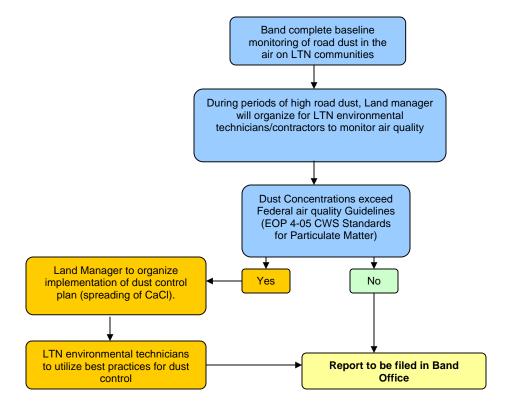
EOP Procedure: Air Quality Management

Section Ref.: EMF-SEC03 Document Date: 070331

Document Ref.: EOP04-02 Revision Date:

Road Dust

The community has identified vehicles driving on unpaved roads within LTN land as an airborne dust source. An EOP to control and/or prevent high concentrations of dust in the air from roads has been developed and is included in this section.



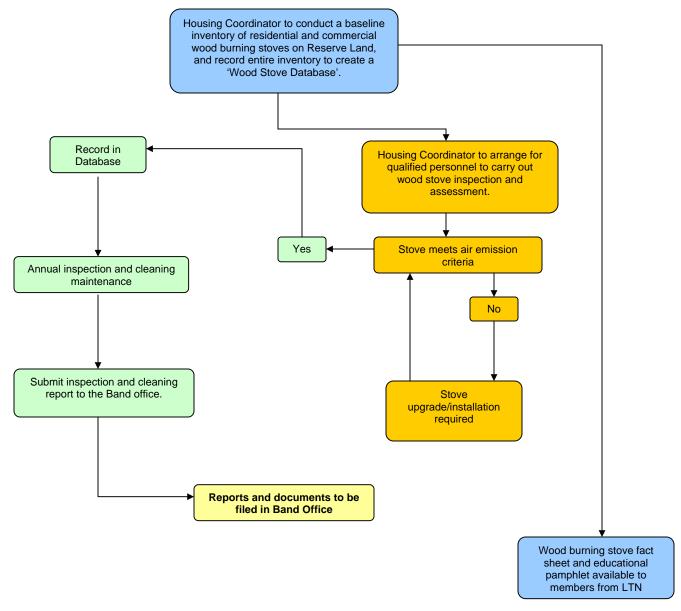
EMF Procedure: Air Quality Management

Section Ref.: EMF-SEC03 Document Date: 070331

Document Ref.: EOP04-03 Revision Date:

Wood Burning Stoves

The use of wood stoves on Reserve land has been identified as contributing to air pollution in the community. An EOP to control and/or prevent high concentrations of smoke from wood stoves has been developed and is included in this section.



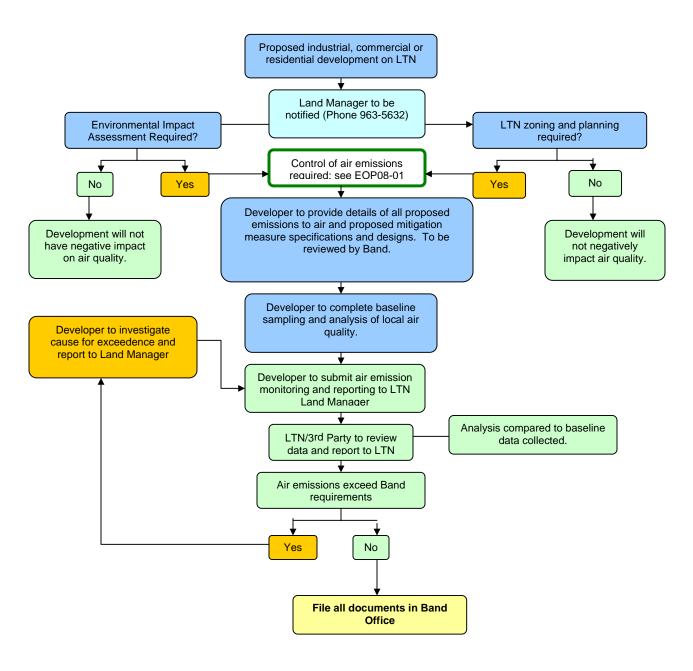
EMF Procedure: Air Quality Management

Section Ref.: EMF-SEC03 Document Date: 070331

Document Ref.: EOP04-04 Revision Date:

Future Developments on LTN Lands

All industrial, commercial or residential developments that are constructed on LTN lands may require controls on air emissions from the development. To make certain that future developments do not negatively impact local air quality on LTN lands, they require appropriate design and management. The following EOP outlines procedures to ensure efficient control and environmental protection.



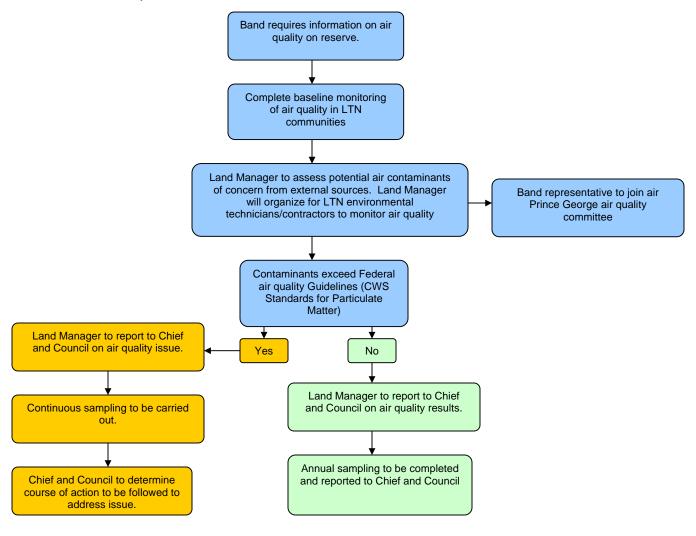
EOP Procedure: Air Quality Management

Section Ref.: EMF-SEC03 Document Date: 070331

Document Ref.: EOP04-05 Revision Date:

Off Reserve Sources

The community has indicated that off reserve sources may be affecting air quality on reserve. Industrial (e.g. factories) and environmental (e.g. erosion of cut banks) sources may be contributing to poor air quality on reserve lands and LTN will complete a baseline sampling program to determine the affects, if any, that outside sources are having on air quality on reserve. An EOP to compete a baseline sampling program has been developed and is included in this section.



Section Re.: EMF-SEC03 Document Date: 070331

Document Ref.: EOP05 Revision Date:

Soil Management

Environmental Operating Procedure

Purpose

- □ To generally identify locations where soil may be excavated and stockpiled for use at LTN, with reference to the appropriate land use.
- □ To identify the types of land use, on reserve, where various activities could impact soil quality (e.g., forestry, agriculture, material storage);
- □ To provide mechanisms for characterizing, excavating and moving soil in the community, while protecting human health and the environment;
- □ To provide procedures for managing soils being transported on reserve, off reserve and within reserve;
- □ To measure the volumes and types of soils being transported on reserve, off reserve and within reserve;
- □ To develop targets for proper handling, storage and transport of soils.

Scope

This procedure covers characterizing, excavating, stockpiling, transporting and disposing of soil on LTN land, and the management of soil entering LTN lands from external sources. This document provides information to members of the LTN on proper handling procedures and contact information when dealing with soil relocation.

Main Goals

To minimize the environmental impacts, on LTN lands, that result from the relocation of soils, with reference to:

- Canadian Environmental Protection Act Part 7: Controlling Pollution and Managing Wastes
- Groundwater Protection Regulation Part 2 Ground Water Protection
- Organic Products Regulations Part 3: Organic Certification

General Procedures

Materials

The main soil management issues at the LTN are:

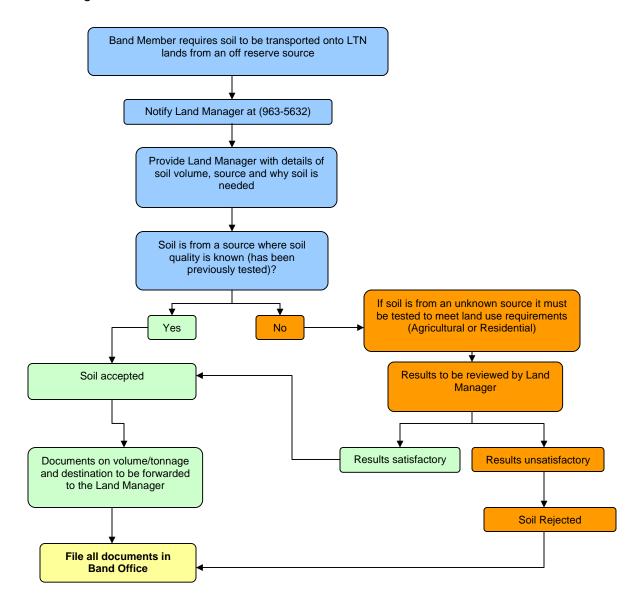
□ Soil – Incoming (off-site/reserve source)
 □ Soil – Relocation with LTN
 □ Soil – Relocation with LTN
 □ 3rd Party Soil Management

Section Re.: EMF-SEC03 Document Date: 070331

Document Ref.: EOP05-01 Revision Date:

Incoming Soil

The following EOP outlines procedures for soil entering LTN lands from an external source (outside LTN land). This practice is designed to control the quantity and quality of the incoming soil.

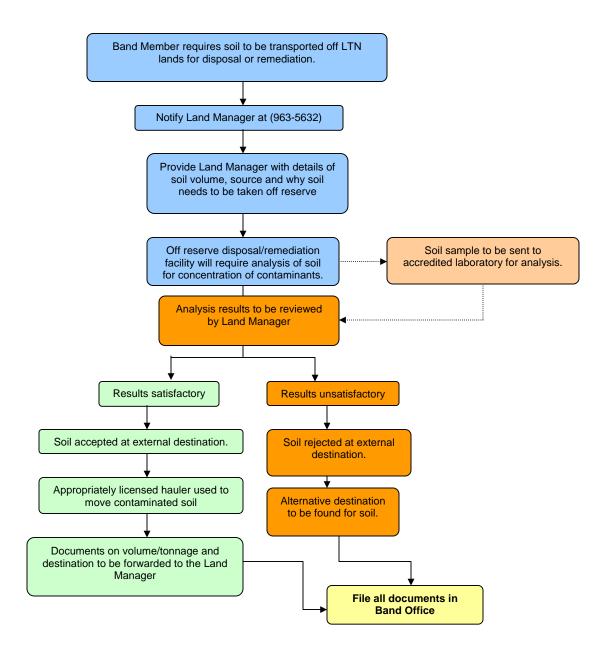


Section Re.: EMF-SEC03 Document Date: 070331

Document Ref.: EOP05-02 Revision Date:

Outgoing Soil

The following EOP outlines the steps to follow when soil is being transported off reserve to an external destination (e.g., disposal of contaminated soil off LTN land). The procedure is designed to control the movement of soil leaving LTN lands.

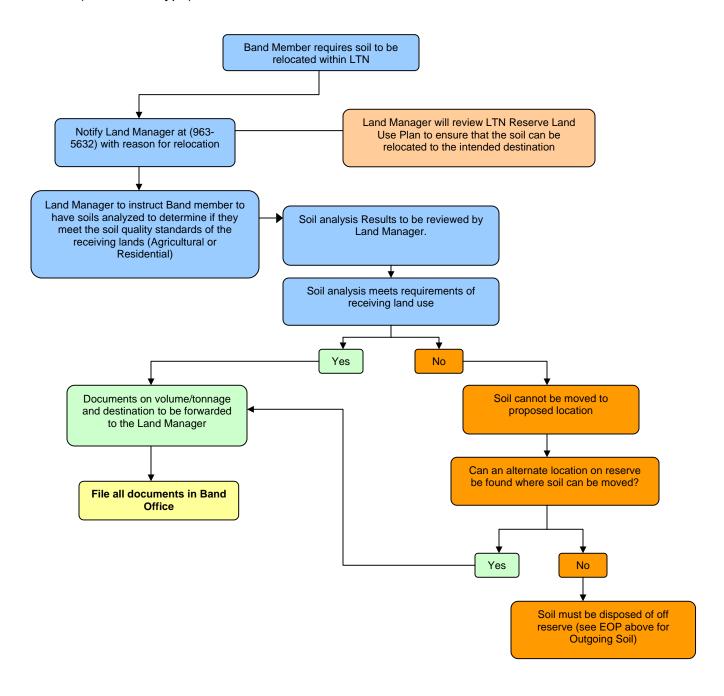


Section Re.: EMF-SEC03 Document Date: 070331

Document Ref.: EOP05-03 Revision Date:

Relocation of Soil within LTN Lands

The following procedure outlines the step to follow when soil is to be moved within LTN lands. The procedure is designed to control the movement of soil moving from one area (or land use type) to another within LTN lands.

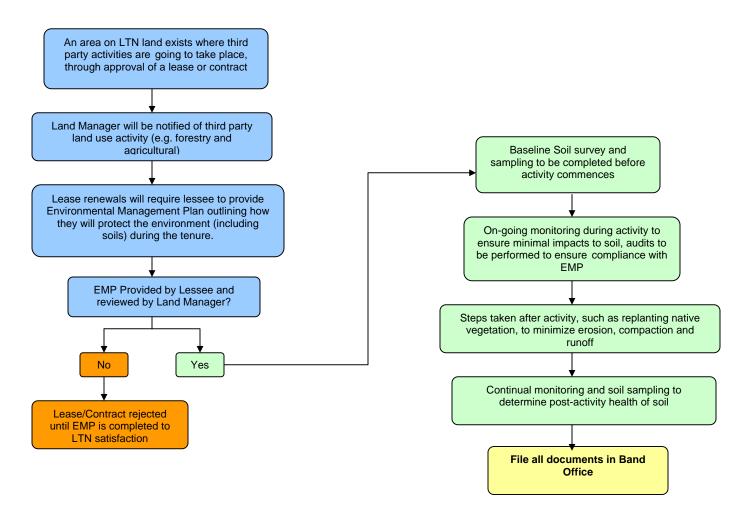


Section Re.: EMF-SEC03 Document Date: 070331

Document Ref.: EOP05-04 Revision Date:

Soil Quality Management for Third Party Lease/Contract on LTN Lands

The following procedure outlines the steps to follow in protecting soil quality when developing or renewing a lease or contract with a third party operating on LTN lands.



EOP Procedure: Landfills

Section Ref.: EMF-SEC03 Document Date: 070331

Document Ref.: EOP05 Revision Date:

Landfills

Environmental Operating Procedure

Purpose

□ To generally identify areas of landfill activity;

- □ To provide mechanisms for dealing with landfills on reserve lands;
- □ To provide procedures for remediation of on reserve landfill areas;

Scope

This procedure covers landfill management on LTN reserve lands. This document provides information to members of the LTN on proper procedure and contact information when a landfill is discovered.

Main Goals

To protect and maintain the overall good health of LTN reserve land through landfill management, by reference to:

- Canadian Environmental Protection Act Part 7: Controlling Pollution and Managing Wastes
- Indian Act Indian Reserve Waste Disposal Regulations
- Water Protection Act
- Groundwater Protection Act
- Hazardous Waste Regulations

General Procedures

Landfill

Burying of waste material under the ground surface.

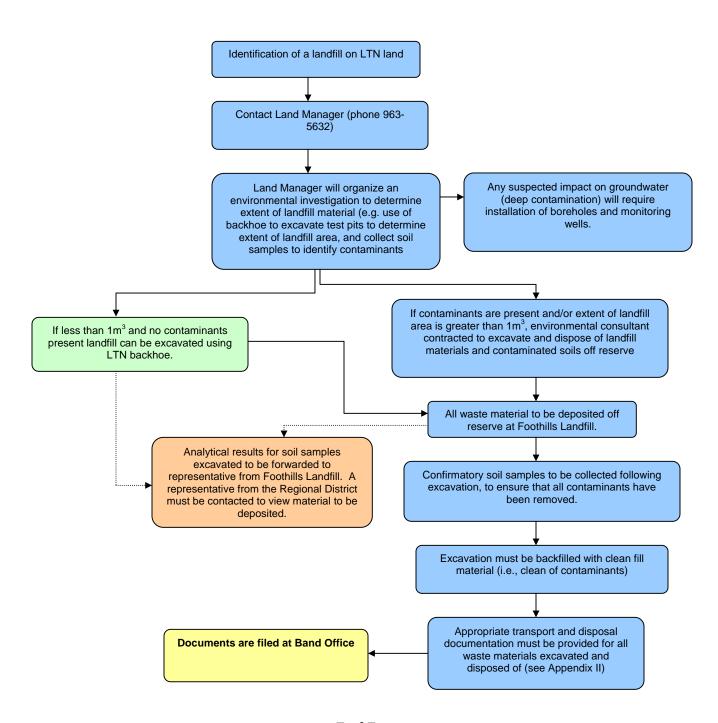
EOP Procedure: Landfills

Section Ref.: EMF-SEC03 Document Date: 070331

Document Ref.: EOP05-05 Revision Date:

Landfill Management

The following procedure outlines the steps to be followed when a landfill waste area (buried waste material) is discovered on LTN lands. This EOP is designed to ensure environmental protection and removal of buried waste materials.



Section Ref.: EMF-SEC03 Document Date: 070331

Document Ref.: EOP06 Revision Date:

Habitat

Environmental Operating Procedure

Purpose

- □ To generally identify environmentally sensitive areas, wetlands, wildlife and fish habitat areas on LTN lands;
- □ To provide mechanisms for protecting environmentally sensitive areas, wetlands, wildlife and fish habitats:
- □ To provide procedures for mitigating the degradation or contamination of on reserve habitat areas;
- □ To develop targets for increased biodiversity on reserve lands.

Scope

This procedure covers the protection of environmentally sensitive areas, wildlife, fish habitat and wetlands within LTN reserve lands. This document provides information to members of the LTN on proper procedures and contact information when accessing these areas.

Main Goals

To protect and maintain the overall good health of environmentally sensitive areas, including wetlands and species habitat, with reference to:

- Canada Wildlife Act 85
- Fisheries Act Fish Habitat Protection and Pollution Prevention
- Health of Animals Act
- Plant Protection Act
- Species at Risk Act
- Wild Animal and Plant Protection Regulation of International and Interprovincial Trade Act 1992

General Procedures

Materials

The main habitat management issues on LTN lands are:

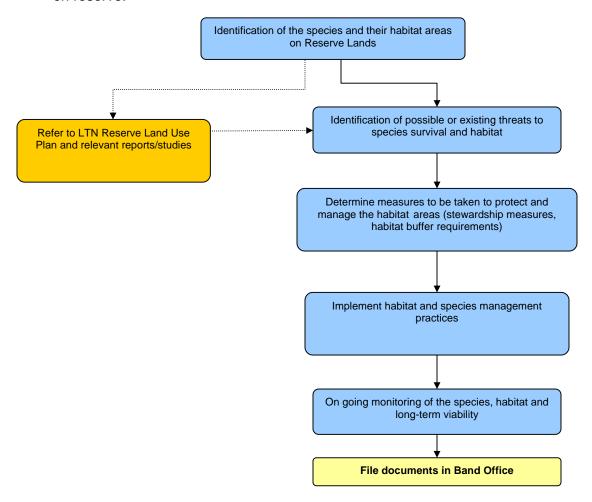
Protection of Wetlands & Riparian Areas	Fish Habitat
Protected Areas	 Invasive/Noxious Plants Species
Animal Habitat/Trapping and Hunting	Endangered Species

Section Ref.: EMF-SEC03 Document Date: 070331

Document Ref.: EOP06-01 Revision Date:

Animal Habitat/Trapping & Hunting

The overall health of species habitat on reserve lands is vital to the health of animals and fish hunted and trapped by Band members. This procedure outlines the basic habitat monitoring that must be completed to determine the health of plants and animals on reserve.

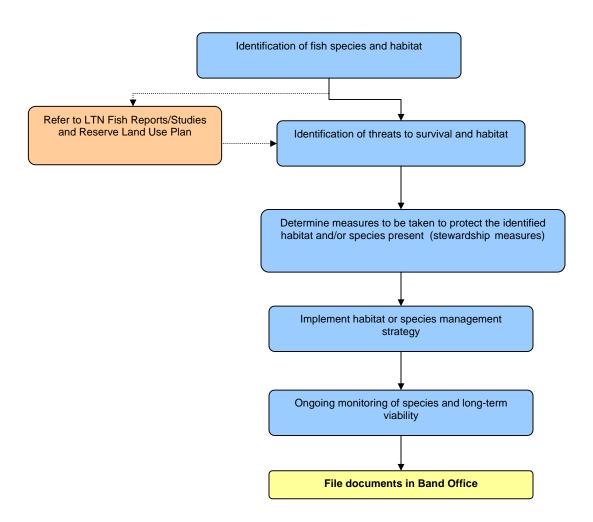


Section Ref.: EMF-SEC03 Document Date: 070331

Document Ref.: EOP06-02 Revision Date:

Fish Population Monitoring and Protection

Band members fish the lakes and rivers of the reserve on a year round basis. It is important to assess the fish populations, and monitor these to determine any change in population (increasing or decreasing) and also to determine if habitat management measures are required.

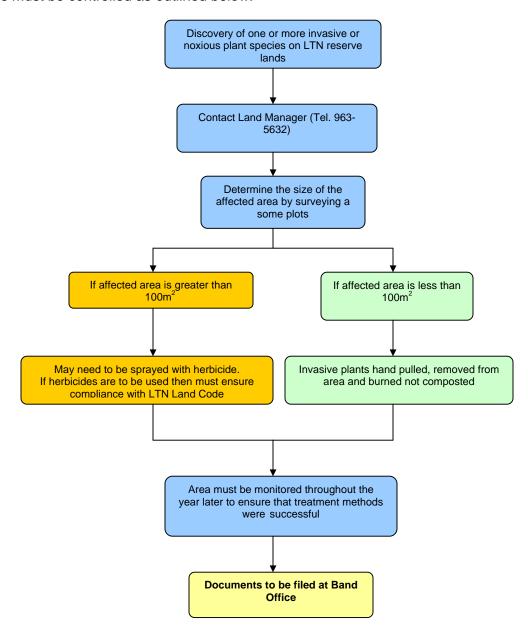


Section Ref.: EMF-SEC03 Document Date: 070331

Document Ref.: EOP06-03 Revision Date:

Invasive/Noxious Plant Species

Some non-native plant species can cause serious ecological and economic damage to many areas if blown or introduced into native environment. Weeds can take over important habitat areas for wildlife by devastating shelter and forage and reducing the diversity and quantity of native plants. Any non-native plant species observed on LTN lands must be controlled as outlined below:

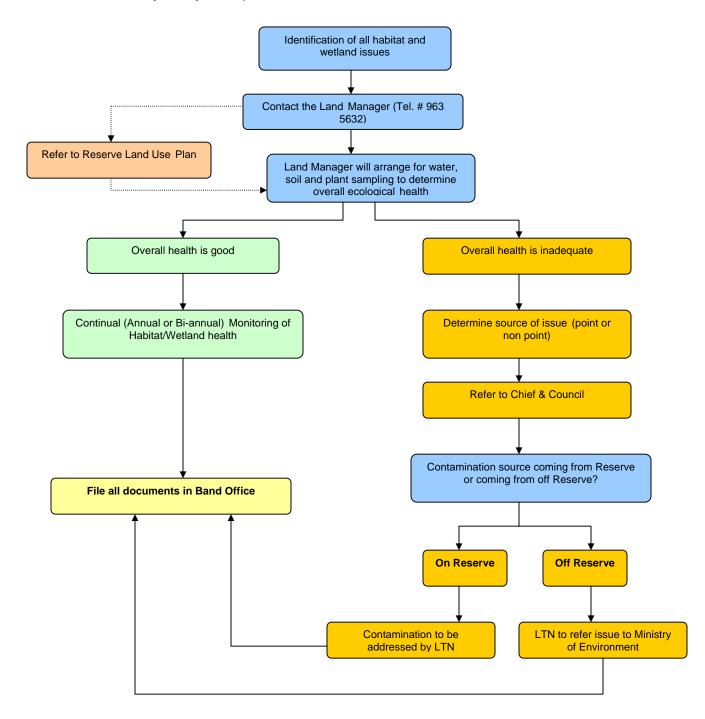


Section Ref.: EMF-SEC03 Document Date: 070331

Document Ref.: EOP06-04 Revision Date:

Habitat/Wetland Protection

The continued health and biodiversity of natural systems on LTN lands depends on the maintenance and protection of high-quality habitat. The same areas that often attract human development also provide essential food, cover, migratory corridors, and breeding areas for fish, animal and bird species. Habitat protection on LTN lands is critical to a healthy ecosystem, procedures to ensure habitat health are outlined below:



Section Ref.: EMF-SEC03 Document Date: 070331

Document Ref.: EOP07 Revision Date:

Fuel Handling and Storage Environmental Operating Procedure

Purpose

- □ To identify, predict and prevent environmental impacts from improper storage of fuel;
- □ To develop procedures that ensure the proper transport, handling and storage of gasoline, diesel and kerosene fuels;
- □ To ensure that all existing tanks on LTN lands are in good condition and have appropriate spill mitigation measures in place;
- □ Complete regular checks on tanks to prevent spills/leaks.
- □ To protect the environment from leaks and spills of fuel on LTN lands.

Scope

Outline the procedures for the proper transport, transfer and storage of fuels on LFN lands. The procedures will require appropriate secondary containment and access to spill control equipment (absorbent pads, booms etc.). This document provides information to all members of the LTN on proper procedures and contact information relating to fuel handling and storage.

Main Goals

To mitigate and minimize the environmental impacts from fuel spills and leaks on LTN lands with reference to:

- Ground Water Protection Act Part 2: Ground Water Protection
- Petroleum Storage and Distribution Facilities Storm Water Regulations

Definition

Tidy Tank – Small Tank of less than 150 gallons.



□ Aboveground Fuel Tank – Storage tanks located at ground level

Section Ref.: EMF-SEC03 Document Date: 070331

Document Ref.: EOP07 Revision Date:



□ Underground Fuel Tank – Tank Buried on the ground

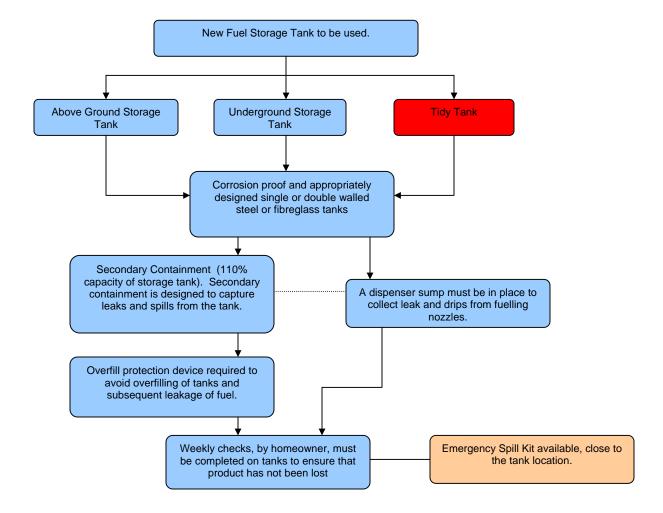
Basic Requirements for Fuel Storage Tanks

All fuel storage tanks on LTN lands must meet federal codes for design and containment. The procedures outlined below are designed to prevent and mitigate environmental impacts from spills and leaks from above ground storage tanks, underground storage tanks and tidy tanks.

Section Ref.: EMF-SEC03 Document Date: 070331

Document Ref.: EOP07-01 Revision Date:

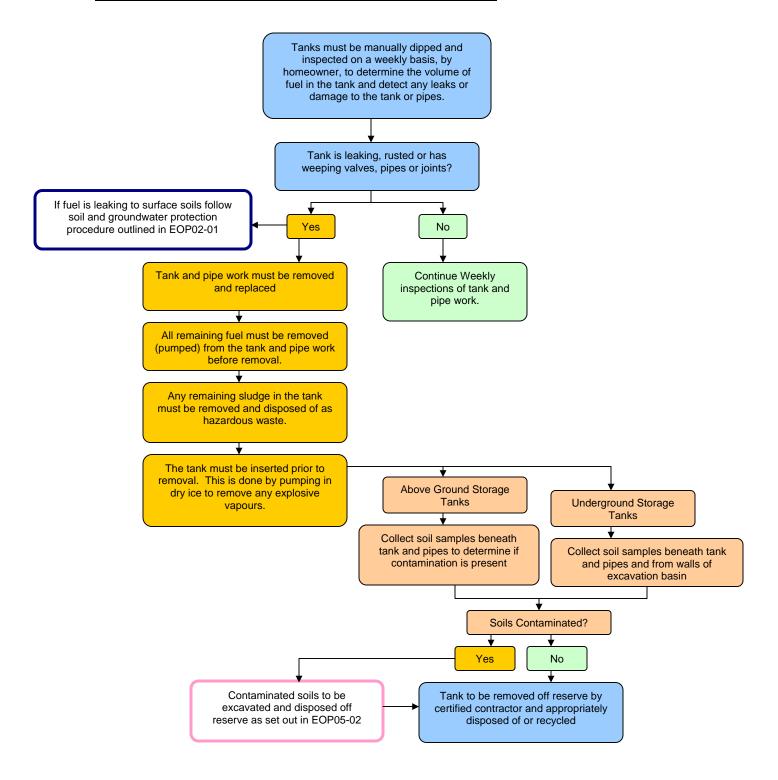
Fuel Storage Tank General Requirements



Section Ref.: EMF-SEC03 Document Date: 070331

Document Ref.: EOP07-02 Revision Date:

Environmental Procedures for Fuel Tank Inspections



EOP Procedure: Environmental Impact Assessment

Section Ref.: EMF-SEC03 Document Date.: 070331

Document Ref.: EOP08 Revision Date:

Environmental Impact Assessment Environmental Operating Procedure

Purpose

- □ To identify, predict and prevent environmental impacts from future developments on LTN lands;
- □ To ensure that all EIA documents are prepared with reference to the Canadian Environmental Assessment Act (CEAA);
- □ All developments must be planned with consideration to the environment, cultural heritage and human health impacts;

Scope

Outline the process for the completion and review of Environmental Impact Assessments relating to proposed developments on LTN lands. All EIA documents must contain at a minimum the CEAA requirements.

Main Goals

To mitigate and minimize the environmental impacts from developments on and adjacent to LTN lands with reference to:

- Canadian Environmental Assessment Act
- Environmental Impact Assessment Regulation

Definition

□ EIA

Environmental Impact Assessment is a decision making process designed to reduce impacts resulting from human activities.

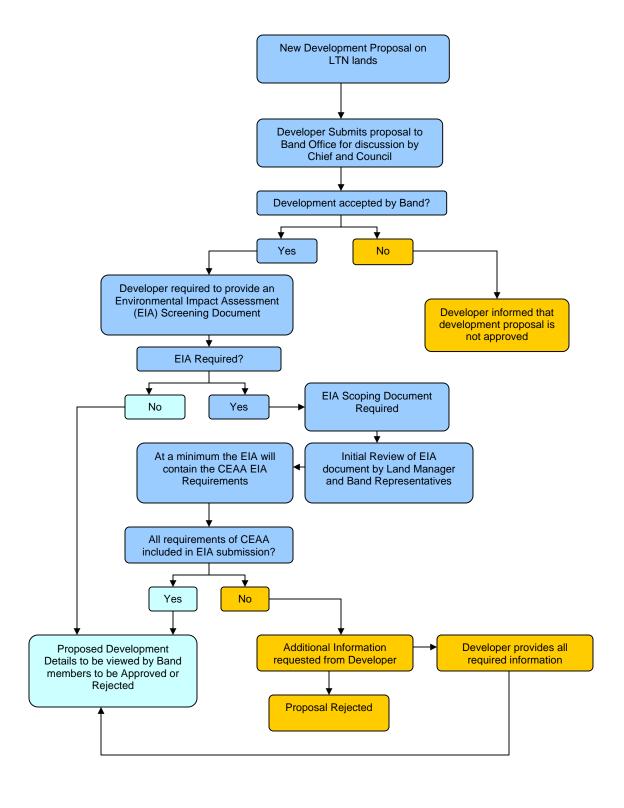
□ CEAA

Canadian Environmental Assessment Act

EOP Procedure: Environmental Impact Assessment

Section Ref.: EMF-SEC03 Document Date.: 070331

Document Ref.: EOP08-01 Revision Date:



Section Ref.: EMF-SEC03 Document Date: 070331

Document Ref.: EOP09 Revision Date:

Environmental Emergency Response Environmental Operating Procedure – Flooding

Purpose

- □ To provide for orderly emergency evacuation of I.R#2, I.R#3;
- □ To provide interim shelter for displaced residents;
- □ To provide for orderly return to residents after river levels decrease;

Scope

This procedure covers steps to be taken in the event that a flood situation occurs at Shelley North, Shelley South or Clesbanichek. This document provides information to all members of the LTN on gathering locations and evacuation options in the event that a major flood event occurs.

Three main advisories and warnings will be issued from the Ministry of Environment, these are:

- High Stream Flow Advisory the river levels are rising or are expected to rise rapidly, no major flooding expected but minor flooding of low lying areas may occur.
- Flood Watch River levels are rising and will reach or may overflow the bank. Flooding of areas adjacent to river may occur.
- Flood Warning the river levels have exceeded the height of the bank or will shortly exceed the bank height, flooding of areas adjacent to the river will occur.

Main Goal

To ensure a procedure is in place to protect LTN members in the event of a flood on the Fraser or Nechako Rivers. To coordinate an emergency response plan with the Regional District Emergency Response and Recovery Plan and to put in place some short-term mitigation measures to try and control flood waters.

Definition

□ PEP - Provincial Emergency Program

References:

- British Columbia Consequence Management Series, BC Flood Plan, 2007.
- Shelley North and South Flood Plain Drawing
- Reserve Land Use Plan

Section Ref.: EMF-SEC03 Document Date: 070331

Document Ref.: EOP09 Revision Date:

Emergency Contact Numbers:

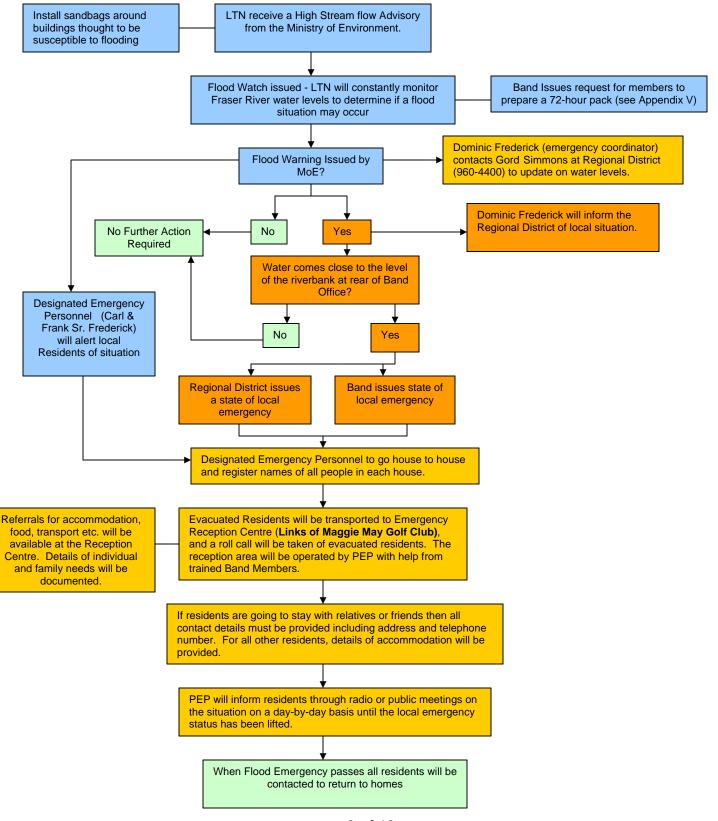
Emergency Services - 911 City of Prince George –561-7600

Regional District –960-4400

Section Ref.: EMF-SEC03 Document Date: 070331

Document Ref.: EOP09-01 Revision Date:

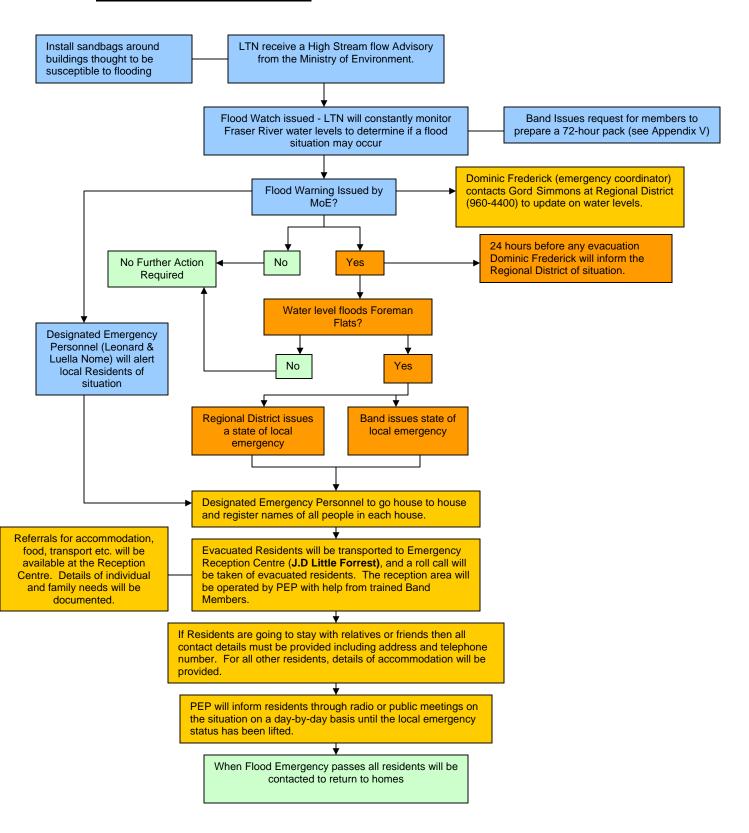
Shelley South Flood Procedure



Section Ref.: EMF-SEC03 Document Date: 070331

Document Ref.: EOP09-02 Revision Date:

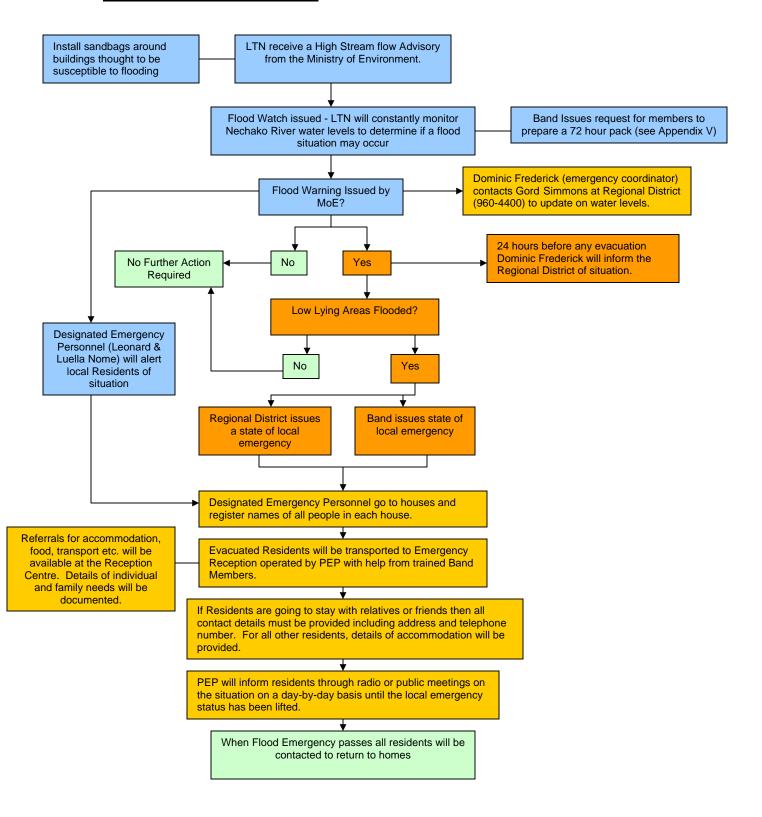
Shelley North Flood Procedure



Section Ref.: EMF-SEC03 Document Date: 070331

Document Ref.: EOP09-03 Revision Date:

Clesbanichek Flood Procedure



Section Ref.: EMF-SEC03 Document Date: 070331

Document Ref.: EOP09 Revision Date:

Environmental Emergency Response

Environmental Operating Procedure – Forest/Wildfire

Purpose

- □ To provide for orderly emergency evacuation of I.R#2 and I.R#3;
- □ To provide interim shelter for displaced residents;
- □ To provide for orderly return to residents after emergency has passed;

Scope

This procedure covers steps to be taken in the event that a wildfire situation occurs, and threatens property and persons at Shelley North, Shelley South and Clesbanichek. This document provides information to all members of the LTN on gathering locations and evacuation options in the event that a wildfire event occurs.

Three main advisories and warnings will be issued from the Provincial Emergency Program (PEP), these are:

- Evacuation Alert Regional District issues a warning on imminent danger to life and property, and people are asked to be ready to leave on short notice.
- **Evacuation Order** When the population is determined to be at imminent risk, Regional District will issue an evacuation order and people must leave the area immediately.
- Evacuation Rescinded An evacuation order is lifted by the Regional District when it is determined that it is safe for residents to return to their homes.

Main Goal

To ensure that a procedure is in place to protect all LTN members at Shelley North Shelley South and Clesbanichek in the event of a wildfire event. To coordinate an emergency response plan with the Regional District Emergency Response and Recovery Plan and to put in place an evacuation procedure in the event that a wildfire threatens property or human life.

Definition

PEP

Provincial Emergency Program

Emergency Contact Numbers:

Emergency Services - 911

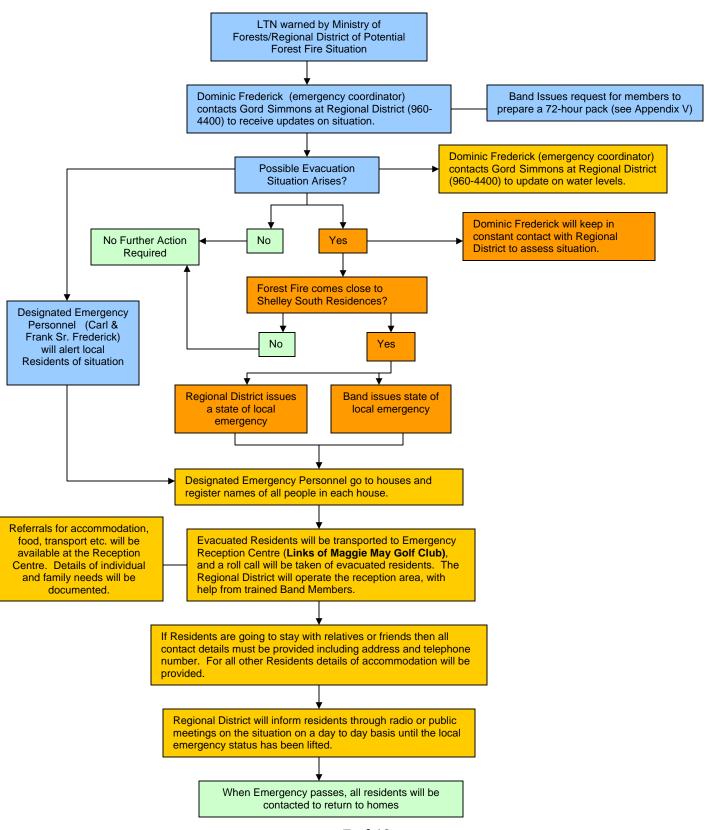
City of Prince George –561-7600

Regional District –960-4400

Section Ref.: EMF-SEC03 Document Date: 070331

Document Ref.: EOP09-04 Revision Date:

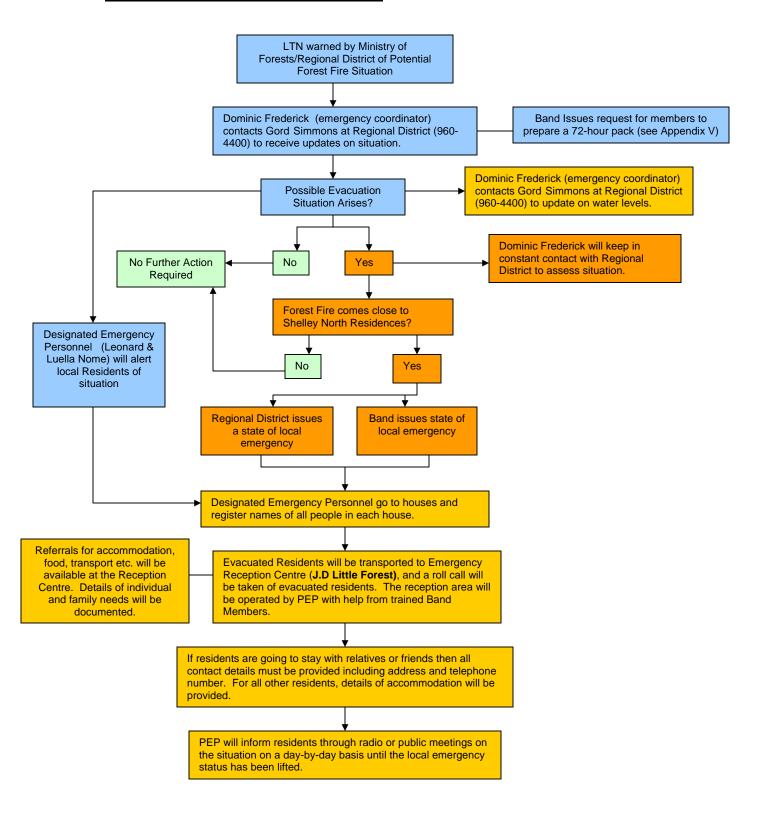
Shelley South Forest/Wildfire Procedure



Section Ref.: EMF-SEC03 Document Date: 070331

Document Ref.: EOP09-05 Revision Date:

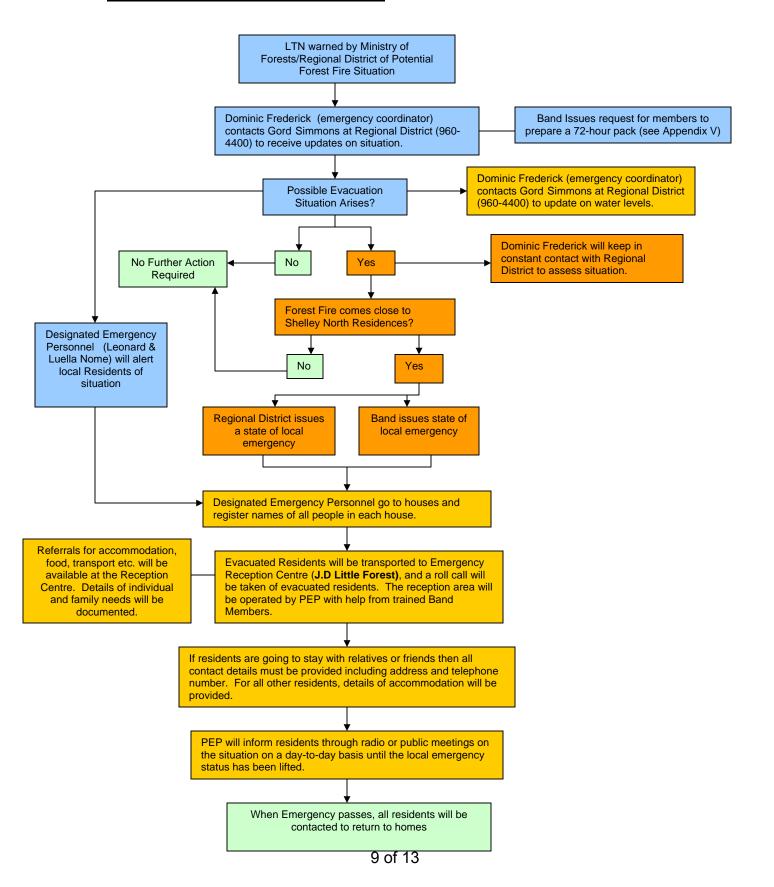
Shelley North Forest/Wildfire Procedure



Section Ref.: EMF-SEC03 Document Date: 070331

Document Ref.: EOP09-06 Revision Date:

Clesbanichek Forest/Wildfire Procedure



Section Ref.: EMF-SEC03 Document Date: 070331

Document Ref.: EOP09 Revision Date:

Environmental Emergency Response

Environmental Operating Procedure – Train Derailment

Purpose

- □ To provide for orderly emergency evacuation procedure for Shelley South;
- To provide interim shelter for displaced residents;
- □ To provide for orderly return to residents after emergency has passed;

Scope

This procedure covers steps to be taken in the event that a train derailment situation occurs, and threatens property and persons at Shelley South. This document provides information to all members of the LTN on gathering locations and evacuation options in the event that a train derailment event occurs.

Three main advisories and warnings will be issued from the Provincial Emergency Program (PEP), these are:

- Evacuation Alert Regional District issues a warning on imminent danger to life and property, and people are asked to be ready to leave on short notice.
- **Evacuation Order** When the population is determined to be at imminent risk, Regional District will issue an evacuation order and people must leave the area immediately.
- Evacuation Rescinded An evacuation order is lifted by the Regional District when it is determined that it is safe for residents to return to their homes.

Main Goal

To ensure that a procedure is in place to protect all LTN members at Shelley South in the event of a train derailment. To coordinate an emergency response plan with the Regional District Emergency Response and Recovery Plan and to put in place an evacuation procedure in the event that a train derailment threatens property or human life.

Definition

PEP

Provincial Emergency Program

Emergency Contact Numbers:

Emergency Services - 911

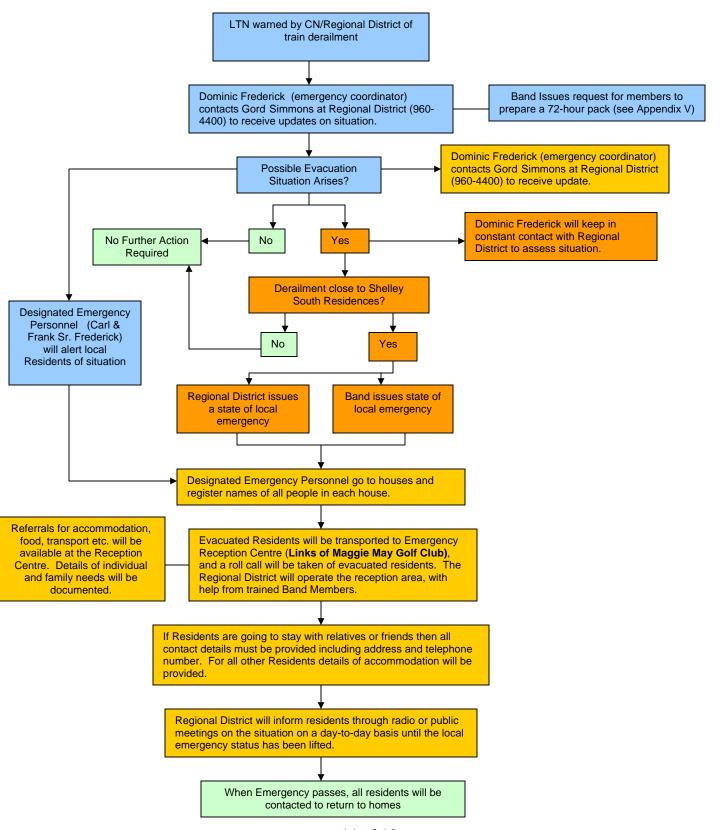
City of Prince George –561-7600

Regional District -960-4400

Section Ref.: EMF-SEC03 Document Date: 070331

Document Ref.: EOP09-07 Revision Date:

Shelley South Train Derailment Procedure



Section Ref.: EMF-SEC03 Document Date: 070331

Document Ref.: EOP09 Revision Date:

Environmental Emergency Response

Environmental Operating Procedure – Environmental Impact

Purpose

- □ To provide for organized response to environmental emergency on all Reserve lands:
- □ To provide interim mitigation of environmental impacts;
- □ To provide for appropriate monitoring and remediation of environmental emergency impacts.

Scope

This procedure covers steps to be taken in the event that an environmental emergency (e.g., derailment of rail car) resulting in loss of materials that may have a negative environmental impact on reserve lands. This document provides information to all members of the LTN on the procedures that will be required to respond and mitigate environmental impacts following an environmental emergency event.

Main Goal

To ensure a procedure is in place to protect LTN land and members in the event of an environmental emergency such as a fuel spillage and to coordinate an emergency response plan to put in place some short-term mitigation measures to try and control environmental impacts.

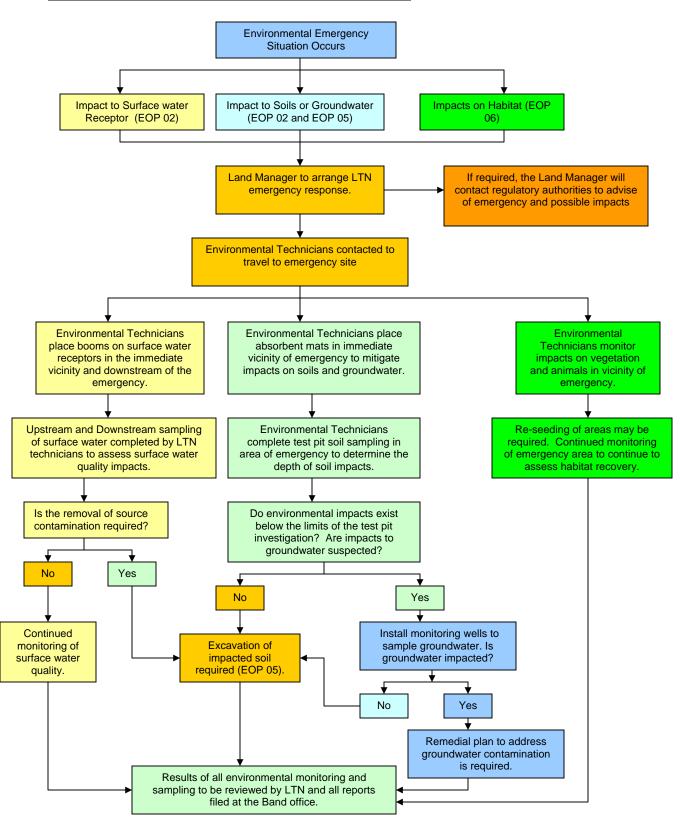
Definition

□ Environmental Emergency – An event that may cause immediate negative environmental impact to receptors on Reserve.

Section Ref.: EMF-SEC03 Document Date: 070331

Document Ref.: EOP09-08 Revision Date:

Shelley South Environmental Emergency Procedure



Environmental Management Framework – Section 4				
Document Ref.:	EMF- 004	Document Date:	070531	
Responsibility:	EMF Manager	Rev. Date:		

4. CAPACITY BUILDING

Capacity building within the Lheidli T'enneh people to manage and control environmental issues on their lands is a vital component of the EMF requirement. It will be important that members of the community have the skills and knowledge required to complete required tasks on a daily basis that will ensure the protection of the environment on their lands.

4.1. Challenges to Managing Environmental Impacts on Lhedli T'enneh Lands

There are a number of challenges for Lheidli T'enneh that must be overcome to allow them to manage environmental impacts on their lands. Many aspects of environmental management will require skilled people including project managers, technicians, scientists and engineers. The technical nature of environmental management will also add to the governing challenges of Chief and Council who may not have a technical background.

Lheidli T'enneh staff currently does not have all the technical skills required to effectively manage environmental issues on their lands and require outside assistance to deal with any issues that arise. The main challenges for the Lheidli T'enneh Nation in terms of environmental management are:

- The large variety of functions required in effectively managing environmental issues on Band lands.
- The technical and regulatory requirements of environmental management.

The Band must build their capacity to deal with the above challenges to allow them to manage their environment in a sustainable way and build understanding in the community.

The following are programs and courses that should be taken by employees working as the Lheidli T'enneh Environmental Manager or as Environmental Monitors.



Environmental Management Framework – Section 4				
Document Ref.:	EMF- 004	Document Date:	070531	
Responsibility:	EMF Manager	Rev. Date:		

WorkSafe BC OFA Level 1

Course Description:

This course is for persons requiring the WorkSafe BC minimum workplace certification. It is a 7-hour program developed by a panel of medical experts and educators and designed to meet the Industrial (Occupational) First Aid needs of British Columbia. The students receive instruction in Priority Action Approach, Artificial Respiration, Choking, Adult CPR, Control of Severe Bleeding, Shock, and Minor Wound Care, Burns, Eye Injuries, and Introduction to WHMIS (Workplace Hazardous Materials Information System) are also included.

Upon successful completion of the course, participants receive a WorkSafe BC Level 1 Certificate, valid for two years. Students must be 16 years or age or older to take this course and have the physical ability to perform the first aid skills required to complete the learning tasks. Private courses can be arranged for a minimum of six people, either at your location or ours.

Course Length: 1 day from 8:30 to 4:30 with a ½ hour lunch break

Course Location: priMed Emergency Training Centre

3861 15th Avenue

Prince George, BC V2N 1A4

Tel. 250-277-4440 or fax: 250-277-4441

Course Fee: \$70.00

WorkSafe BC Transportation Endorsement

Course Description:

This course is for current Level 1 or Level 2 ticket holders who need to be certified in the correct methods and techniques of moving and injured work. During this one-day course, the student will become proficient in the use of hard collars, patient packaging with correct spinal precautions, care in transportation, and various techniques in loading and moving patients.



	Environmental Ma	anagement Framework	- Section 4
Document Ref.:	EMF- 004	Document Date:	070531
Responsibility:	EMF Manager	Rev. Date:	

A Transportation Endorsement Certificate is valid for two years and must be accompanied by a current WorkSafe BC Level 1 (or equivalent) or a WorkSafe BC Level 2 certificate.

Course Length: 1 day from 8:30 to 4:30 with a ½ hour lunch break

Course Location: priMed Emergency Training Centre

3861 15th Avenue

Prince George, BC V2N 1A4

Tel. 250-277-4440 or fax: 250-277-4441

Course Fee: \$75.00

WHIMIS

Course Description:

The Workplace Hazardous Materials Information System (WHMIS) provides information about many hazardous materials used in the workplace. WHMIS calls these hazardous materials controlled products. Under WHMIS, workers have the right to receive information about each controlled product they use—its identity, hazards and safety precautions.

This 3 to 3.5 hour course is designed to orient the student to the three key elements of WHMIS:

- Controlled Product identification;
- Excluded or exempt products;
- Worker and employer responsibilities and training; and
- Labelling, MSDS and literature

WHMIS is worksite specific in nature, priMed also offers worksite specific instruction if required.



Environmental Management Framework – Section 4			
Document Ref.:	EMF- 004	Document Date:	070531
Responsibility:	EMF Manager	Rev. Date:	

Course Length: 3 to 3.5 hours

Course Location: priMed Emergency Training Centre

61 15th Avenue

Prince George, BC V2N 1A4

Tel. 250-277-4440 or fax: 250-277-4441

Course Fee: \$50

BEAHR Environmental Monitoring Certificate Program

Course Description:

This program is part of the BEAHR project (Building Environmental Aboriginal Human Resources), which is a partnership between ECO (Environmental Careers Organization) Canada and the Aboriginal Human Resource Development Council of Canada (AHRDCC), and is funded by Human Resources and Skills Development Canada (HRSDC).

Successful completion of this 5-week program consists of one 3-week core skills program and one 2-week regulatory or research specialization. The modules may be delivered consecutively over a 5-week period, or spread over a longer period of time to allow for program flexibility and specialization. Upon successful completion, participants are issued a nationally recognized certificate from BEAHR and Malaspina University-College. The program also allows for a unique, specialized 'on-the-job' training component.

Contact Information:

Darren Hebert, Fisheries and Environment Coordinator

Phone: (250) 740-6377

Fax: (250) 740-6480

email: hebertd@mala.bc.ca



Environmental Management Framework – Section 4				
Document Ref.: EMF- 004 Document Date: 070531				
Responsibility: EMF Manager Rev. Date:				

Interactive Spill Response

Course Description:

Ensuring that employees are trained to handle hazardous on-site materials is crucial to your capability and preparedness to execute on-site contingency plans and utilize available equipment to mitigate environmental effects. Employee health and safety issues are emphasized to ensure that each participant is aware of the risks and has the knowledge to assess a situation quickly, correctly and efficiently. In addition the course encompasses corporate policy definition of a spill, legislative requirements, HAZMAT identification, zoning, and decontamination.

Objective:

This 1-day course results in a Canadian Certificate of Training that meets the requirements for first responder.

Contact Information:

To arrange a customized "in-house" session contact

Krista Convey

Phone: (250) 740-6492

Email: conveyk@mala.bc.ca

For more information call 1-866-734-6252.

Spill Response

Course Description:

This course reviews the following: your employer's spill response plan, the material safety data sheets MSDS for WHMIS materials stored at your workplace, and the equipment available to responders should a spill occur.

44



Environmental Management Framework – Section 4			
Document Ref.:	EMF- 004	Document Date:	070531
Responsibility:	EMF Manager	Rev. Date:	

To successfully complete this training, you must demonstrate the correct use of equipment and a spill response plan during the practical session.

Course Length: 4 hours

Course Location: College of New Caledonia

Course Fee: \$72, plus \$5 technology fee

Asbestos Awareness

Course Description:

The course includes background information on asbestos and its use, the potential adverse health effects of exposure to asbestos, specific regulations from the WorkSafe BC's Occupational Health and Safety (WorkSafe BC OH & S) Regulations as they relate to asbestos, and a presentation of the procedures inherent in the management, handling, removal, and disposal of asbestos materials.

Course Length: 4 hours

Course Location: College of New Caledonia

Course Fee: \$72, plus \$5 technology fee

Transportation of Dangerous Goods (TDG)

Course Description:

The Transportation of Dangerous Goods (TDG) course provides the participant with a working knowledge of:

- the regulations surrounding the transport of dangerous goods;
- some of the procedures involved in the transport of dangerous goods;
- · classifications of dangerous goods;



Environmental Management Framework – Section 4			
Document Ref.:	EMF- 004	Document Date:	070531
Responsibility:	EMF Manager	Rev. Date:	

responsibilities of shippers, carriers and receivers; and

bulk transportation and incident reporting.

Course Length: 4 hours

Course Location: priMed Emergency Training Centre

3861 15th Avenue

Prince George, BC V2N 1A4

250-277-4440 or fax: 250-277-4441

Course Fee: \$60

ABC's of Fire Extinguishers On-line Training Program

Organization Name: Danatec Educational Services Ltd.

E-Mail: guin@danatec.com

Phone: 403-232-6950/1-800-465-3366

Web Site: http://www.danatec.com/

Course Description:

In any situation where there is a risk of fire, it is important to understand the use of fire extinguishers. Completion of this program provides you with qualification to participate in the Live Fire portion of the training program. You will be given the opportunity to register for Live Fire training at the end of this course. This training program is designed for anyone who requires awareness and education around the use of fire extinguishers.

Course Length: Half-day (3-5 hours)

Course Type: E-learning

Course Fee: \$24.95



Environmental Management Framework – Section 5					
Document Ref.: EMF- 005 Document Date: 070531					
Responsibility: EMF Manager Rev. Date:					

5. SECTION FIVE – CONCLUSIONS AND RECOMMENDATIONS

The preparation of the EMF document including responses in the questionnaire, discussion topics at the environmental task committee meetings and the drafting of the environmental operating procedures has highlighted a number of requirements to allow LTN to progress in managing environmental issues on reserve. Based on the nine main environmental topics covered in the EMF, study conclusions are provided in Sections 5.1 and 5.2 below. Recommendations, proposed timelines and estimated costs are provided in Section 5.3.

5.1. Environmental Personnel

5.1.1. Environmental Manager

One of the main requirements for LTN is the need for a full time environmental manager to coordinate environmentally related issues on Reserve lands. The environmental manager could combine land management within the role. All aspects of environmental management need to be centralized under one person to determine the needs of the community and to deal with day-to-day issues. The idea of combining the environmental managers duties with those of a land manager were considered; however, based on the current workload requirements of land managers, it was decided by the Band that the role of environmental manager be a stand alone position on reserve.

5.1.2. Trained Environmental Technicians from the Band

Up to four trained individuals will be required to complete waste management, environmental monitoring and baseline assessments on reserve lands. The positions can be phased in over a number of years initially starting with two environmental technicians (one at Shelley North and one at Shelley South). These individuals would report directly to the environmental manager and complete environmental field tasks assigned to them by the environmental manager.



Environmental Management Framework – Section 5				
Document Ref.:	EMF- 005	Document Date:	070531	
Responsibility: EMF Manager Rev. Date:				

5.2. Environmental Management Requirements

Based on the nine main areas of environmental concern outlined in Section 3 of the EMF document, the following resource requirements have been identified:

5.2.1. Waste Management

A number of requirements to improve handling storage, transport and disposal/recycling of waste materials on reserve have been identified and are outlined below:

- community recycling;
- new garbage cans for households on reserve;
- initiation of composting pilot program;
- development and operation of Waste Compound at Shelley North and South; and
- extension of annual clean-up on reserve.

The introduction of a community recycling initiative will allow for improved recycling of waste materials that may historically have been disposed of. Situating recycling receptacles at both residential locations on reserve (Shelley North and South) will provide the community with the opportunity to reduce the volume of waste sent to landfill.

A number of the environmental task committee members indicated that the garbage cans on reserve were difficult to move and the lids were not secure and may attract wildlife. The committee agreed that new garbage cans for all reserve residents should be negotiated with the waste collection contractor.

A pilot composting program to include approximately five households on reserve will be initiated through REAPS. REAPS will train householders on how to compost their organic household waste. It is intended that band members would be trained on how to instruct other band members on household composting.



Environmental Management Framework – Section 5				
Document Ref.:	EMF- 005	Document Date:	070531	
Responsibility: EMF Manager Rev. Date:				

Installation of a waste management/recycling compound at Shelley North and Shelley South to provide a structured location for use by local people, to be controlled and managed by the environmental technicians. The compound will be fenced and contain up to date waste containers (e.g., waste oil container) to allow for proper disposal of Hazardous Waste, large waste items (e.g., couches and mattresses) and recyclable materials. The compound must have environmental controls; including a concrete floor, spill kits and oil water separator to ensure that surface water runoff is treated before leaving reserve land.

The annual clean-up has been successful in removing large waste items that have been disposed of on reserve. Additional clean-up initiatives (three times per year) would allow for ongoing removal of waste items and reduce the build up of waste items on reserve. LTN will have to negotiate a contract with a local waste management contractor to supply containers, and collect waste on a regular basis.

5.2.2. Ground and Surface Water Protection

A baseline assessment of all properties on reserve to identify fuel storage tanks, waste oil containers, old vehicle batteries, oil filters, abandoned vehicles etc. should be completed. All properties with fuel storage tanks should have their tanks and pipe work assessed and tested. If the tanks are not in good condition they should be replaced by systems with in-built environmental protection designs (e.g., double containment system).

An annual assessment of fuel tanks should be completed to determine degradation of the tank structure or pipes. Members will be encouraged to bring their waste oils etc. to a central collection area (waste compound) for proper storage and disposal, or the environmental technicians will collect the waste materials and transport them to a central collection area.

At least one spill kit including absorbent mats and booms will be situated at Shelley North and Shelley South to be used in the event of a spill or leak.



Environmental Management Framework – Section 5					
Document Ref.: EMF- 005 Document Date: 070531					
Responsibility: EMF Manager Rev. Date:					

5.2.3. Wastewater Management

An assessment of all septic systems on reserve should be completed to ensure that all systems are operating effectively. A septic contractor will be employed to assess and service the septic systems and will be accompanied by an environmental technician. All septic systems will be entered into a register held by the housing coordinator and a schedule of on-going checks and maintenance will be created.

An information checklist will be created by the Band to instruct members on the types of household chemicals that can be harmful to septic systems and should not be used.

All surface water culverts and ditches will be assessed to determine their condition and capacity to function (i.e., are the culverts or ditches blocked or silted). The environmental technicians will inspect all culverts/ditches and the condition reported to the land manager who will arrange to have remedial work completed. The condition of the surface water drainage systems will be assessed each spring.

Any new developments on reserve may require an oil/water separator installed, this will be determined through the EIA process (if required) for each new development.

5.2.4. Air Quality Management

A baseline assessment of air quality on reserve should be completed to determine exposure of Band members to airborne pollutants. The initial assessment will concentrate on dusts that were identified by Band members as the main air contaminant on reserve. Following the initial baseline assessment for dusts, additional sampling for other airborne pollutants may be completed (e.g., pollutants from outside industrial sources, vehicle emissions etc.).

To determine the Band's contribution to global greenhouse gases concentrations, a program to estimate the contribution of the Band activities will be calculated on an annual basis using a carbon calculator spreadsheet operated by the Band technician.



Environmental Management Framework – Section 5			
Document Ref.:	EMF- 005	Document Date:	070531
Responsibility:	EMF Manager	Rev. Date:	

Any new developments on reserve may require a stack treatment system installed, this will be determined through the EIA process (if required) for each new development.

5.2.5. Soil Management and Landfills

A process for the relocation of soils has been outlined in Section 3 (EOP05). The land manager will control the requirements for relocating soils on or off reserve. The analysis of soils being moved onto, within or off reserve will be required before any relocation can be completed. Band environmental technicians should be trained to collect soil samples, complete required documentation (e.g., chain-of-custody) and work directly with the analysis laboratory.

From the Environmental Management Agreement process the Band will set guidelines for soil quality, and all soil results from the laboratory will be compared against these guidelines.

Removal of landfilled waste will be required in locations where environmentally sensitive areas may be affected (e.g., lakes, streams, wetlands or drinking water sources). The band environmental technicians will compile a baseline register of all known landfill waste locations, and the land manager will make an assessment on their potential environmental impact.

5.2.6. Habitat and Cultural Heritage Management

One of the outcomes of the EMF is the recognition that a full environmental inventory of natural habitats needs to be completed on reserve lands to determine environmentally sensitive locations and varying habitat types. The inventory will allow for protection of these locations from any future developments or environmental emergencies. The band should complete ongoing monitoring of identified habitats with an annual sampling program completed to assess water, soil and plant quality.

There was also a recognition that mapping and inventory of areas of cultural and spiritual significance must be completed on reserve lands. The mapping and inventory of these locations will allow the band to readily identify if impacts will be expected from future developments or environmental emergencies (e.g., wildfires or floods) and protect these areas if

51



Environmental Management Framework – Section 5				
Document Ref.:	EMF- 005	Document Date:	070531	
Responsibility: EMF Manager Rev. Date:				

possible. Monitoring of identified locations to record their condition should be completed by the band on an annual basis.

5.2.7. Fuel Handling and Storage

Improper storage and handling of fuel was identified as a significant contaminant source on reserve. A baseline assessment on tank and pipe conditions will be completed on all fuel storage areas by the Band environmental technicians. Based on the results of the initial assessments a contractor will be employed to test the integrity of the tank and pipe work. It is anticipated that all residential fuel tanks on reserve will be replaced within 10 years with tanks that have in-built spill control designs (e.g., double walled tanks).

All tidy tanks will be stored on spill mats to contain any minor leaks and spills. Spill should be available to all band members with fuel storage tanks and tidy tanks.

5.2.8. Environmental Emergency Response

In the event of an environmental emergency the Band must have one central environmental emergency coordinator and four emergency personnel to deal with the emergency situation (set up off reserve reception areas, order sand bags etc.) and any evacuations that may be required. The environmental emergency coordinator will liaise with the Regional District and City of Prince George in the event of an environmental emergency. The four emergency personnel will work within the community to inform residents of emergency situations and to coordinate the evacuation of the community if necessary.

5.3. Recommendations

Based on the conclusions of the EMF, a number of recommendations have been put forward by the band to allow them to further manage the environment on reserve. It is intended that recommendations be introduced over a phased basis, short-term (1-3 years), medium-term (3-6 years and long-term (6-10 years). All recommendations, the intended timeline for implementation and the estimated cost range are included in Table A below.



Environmental Management Framework – Section 5			
Document Ref.:	EMF- 005	Document Date:	070531
Responsibility:	EMF Manager	Rev. Date:	

TABLE A: Band Recommendations from EMF

Environmental Management	Environmental Management				
Create Environmental Committee	Short Term	Five members and a manager meet once a month.	\$5,000 - \$6,000 annually		
Employ full-time Band Environmental Manager	Short Term	Manager required to promote environmental awareness and manage day to day environmental issues.	\$50K - \$75K depending on individual's experience.		
Employ Band Environmental Technicians	Short – Medium Term				
Raise Band environmental awareness and set goals.	Short Term	Set up an information centre in the Band office to provide fact sheets, checklists, Standard Operating Procedures (SOPs), and standards.	\$1,000 – 1,500		
Environmental training/education for Band members.	Ongoing	Provide for band members to be trained and educated at College of New Caledonia and the University of Northern British Columbia	To Be Determined		
Band members to become involved in local environmental committees	Medium Term	Band members to become involved with environmentally based committees in the local community that may affect reserve lands.	No Cost - Volunteer		
Database Inventory	Short Term – decide inventory priority, create database template, and compile a preferred contractor list	Professional contractors to perform initial inspections (septic, wood stove, storm water infrastructure, non-point pollution sources, air quality tests, fuel tanks).	To Be Determined		



Environmental Management Framework – Section 5					
Document Ref.:	EMF- 005	Document Date:	070531		
Responsibility:	EMF Manager	Rev. Date:			

Waste Management	Waste Management					
Recommendation	Time Frame	Notes	Estimated Cost Range			
Community Recycling	Short Term – 20% community participation Long Term – 50% community	Possibly working with Regional District and City of Prince George.	\$12,000 - \$15,000 annually.			
	participation					
New Garbage Bins for households on reserve.	Short Term	Negotiate new contract with current waste collection contractor (Redknap) to include wheel bins similar to those used in the City of PG.	To Be Determined			
Initiation of Composting Pilot Program Short Term – 10% community participation Medium Term – Training of two members as compost trainers.		Identify up to five households on reserve to be included in pilot home composting program. REAPS will conduct a workshop to instruct on proper composting techniques.	10 Compost Bins - \$500 REAPS Training Workshop - Free Training - \$500			
Development of a location on Reserve for disposal of hazardous wastes.	Short - Medium Term	Site selection and environmentally sound design. Containment locations at Shelly North and South for disposal of waste oil, oil filters, lead acid batteries etc.				
Annual clean-up on reserve	Short Term	Collect large items three times a year for disposal	\$3,000			
Design, construct and operate a Waste Compound at Shelley North and South.	Medium - Long Term	Determine location and design of compound. Compound to accept all wastes that cannot be disposed of in regular garbage.	To Be Determined			
Curb-side recycling pick up	Long Term	Possible initiation of a curb-side recycling program.	To Be Determined			



Environmental Management Framework – Section 5					
Document Ref.:	EMF- 005	Document Date:	070531		
Responsibility:	EMF Manager	Rev. Date:			

Habitat & Cultural Heritage			
Ecological Assessment of Reserve Lands Short Term – Designate areas and carry out initial assessment Long Term – Yearly monitoring of habitat and species population		Determination and mapping areas of ecological sensitivity on reserve	To Be Determined
Cultural/Spiritual location Inventory on Reserve	Short Term	Determination and mapping areas of cultural and spiritual significance on reserve. Annual assessment of site conditions.	To Be Determined
Annual assessment of identified locations.	Ongoing	Annual assessment of site conditions.	
Groundwater & Surface Water	Protection		
Assessment of existing septic systems on Reserve.	Short Term	Initial inspections on all septic systems to determine if they are operating correctly or if they need maintenance. Information to be included in a Band database.	Septic Checks - \$150 per hour
Septic System Information Sheet Short Term		Development of an information sheet showing band members the household chemicals that can NOT be used in toilets and sinks on reserve.	\$1,500
Assessment of herbicides and pesticides used on reserve.	Short-Term	All land tenants must provide a list of herbicides and pesticides they intend to use on reserve. Band will assess their suitability.	To Be Determined
Implementation of First Nations Water and Wastewater Program Strategy.	Short – Medium Term	Implementation of strategy recommendations to ensure good quality potable water supply.	To Be Determined
Storm Water collection program	Short Term	Initiate a storm water collection program to assess the condition of collection systems in use on reserve.	To Be Determined



Environmental Management Framework – Section 5					
Document Ref.:	EMF- 005	Document Date:	070531		
Responsibility:	EMF Manager	Rev. Date:			

Environmental Emergency			
		Information on putting together a survival pack with various supplies to last 72 hours to be available in Band office.	To Be Determined
Equipment and First Aid Short Term		Compile spill kits, sharps kits, first aid and Personal Protective Equipment (PPE) to be kept in the Band office.	\$3,000 - \$4,000
Environmental Emergency Training Short – Medium Term		Training for Band members as social services representatives at reception locations during emergency situations – aiding Band members to complete necessary paperwork.	To Be Determined
Reports, documents, safety plans, emergency plans, burn plans, etc		Obtain required reports, documents, safety plans, emergency plans, burn plans, etc and post in the band office.	\$500 - \$1,000
Air Quality			
Determine Green House Gas (GG) contributions	Short Term –Carry out initial assessment Ongoing – Yearly calculations by	Initiate a carbon calculator spreadsheet to track green house gasses on Reserve	To Be Determined
	technicians		
Air Quality Monitoring Station	Short Term – monitor dust and particulate matter	Air quality monitoring of dust, particulate matter, vehicle and industrial sources.	To Be Determined
	Long Term – expand to assess vehicle emissions, industrial sources, and non-point sources		
Assessment of existing wood stoves on Reserve.	Short – Medium Term	Initial inspections on all wood stoves to determine their burn efficiency. Information to be included in a Band database.	To Be Determined

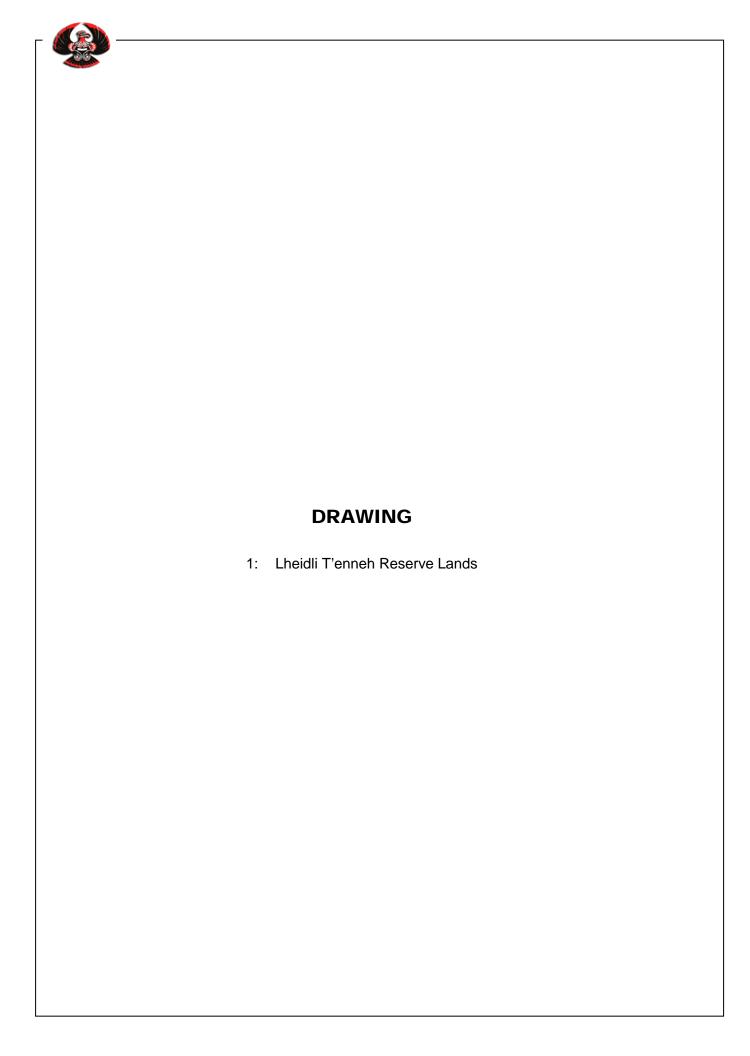


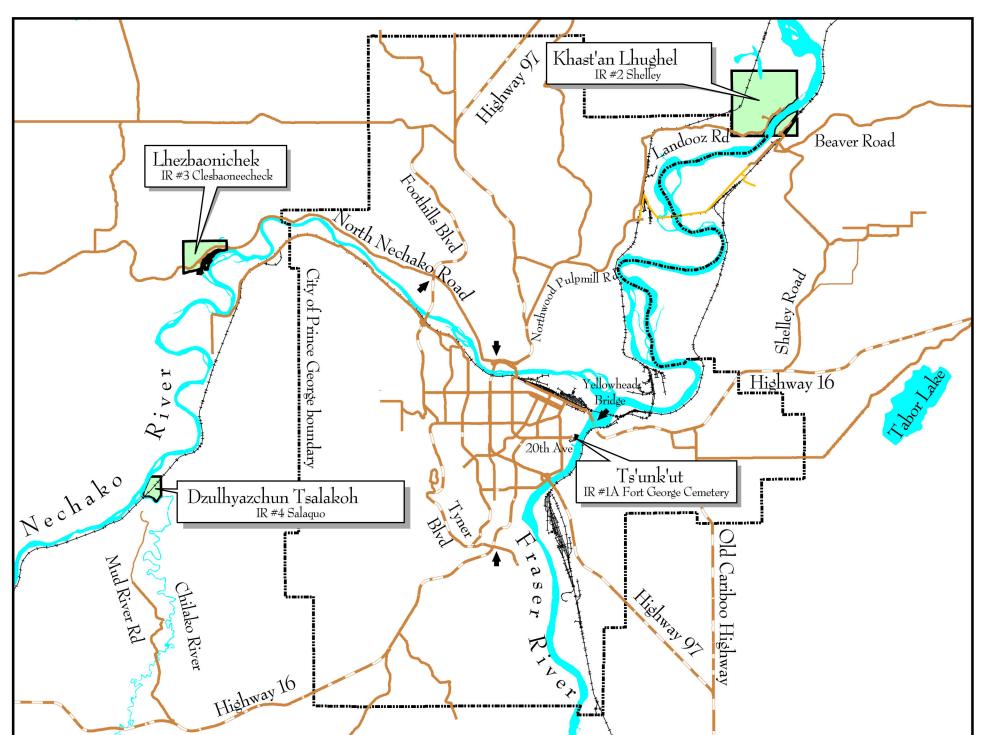
Environmental Management Framework – Section 5					
Document Ref.:	EMF- 005	Document Date:	070531		
Responsibility:	EMF Manager	Rev. Date:			

Fuel Handling and Storage						
Assessment of existing fuel tanks on Reserve.	Short-Term	Initial inspections on all fuel tanks to determine if they are in good condition or if they need maintenance. Information to be included in a Band database.	To Be Determined			
Regular maintenance by contractors and homeowners	Ongoing	Homeowners to dip fuel tanks weekly. Maintenance workers to inspect / clean pipe work, septic systems and fuel tanks every two years.	To Be Determined			

Note: Short Term = 1 - 3 years
Medium Term = 3 - 6 years
Long Term = 6 - 10 years
Ongoing = Continuous requirement







Map #1

Lheidli T'enneh **Reserve Lands Overview**

Ts'unk'ut IR #1A Fort George Cemetery

Location:

Fort George Park, near the end of 20th Avenue (Exploration Place).

Khast'an Lhughel IR #2 Shelley

Location: North Side - Approximately

18 km from the intersection

of Highway 97 and North Nechako Road.

South Side - Approximately 20 km from the Yellowhead

Bridge.

Lhezbaonichek IR #3 Clesbaoneecheck

Location: Approximately 10 km from the intersection of North Nechako Road and Foothills

Boulevard.

Dzulhyazchun Tsalakoh IR #4 Salaguo

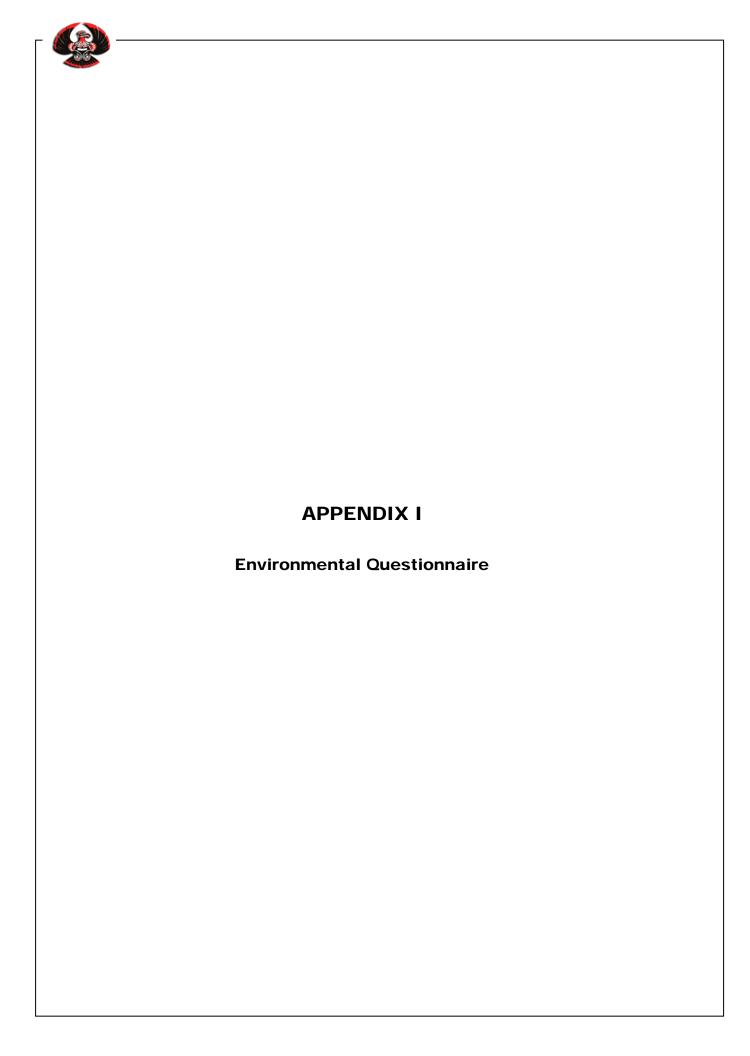
Location: No road access.

Access can be obtained

through private land at the end of Mud River road and a walk across the Chilako River railway bridge. The end of Mud River road is approximately 24 km from the

intersection of Highway 16

and Tyner Boulevard.





Lheidli T'enneh Environmental Management Community Questionnaire

December 2006

The Lheidli T'enneh are designing an environmental management framework whereby the Band will manage environmental issues arising on Reserve Lands. We are asking for members to provide information on the attached questionnaire to target areas where environmental issues exist.

The information provided in the questionnaire is anonymous and members will not have to provide their names.

Instructions: Please read each question and answer accordingly. There are spaces available for comments should you wish to provide additional information. Completed guestionnaires can be returned to: Band Administration Office, 1041 Whenun Road, Prince George, B.C., V2K 5X8 or the Natural Resources Office, #102-2288 Old Cariboo Highway, Prince George, B.C., V2N 6G3 no later than January 10, 2007.

If you have questions or would like further information regarding this questionnaire, please contact: Patricia @ 963-5632 or via e-mail pwight@lheidli.ca

Que	Questions: PLEASE CIRCLE THE APPROP	RIATE ANSWERS						
1.	Do you think that the environmental quality or resource to protect?	Do you think that the environmental quality on Reserve is an important resource to protect?						
	YES NO							
2.	2. What do you see as the biggest threat to the	environment on Reserve?						
3.	3. Could the Band do more to protect the enviro	Could the Band do more to protect the environment on Reserve land?						
	YES NO							
	If 'YES', what could they do:							
4.	I. Would developing the environmental capacity Office (training community members to deal a benefit for the Band?	_						

NO

YES



Lheidli T'enneh Environmental Management Community Questionnaire December 2006

5.	In the event of an emergency (Flood or Forest Fire) do you know who to call?							
	YES	NO						
	If 'YES', who would you	call:						
6.	Do you know if there is event of an emergency	an evacuation plan in place at the Reserve in the ?						
	YES	NO						
7.	In the event of an envir to call?	onmental emergency (Fuel Spill) do you know who						
	YES	NO						
If 'YE	S', who would you call:							
8.	Do you view solid wast	e management to be an important issue on reserve						
	YES	NO						
9.	How do you currently o	lispose of your household garbage?						
10.	Is your household garb	age disposed of On Reserve or Off Reserve?						
	ON RESERVE	OFF RESERVE						
11.	Have you in the past or	do you currently recycle?						
	YES	NO						
If	'YES', which of the following	ng items do you recycle? Please check						
	Cardboard Newspaper Plastic Metals (aluminium & stee Drink containers Waste oil	el)						
12.	Do you know what com	posting is?						
	YES	NO						
	If 'YES', please explain v	vhat it is:						

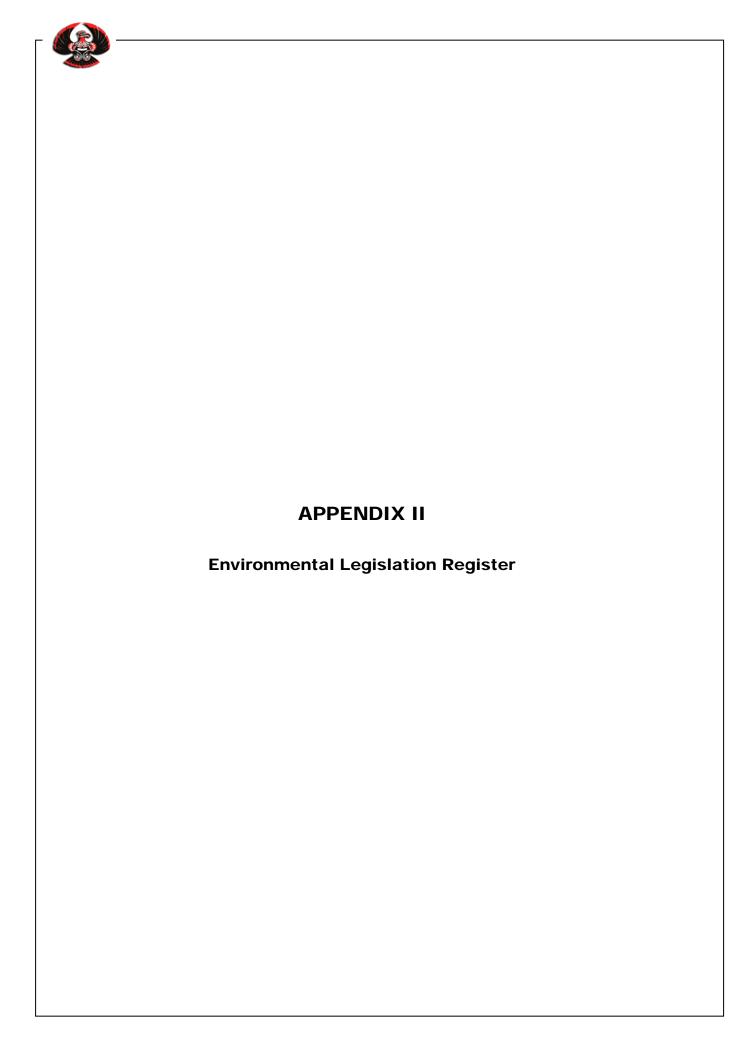
Lheidli T'enneh Environmental Management Community Questionnaire December 2006

13.	Do you, or have you ever composted organic materials?							
		YES	NO					
	If Yes, what	materials ha	ve you compost	ted:				
14.	In your view	v, is water q	uality an issue	ssue on reserve?				
		YES	NO					
15.	What do y Reserve:	ou think is	the biggest	threat to drinkin	g water (wells) or			
16.		ou think is t n Reserve:	he biggest thr	eat to surface wat	er (Creeks and			
17.	How often do you empty the Septic Field Tank on your property?							
	Every Year	1-5	Years	5-10 Years	Never			
18.	Is air quality an issue on reserve?							
		YES	NO					
	If Yes, pleas	e circle the n	nain problems:					
	Dust	Smells	Wood Smo	oke Vehicle	Fumes Other			
If oth	er, please expl	lain:						
19.	•	•	embers in you ectly related to		medical conditions			
		YES	NO					
	If yes, pleas	e indicate the	problem:					
	Asthma	Bre	eathlessness	Other ill	ness			
If oth	er, please expl	lain:						
20.	Is road dus	t a major co	ncern on reser	ve?				
		YES	NO					



Lheidli T'enneh Environmental Management Community Questionnaire December 2006

21. Do you or any of the members in your household hunt, trap, and/or reserve?						fish on	
	reserve:	YES	NC)			
22.	Have you n	oticed any inc	rease or dec	crease in wild	life or fish p	opulati	ons?
		Increase		Decrease			
	What chang	ges have you se	een?			-	
23.		noticed any xpansion of la		decrease in	wildlife o	r fish	habitat
		Increase		Decrease			
	What chang	ges have you se	een?			-	
24.	What is the	main energy	source used	to heat your	home?		
	Propane	Wood	Gas	Oil	Electric	ity	
25.	Do you hav	e fuel (kerose	ne, diesel, o	il) storage tan	ıks at your h	nome?	
		YES	NC)			
26.	Do you ser	vice your vehi	cles at home	?			
		YES	NC)			
27.	Do you dis Off Reserve	spose of wast e?	e material fr	om servicing	vehicles C	n Rese	erve or
	ON I	RESERVE	OF	F RESERVE			
If you	have any ad	lditional comn	nents then p	ease add the	m in the sec	tion be	low:



	1556							-																						1																					
	PRO	VINCE	: OF	BRIT	ISH (COLU	MBI/	1	1	, ,	ı	, ,	, ,	ı	1	, ,	ı		ı	, ,	ı	, ,	7 =		ı	, ,	1 9	1 1	1	CAN	IADIA	4N C	JUNC	JIL O	r MI	NISTE	:KS C)F Th	IL EN	VIRC	NME	NT (C	CME)		ı	, ,	5° I			_
Activity Areas for Consideration in Developing Environmental Standards	Site-Specific Numerical Soil Standards Blending. Mixing or Dilution as a Remediation Approach	Determining Background Soil Quality	Determining Background Groundwater Qualify Waste Reduction Plan for On Site Mgmt of Wastes and Haz. Waste at Contaminat	Site Characterization and Confirmation Testing Investination and Remarkation Processes and Local Covernment Permit Processes	Investigation and Netherland of Traces and Local Covernment Formers Applying Water Quality Standards to Goundwater and Surface Water	Soil Sampling Guide for Local Background Reference Sites Rackground Soil Quality Database	Technical Guidance on Contaminated Sediments	General Factors for Determining the Presence of Preferential Pathways for Contam Completing and Submitting Site Profiles	BC Water Quality Guidelines A Compendium of Working Water Quality Guidelines for BC	Criteria for Managing Contaminated Sediment in BC	Soil Quality Numerical Standards for Salt Standard Operating Procedures for Hydrometric Surveys	Ambient Freshwater and Effluent Sampling Manual	Couloelines for Interpreting water Quality Data Lake and Stream Bottom Sediment Sampling Manual	Glines for Designing and Implementing a Water Quality Monitoring Program in BC Guidelines for Monitoring Fine Sediment Deposition in Streams	Freshwater Biological Sampling Manual Fish Collection Methods and Standards	A Guide to Photodocumentation for Aquatic Inventory	BC Archaeological Impact Assessment Guidelines BC Archaeological Site Inventory Form Guide		Digital Data Standards for a Community-Scale Tourism Opportunity Strategy Tourism Becourse Inventory Standards	Recreation Resource Inventory Standards and Procedures	Traditional Use Studies Data Capture Specifications Visual Landscape Inventory Manual Procedures and Standards	Guidelines and Standards to Terrain Mapping in BC	Terrain Stability Mapping in BC (Methods for Landslide Hazard and Risk Mapping) Procedures for Environmental Monitoring in Range and Wildlife Habitat Manageme	Soil Inventory Methods for BC	Standard for Terrestrial Ecosystem Mapping in BC Field Manual for Describing Terrestrial Ecosystems	BC Wildlife Habitat Rating Standards	Standards for Predictive Ecosystem Mapping Live Animal Capture and Handling G'lines for Wild Mammals, Birds, Amphibians an	Vegetation Resources Inventory Ground Sampling Procedures	Stds, Specifications and G'lines for Resource Surveys Using GPS Technology Std for the Use of Map Projections for Resource, Cultural and Heritage Inventories	Canadian Code of Preferred Packaging Practices 91	Recommended Principles on Contaminated Sites Liability '06 Emission Trading Program for SO2 Sources, Canada 93	Env. C. of P. for AG and UG Storage Tank Sys. with Petro. and Allied Petro. Prods Frv. C. of P. for Red'n of Solvent Em from Comm. Ind. Decreasing Eacilities 93	Env. C. of P. for the Meas. & Containment of VOC Em.	Env. C. of P. for Vapour Recovery in Gas. Distribution Networks Frv. C. of P. for Vapour Recovery - Service Strs & Gas. Facilities	Env. Guide for Control of Em. of VOC from AG Storage Tanks 95	Env. G'line for Control of VOC Em. from NOCO Env. Profiles - G'lines to Help Ind. Meet Goals of Pkg. Protocol 94	ce Man. for	Guidance Man. on Sampling, Analysis, and Data Mgmt for Cont. Sites 93, Vol. I Guidance Man. on Sampling, Analysis, and Data Mgmt for Cont. Sites 93, Vol. II	Guidelines for Compost Quality 96		Development of Ecoregion Based Phosphorus Guidelines for Canada A Canada Wide Framework for Water Quality Monitoring	Dioxins and Furans Canada Wide Standards	An Analysis of Canadian and Other Water Conservation Practices and Initiatives Canada-Wide Strategy for Managing Municipal Wastewater Effluent	Canada-Wide Standards for Particulate Matter and Ozone Canada's Strateov to Accelerate the Phase-out of CFC and Halon Uses	Nat. Action Plan for the Environmental Control of ODS and Halocarbon Alternatives	Policy Statement for the Management of Toxic Substances CCME Water Quality Index	National Packaging Protocol	Fwork for Dev. Ecosystem Health Goals, Objectives and Indicators. Tools for Ecos From Source to Tan: Guidence on Multi-barrier Annoach to Safe Drinkino Water	Analysis of Economic Instruments for Water Conservation	Framework for Ecological Risk Assessment: General Guidance	Internal Trade Barriers in Environmental Protection Sector 94
INDUSTRIAL & RESOURCE MANAGE	IENT					<u> </u>		O			<u> </u>	<u> </u>			<u> </u>								.	.								ш				<u> </u>	<u> </u>					<u> </u>	<u> </u>					ш.			_
Oil & Gas	+ +	• •	* *	• •	•	+ 4	•	* *	*	• •	•	•	• •	* *			*													•	♦ □	•	•	+ +	•	•	•	* *		•	•		•	*	•	* *	•	4	, 🚺	\Box	\neg
- seismic	•	•	•	•	•	•	•	*	• •	•		•	• •	*																	•				•		•	*													
- drilling	•	•			•	• •	•	*	*	•		•		*																•	•			•	•		•	* *											\perp		
- pipelines	•	•	* *	•	•	* •)	* *	* *	•		•		* *			•													1_	•	•			•		•	* *									1_1		_	_	_
- processing	* *	•	* *	 • 	•	• •	•	* *	* *	•		•		* *			•														•	•	•	• •	*	• •		* *											-	+	_
- oil sands	* *		* *	 	*	* *	*	* *	* *	*		* ·		* *			•					+									▼		•		•	• •	-	*		_	•		_		+	* *			• •	+	\dashv
Mining	* *		* * • •	• •	* *			* *	• •	-	•	• .		* *			* •	+				++		+		+				•	• •		•				-	*		-			-	* *		* *	•		+	+	_
- processing			*		•		.	• •	•			•		• •			+					1	•	.		•		•		 	_		_		_	•				•	•	•	•	• •	. •	* *		• •	• •	•	_
Forestry - pulp and paper mill			•		•		•	• •	•	.		•	• •	* *			•						•					+			•					Ť				+		•	-			- •		-	+		_
- puip and paper mili Agriculture	* •		*	• •	• •	• •	•	♦ ♦	* *	•		• .		* *								1	•					•		• .	•		•		•	* *	•	* *		•	•		•	• •		* *	-	-	• •	+	-
- pesticides	* •	• • •			•	•	• •	•	* *	•		• .		* *								+	•										•			•		* *		_	•					* *		4		\top	\neg
- irrigation		1 0 0			•		1		• •	•		•	• •	* *									•	.														<u> </u>												\top	
- aquaculture			_		•		•		* *	• •		•	• •	*	* *	•																																			
Peat Operation																																																			
Manufacturing and Processing	*	• •	*	• •	•	• •	•	*	* *	•		•	• •	*			•													<u> </u>	• •				•	* *	•	* *		•	•	•	•	• •	•	• •		•	•	\prod	
- food processing																																																			
Economic Development										$\perp \perp$									• •		•																												$\perp \perp \downarrow$		•
- tourism																			• •	• •	•																												_		
- service industry																				•	•												וו		0	0													_		
- research and development				$\perp \perp$						+							-		• •		•			\perp																						-			$\perp \perp \downarrow$	\downarrow	_
Wildlife and Vegetation Management															* *				_	1 +			•		* *	•	*	•														+	_					•		•	_
Water Management			•				*	*	* * * *		-		• • • • • • • • • • • • • • • • • • •				*	+	<u> </u>	1 ♦		1	•			1																•	•		+	•		•		+	4
- water supply		1 0 0	•		_			•	* * * *				• •				-						•							11.	•												*			•			•	+	-
- waste water	* •	. _ '	_	+ [- -	+ 4		•	• •	* *		• •		* *			-	++				++		. •	• •	+					•						•				•	•	+					- -	+	+	_
Soil	• •	++	-							++			-				-					++	-		-	+				++	•			• •						-		•		• •		•			+	+	
Air INFRASTRUCTURE & PUBLIC WORKS				1 -	-			J	<u> </u>																					+		<u> </u>	▼	V	V	V	1					*		V	▼	V		_			_
Land Use											D			-															<u> </u>														•			1			• •		_
- planning			_					_		+-+		<u>- </u>	- -				_												0 0		_						1-1	- -					•					- '	• •	_	-
- decommissioning																	_		+			+				+																							+	+	
accommissioning							-	- 1	1	1	1	1 1		1	i I	1 1	- 1	1 1				1 1	1	1		1 1	1	1	1	1 1 '	- ı	1 1		1	1	1 1	1 - 1	_ _	1 1	1		1 1	1	1 1		1	1 1	1	1 1		

PROVINCE OF BRITISH COLUM cal Soil Standards tround Soil Guality Groundwater Quality d Groundwater Quality d Goundwater and Haz. Waste at Contaminated Sites d Confirmation Testing and Local Government Permit Process o Goundwater and Surface Water Background Reference Sites builty Database	Strategy sk Mapping) Management	Petro. Prods aculities 93 Backs Initiatives Alternatives king Water king Water 4 4 4 4 4 6 6 6 6 6 6 7 6 7 7 7 7 8 8 8 8 8 8 8 8
Consideration in Solution Solu		
Site-Specific Numeric Blending, Mixing or Dilution as Determining Background Determining Background Waste Reduction Plan for On Site Mgmt of Was Site Characterization and Investigation and Remediation Processes & Applying Water Quality Standards to Soil Sampling Guide for Local B Background Soil Qu	Technical Guidence on Contaminated Sediments Technical Guidence on Contaminated Sediments BC Water Quality Guidelines BC Water Quality Guidelines A Compendium of Working Water Quality Guidelines for BC Criteria tor Managing Contaminated Sediment in BC Soil Quality Numerical Standards for Salt Soil Quality Numerical Standards for Salt Standard Operating Procedures for Hydrometric Surveys Ambient Freshwater and Effluent Sampling Manual Guidelines for Interpreting Water Quality Data Lake and Stream Bottom Sediment Sampling Manual Guidelines for Monitoring Fine Sediment Deposition in Stream Freshwater Biological Sampling Manual Fish Collection Methods and Standards A Guide to Photodocumentation for Aquatic Inventory BC Archaeological Inventory Guidelines BC Archaeological Inventory Standards A Guide to Photodocumentation for Aquatic Inventory BC Archaeological Inventory Standards and Procedures Frestration Resource Inventory Standards and Standard Cuidelines and Standards for a Community-Scale Tourism Opportunity Tourism Resource Inventory Standards and Standard A Guidelines and Standards for Landside Hazard and Ris Procedures for Environmental Monitoring in Range and Wildlife Habitat A Soil Inventory Manual Foresystem Mapping in BC Field Manual for Describing Terrestrial Ecosystem Mapping in BC Field Manual for Describing Terrestrial Ecosystem Mapping Standards Standards for Predictive Ecosystem Mapping Procedures Standards for Predictive Ecosystem Mapping Procedures Standards for Predictive Resource Surveys Using GPS Ta Standards for the Use of Map Projections for Resource Cultural and Heritages Standards for Resources Cultural and Heritages Contaminal Code of Profesciones or Resource Cultural and Heritages Contaminal Code of Parking Code or Parking Described Desc	Env. C. of P. for AG and UG Storage Tank Sys. with Petro. and Allied P Env. C. of P. for AG and UG Storage Tank Sys. with Petro. and Allied P Env. C. of P. for AG and UG Storage Tank Sys. with Petro. and Allied P Env. C. of P. for Neadri of Solvent Em. from Comm./Ind. Degreasing F Env. C. of P. for Vapour Recovery in Gas. Distribution Network Env. C. of P. for Vapour Recovery in Gas. Distribution Network Env. C. of P. for Vapour Recovery in Gas. Distribution Network Env. C. of P. for Vapour Recovery in Gas. Distribution Network Env. C. of P. for Vapour Recovery in Gas. Distribution Network Env. C. of P. for Vapour Recovery in Gas. Distribution Network Env. C. of P. for Vapour Recovery in Gas. Distribution Network Env. C. of P. for Vapour Recovery in Gas. Distribution Network Env. C. of P. for Vapour Recovery in Gas. Distribution Network Env. C. of P. for Vapour Recovery in Gas. Distribution Network Env. C. of P. for Vapour Recovery in Gas. Distribution Network Env. G. of P. for Vapour Recovery in Gas. Distribution Network Env. G. of P. for Vapour Recovery in Gas. Distribution Network Guidance Man. on Sampling, Analysis, and Data Mgmt for Cont. Sites Guidance Man. on Sampling, Analysis, and Data Mgmt for Cont. Sites Guidance Man. on Sampling, Analysis, and Data Mgmt for Cont. Sites Guidance Man. on Sampling, Analysis, and Data Mgmt for Cont. Sites Guidance Man. on Sampling, Analysis, and Data Mgmt for Cont. Sites Guidance Man. on Sampling, Analysis, and Data Mgmt for Cont. Sites Guidance Man. on Sampling, Analysis, and Data Mgmt for Cont. Sites Guidance Man. on Sampling, Analysis, and Data Mgmt for Cont. Sites Guidance Man. on Sampling, Analysis, of Canada Wide Framework for Water Conservation of CCOME Water Conservation of CCOME Water Conservation From Source to Tap: Guidance on Multi-barrier Approach to Sale Drink Analysis of Economic Instruments for Water Conservation Framework for Ecological Risk Assessment: General Guidance Internal Trade Barriers in Environmental Proception Sector 94
INFRASTRUCTURE & PUBLIC WORKS		
Public Works •		
- public areas maintenance		
- housing & public buildings		
- utilities		
- water supply		
Public Health		
- purchasing guidelines - solid waste landfill		
- solid waste incineration		
Transportation •		
- roads and highways		
- railways	 	
- airports		
water transport		
TRADITIONAL LIFESTYLE	<u></u>	
Hunting		
Fishing		
Trapping		
Gathering		
Ceremonial/Spiritual Sites		

LEGEND ◆ = applies

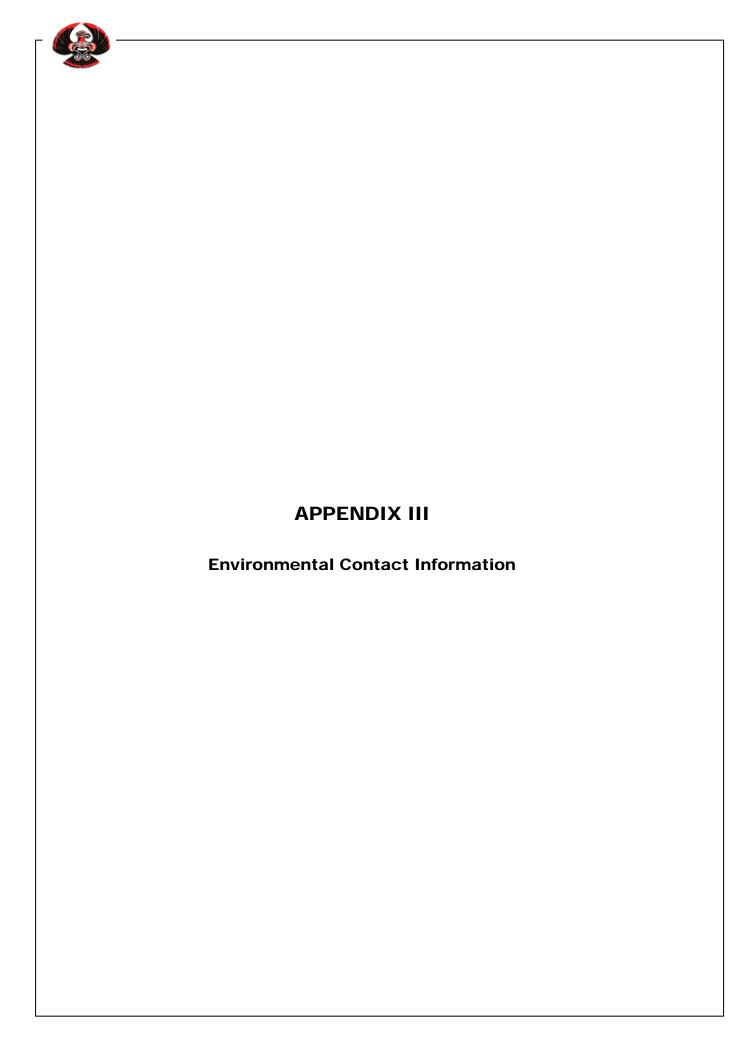
■ may apply

		С	СМ	ΙE													
Activity Areas for Consideration in Developing Environmental Standards	National Action Plan for Recovery, Recycling, and Reclamation of CFCs	National Classification System for Contaminated Sites 92	National Commitment to Pollution Prevention 93	Nat. Guide for Haz. Waste Incineration Facilities: D&O Crit. 92 - Vol. I	Nat. Guide for Haz. Waste Incineration Facilities: D&O Crit. 92 - Vol. II	National Guidelines for Hazardous Waste Landfills '06	O & E G'lines for Municipal Solid Waste Incineration 89	PCB Transformer Decontamination: Standards & Protocols 95	Performance Stds and Glines for Reduction of VOC Emissions 95	Plan to Reduce VOC Em. by 20% from Consumer Surface Coatings 94	Program to Reduce VOC Em. by 40% from Adhesives & Sealants 94	Protocol on Cdn Sediment Quality Glines for Protection of Aquatic Life 95	Provisional C. of P. for Mgmt of Post-Used Treated Wood 96	Recycling Lubricated Oils 93	Subsurface Assessment Handbook for Contaminated Sites 94	Waste Audit Users Manual 96	Wrkg Paper for Proposed SO2 Emission Trading Zones in Canada
INDUSTRIAL & RESOURCE MANAGEMI	L	<u> </u>					<u> </u>	<u> </u>	<u> </u>		<u> </u>	<u> </u>		<u> </u>	<u> </u>	<u> </u>	
Oil & Gas		•	•						•			•		•	•		
- seismic															•		
- drilling									•						•		
- pipelines															•		
- processing			•						•	•	•				•		
- oil sands															•		
Mining		•	•						•	•	•	•		•	•		•
- processing			•						•	•	•				•		•
Forestry			•										•	•	•		
- pulp and paper mill			•										•				•
Agriculture		•	•						•	•	•	•		•	•		
- pesticides									•	•	•				•		
- irrigation												•					
- aquaculture												•					
Peat Operation																	
Manufacturing and Processing		•	•						•	•	•			•	•		•
- food processing																	
Economic Development																	
- tourism	ļ																
- service industry	ļ																
- research and development																	
Wildlife and Vegetation Management																	
Water Management	<u> </u>						_	_	_		_	•		_	<u> </u>	_	
- water supply				_	_	_										_	
- waste water	•	L				0 0	-	-	-		-	L.		-	L	•	
Soil	<u> </u>	•	_	L.	L_			_	<u> </u>		L.	•		_	•	_	
Air				•	•		*		•	•	•						•
INFRASTRUCTURE & PUBLIC WORKS		I =					1		1		1		1	1		1	
Land Use																	
- planning		_													0		
- decommissioning																	

		С	CM	E		ı	ı										
Activity Areas for Consideration in Developing Environmental Standards	National Action Plan for Recovery, Recycling, and Reclamation of CFCs	National Classification System for Contaminated Sites 92	National Commitment to Pollution Prevention 93	Nat. Guide for Haz. Waste Incineration Facilities: D&O Crit. 92 - Vol. I	Nat. Guide for Haz. Waste Incineration Facilities: D&O Crit. 92 - Vol. II	National Guidelines for Hazardous Waste Landfills '06	O & E Glines for Municipal Solid Waste Incineration 89	PCB Transformer Decontamination: Standards & Protocols 95	Performance Stds and Gilines for Reduction of VOC Emissions 95	Plan to Reduce VOC Em. by 20% from Consumer Surface Coatings 94	Program to Reduce VOC Em. by 40% from Adhesives & Sealants 94	Protocol on Cdn Sediment Quality G'lines for Protection of Aquatic Life 95	Provisional C. of P. for Mgmt of Post-Used Treated Wood 96	Recycling Lubricated Oils 93	Subsurface Assessment Handbook for Contaminated Sites 94	Waste Audit Users Manual 96	Wrkg Paper for Proposed SO2 Emission Trading Zones in Canada
INFRASTRUCTURE & PUBLIC WORKS		!				!	!										
Public Works		1															
- public areas maintenance																	
- housing & public buildings																	
- utilities			•					•				•		•			
- water supply																	
Public Health																	
Waste Management	*	•	•	•	•	•	•								•	•	
- waste minimization/3Rs	•			•	•									•		•	
- purchasing guidelines																•	
- solid waste landfill	٠	•	•	•	•	•									•	•	
- solid waste incineration	٠			•	•		•									•	
															•	•	
- hazardous waste	•	٠	•	•	•	٠									_		
- hazardous waste - biological waste	•	•	•	•	•	•											
		•													-		
- biological waste	•	•	•													•	
- biological waste - sanitary sewage		•														• •	
- biological waste - sanitary sewage - sludge - composting Transportation		•														* *	
- biological waste - sanitary sewage - sludge - composting Transportation - roads and highways		•														* *	
- biological waste - sanitary sewage - sludge - composting Transportation - roads and highways - railways		•														* *	
- biological waste - sanitary sewage - sludge - composting Transportation - roads and highways - railways - airports		•														* * *	
- biological waste - sanitary sewage - sludge - composting Transportation - roads and highways - railways - airports - water transport	•			•	•											* * * * * * * * * * * * * * * * * * *	
- biological waste - sanitary sewage - sludge - composting Transportation - roads and highways - railways - airports - water transport Chemical Management		•						•								* *	
- biological waste - sanitary sewage - sludge - composting Transportation - roads and highways - railways - airports - water transport Chemical Management TRADITIONAL LIFESTYLE	•			•	•			•								* * * * * * * * * * * * * * * * * * *	
- biological waste - sanitary sewage - sludge - composting Transportation - roads and highways - railways - airports - water transport Chemical Management TRADITIONAL LIFESTYLE Hunting	•			•	•			•								•	
- biological waste - sanitary sewage - sludge - composting Transportation - roads and highways - railways - airports - water transport Chemical Management TRADITIONAL LIFESTYLE Hunting Fishing	•			•	•			•								•	
- biological waste - sanitary sewage - sludge - composting Transportation - roads and highways - railways - airports - water transport Chemical Management TRADITIONAL LIFESTYLE Hunting Fishing Trapping	•			•	•			•								* * *	
- biological waste - sanitary sewage - sludge - composting Transportation - roads and highways - railways - airports - water transport Chemical Management TRADITIONAL LIFESTYLE Hunting Fishing	•			•	•			•								•	

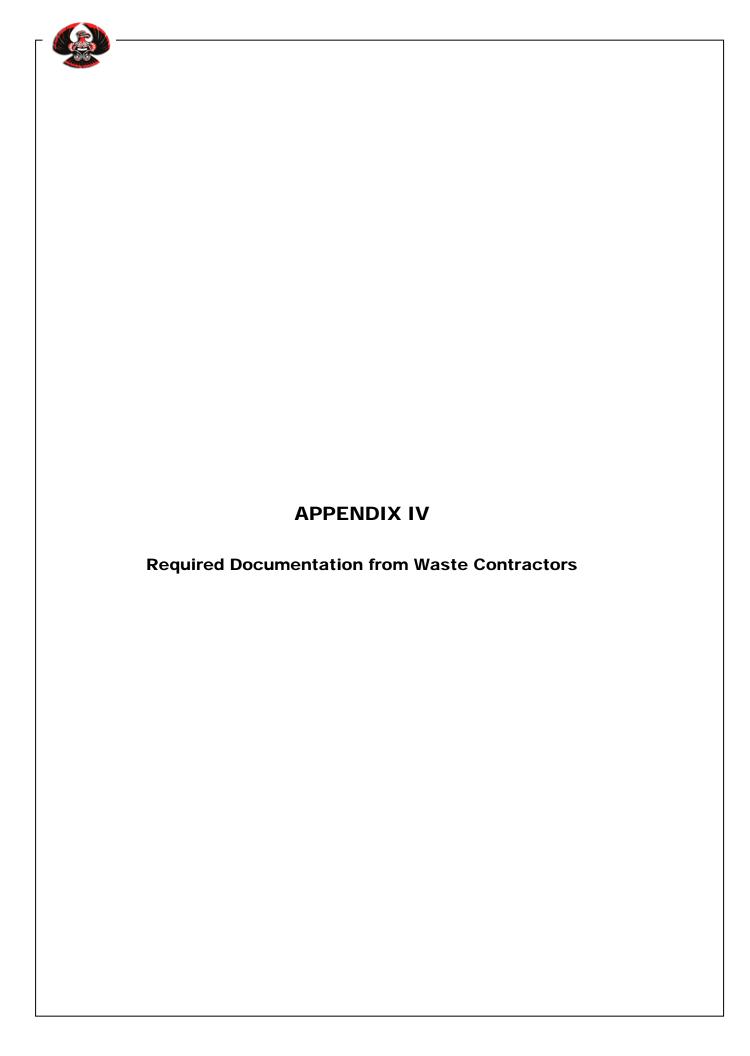
LEGEND

LEGEND♦ = applies □ = may apply



ENVIRONMENTAL AND HEALTH SERVICES - Prince George Region

GOVERNMENT AGENCIES					
A manage Name	Haure of Condes	Address	Dhana Nimban	Fax	Comments
Agency Name	Hours of Service	Address	Phone Number	гах	Comments
Ministry of Health	8:30am to 4:30 pm Mon-Fri	2400 Ospika Blvd, PG	250 561-6902		Call no charge - 1 800-661-4337
Health Canada - Northern District - First Nations and Inuit Health	8:30am to 4:30 pm Mon-Fri	#220-177 Victoria St, PG, V2L 5R8	main switchboard:250 561-5384 other lines: 250 561-7995, 250 561-5370	250 564-3272	Birgit Luesgen-Environmental Health Officer E-mail: Birgit_Luesgen@hc-sc.gc.ca
51500 5 41 5 5 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7		0 i: 1055 100 0 III 0: 1/1			
FNESS - First Nations Emergency Services (no PG location)	8:30am to 4:30 pm Mon-Fri	Suite 1257-409 Granville St, Vancouver, BC, V6C 1T2		604 669-9832	Emergency Only Toll Free 1 888-822-3388
INAC Indian and Northern Affairs Canada BC Regional Office (no PG location)	8:30am to 4:30 pm Mon-Fri	1138 Melville St, Suite 600, Vancouver BC, V6E 4S3	604 775-5100-local, Toll Free (Ottawa) 1 800-567-9604	604 7745-7149	
Ministry of Environment	8:30am to 4:30 pm Mon-Fri	#325-1011 4th Ave., PG, V2L 3H9	250 565-6135 - general inquiries	250 565-6629	Environmental Emergencies - 1 800-663-3456
Fisheries and Oceans Canada	8:30am to 4:30 pm Mon-Fri	3690 Massey Dr, PG	250 561-5366	250 561-5534	
Workers Compensation Board (WCB)	Mon-Fri 8:30am-4:30pm 1 888-621-SAFE	1066 Vancouver St, PG	250 563-9264		
	After Hours (Richmond) Toll free 1 866-922-4357				
	Claims Tel: 250 561-3715 Mon-Fri 8:30am-4:30pm				
Ministry of Agriculture and Lands	8:30am to 4:30 pm Mon-Fri	#707-299 Victoria St., PG	250 565-7200 (no charge-1 800-334-3011)		
Ministry of Forests and Range	8:30am to 4:30 pm Mon-Fri	2000 S Ospika Blvd., PG	250 614-7400		
City of Prince George Environment	8:30am to 4:30 pm Mon-Fri	1100 Patricia Blvd, PG, V2L 3V9	250 561-7698	250 561-7721	Manager - Mark Fercho
ony of Finice deolge Environment	0.30am to 4.30 pm Mon-i ii	1100 Taurcia Bivd, 1 G, VZE 3V3	250 301-7030	230 301-7721	Manager - Mark referio
CONTRACTORS AND CONSULTANTS					
Harris West (was a few life Francis Co.)	Hours of Service	Address	Phone Number	Fax	Comments
Hazardous Waste transport and/or Excavation Services Spruce City Sanitary Service Ltd HW handling and hauling	24 hours	6295 Simon Fraser, PG	250 964-7485, Martin's cell: 640-0472, Macel's cell: 565-7732	250 964-8534	Owner Paul Bazinet, 24 hour emergency service
White Spruce Enterprises - HW transport, Excavation	24 hours		250 962-7223	250 962-6723	24 hour Emergency Response-250 962-7223
Twin Rivers Development Ltd - HW transport	7:30-4:00pm Mon to Fri	5048 Banzer Dr., PG, V2K 4H2	250 962-6657, shop 962-8133	250 962-9600	
Giscome Contracting - Excavation Hydrovac Daylighting - Special Waste transport	24 hours	453 1st Ave, PG 2185 Ridge Cove Pt, PG	250 562-2498 250 962-7223	250 962-6723	Wally or Kevin McCray
Hazco Environmental Services	24 hours	#201-2307 Enterprise Way, Kelowna, V1X 7E1	250 762-5380, cell: 250 878-4995 (Gord Allan)	250 762-5384	Manager-Gord Allan, email: gallan@hazco.com
					· ·
Utility Locators		2007 Haldi Dil DO MONOKA	050 004 0444 Pak Halikarda all 044 0000 Pak Halikarda all 044 0007		Over an Dark and Dark Hadda and
CMH Underground Utilities Ltd Utility Locate, Excavation Subterra Utilities Inc Utility Locate, Excavation		8627 Haldi Rd, PG, V2N 6K1 9092 Hilltop, PG	250 964-6144 Bob Hubbard cell:614-3666, Pat Hubbard cell:614-3667 250 565-4624		Owner Bob and Pat Hubbard
Cubicità Cuinto Inc. Cuinty Locato, Excavation		0002 Timop, T 0	200 000 4024		
Asbestos Surveying/Environmental Consultants					
Morrow Environmental, member of SNC Lavalin Environment Golder Associates Ltd - Asbestos Abatement and Removal	8:00am-4:30pm 8:00am-4:30pm	1546 6th Ave., PG, V2L 2K5 2272 S Nicholson St, PG	250 562-5172 250 563-5866	250 562-5128	
Back to Earth Soil Remediation	all hours, call first	2580 2nd Ave., PG, V2M 1E4	250 564-7184, cell:250 617-3478, Lake #: 250 965-0002	250 564-7184	Manager-Roger Levasseur, email: rlevesseur@shaw.ca
Asbestos Abatement and Removal	24 hours	2624 Dever, PG	050 502 0024 Tall 5-2- 4 000 054 4400 Autotal 050 505 5042	050 500 0004	Deven Hanne and C42 4020 name (42 0444
Crest Insulation Ltd - Asbestos Removal, hauling and disposal Western Thermal - Asbestos Abatement and Removal	24 hours	8431 Summer Place, PG	250 563-6834, Toll Free 1 888-254-1400, Autotel 250 565-5043 250 562-7660, Toll Free 1 888-740-8333	250 563-6834	Darren Hansen - cell: 612-1639, pager:612-6414
NAPP Enterprises Ltd - Asbestos Abatement and Removal	24 hours	8990 Samson, PG, V2N 5B1	250 964-0007	250 964-0009	
Remco Insulation Ltd., Asbestos Abatement and Removal	24 hours	PO Box 397, PG, V2L 4S2	250 562-5455	250 562-5464	Randy ReimneitzS
Environmental/Civil Engineering					
Scouten and Associates Engineering Ltd structural and civil	8:30am-4:30pm	#201-1968 Queensway, PG, V2L 1M2	250 562-7050	250 562-7052	email: info@scouten.bc.ca
International Quest Engineering Ltd - mining and forestry	8:30am-4:30pm	#1088-4th Ave, PG, V2L 3J1	250 612-0246	250 612-0276	email: mailbox@iqeng.com
Allnorth Consultants - industrial, structural, civil, mechanical AMEC - structural, terrain stability	8:30am-4:30pm 8:30am-4:30pm	2011 PG Pulp Mill Rd, PG, V2L 4V1 3456 Opie Crs, PG	250 614-7291 250 564-3243	250 614-7290 250 562-7045	
McElhanney Consulting Services Ltd- forest, municipal, structural	8:30am-4:30pm	1633 1st Ave, PG	250 561-2229	250 562-7045	
L & M Engineering Ltd - civil, minucipal	8:30am-4:30pm	1210 4th Ave, PG	250 562-1977	250 562-1967	
Geonorth Engineering Ltd - geotechnical (terrain stability)	8:30am-4:30pm	1301 Kelliher, PG	250 564-4304		
Waste Water Management					
Earthworm Horizontal Drilling - water, sewer, drainage	all hours	8735 Christina Rd	250 962-9682	250 962-1904	Roland and Robert Forgues- cell 613-5434
G&R Excavating - Excavation, water and sewer line installation	all hours	Chief Lake Rd, PG	250 967-4402	250 967-4041	Garry Allen
Extraction Waste Management Ltd - waste removal, septic installation Blockbuster Drain and Rooter Service Ltd - septic cleaning and removal	all hours all hours	5347 Ferguson Lake Rd, PG	250 961-5822, after 5pm - 250 962-9608 250 561-2762	250 561-2780	James or Cheryl
Sissillation Drain and Notice Convice Lia - Septile Gearing and removal			200 001 2102	_00 001-2100	
Industrial Hygienest	0.00 4.20	#202 4040 2rd Ave. DO VCM 407	050 502 4445	050 500 4440	Clare Ware Disch Cham at 11 070 040 0000
Pacific Environmental Consulting and Occupational Hygiene Services - Industrial Hygienist	8:00am-4:30pm	#203-1940 3rd Ave, PG, V2M 1G7	250 563-1145	250 562-1146	Glenn Wong, Dtech Chem, cell: 250 612-2606
Waste Management					
Recycling & Environmental Action Planning Society - Recycling info	8:30am-4:30pm	1950 Gorse, PG	250 561-7327		
Recycling Information Line Regional District Fraser Fort George - info services Metro Materials Recovery Inc - recycling centre and service	8:30am-4:30pm	155 George St, PG	250 960-4486, No Charge 1 800 667-1959		
Metro Materials Recovery Inc - recycling centre and service Richmond Steel Recycling Prince George	8:30am-4:30pm 8:30am-4:30pm	1108 Industrial Way, PG 1004 Eastern St, PG	250 563-0233 250 563-6000	1	
Blue Jewel Curbside Recycling	8:30am-4:30pm		250 960-8531		
Health and Safety Consultants/Training PG Fire and Safety	8:30am -5:00pm Mon to Fri	1542 Alward St, PG, V2M 2G6	250 562-8808, 564-2122	250 562-8808	
BC Training Ventures	8:30am -5:00pm Mon to Fri	1990 Ogilvie St, PG, V2N 1X1	250 960-1112	250 960-1132	email: office@safetytrainingbc.ca
1	,			,	



Asbestos Abatement Documentation

Prior to demolition or refurbishment, all the asbestos containing materials should be removed by a qualified asbestos removal contractor. All work should be performed in accordance with the WCB Occupational Health and Safety Regulation, and BC Waste Management Act, Hazardous Waste Regulation.

Friable material should be removed by a qualified asbestos abatement contractor under moderate, modified moderate or high risk. During demolition operations, all workers should wear half-face respirators fitted with high efficiency particulate absorbing (HEPA) filters to protect against dust inhalation.

It is recommended that Lheidli T'enneh require qualified contractors (i.e., abatement, demolition and/or disposal contractors) to submit the following documentation to verify that the contractors acted in a responsible manner in accordance with the existing applicable regulations:

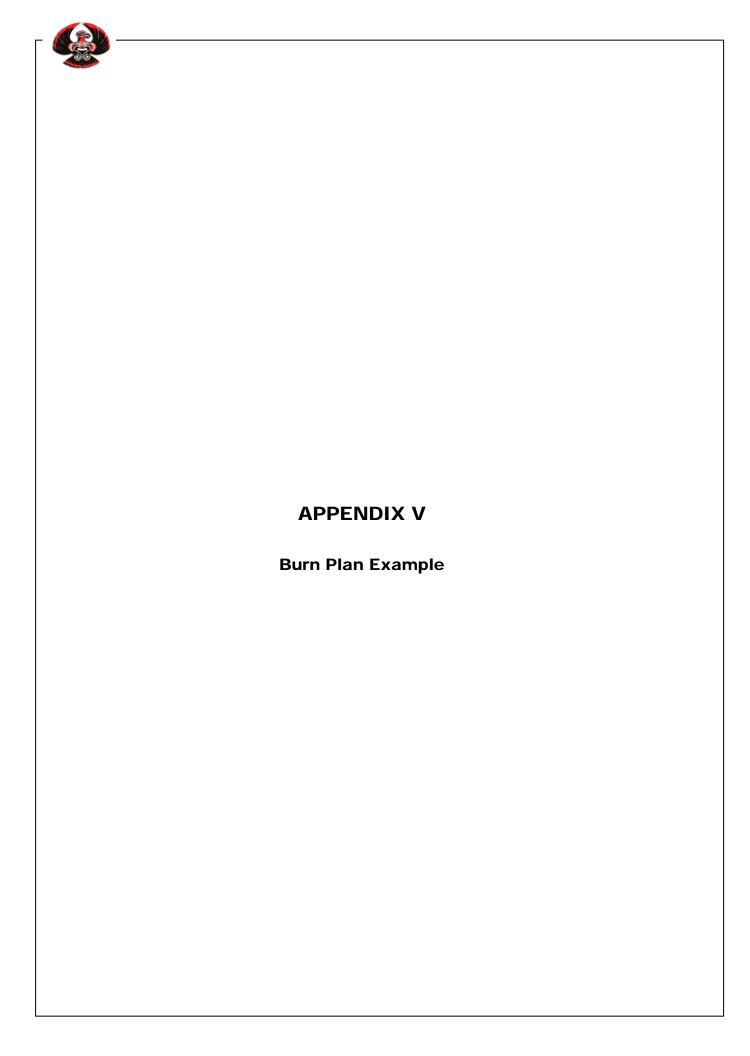
- A Notice of Project for work involving asbestos (NOP) (Note that a NOP is to be filed with WCB prior to abatement work);
- Site specific work procedures for materials of concern for friable and non-friable ACMs (included with NOP);
- A letter stating that the asbestos abatement work was completed; and
- All relevant waste disposal manifests.

The above documentation should be retained by Lheidli T'enneh to verify compliance with the applicable regulations.

Waste Management Documentation

All waste materials must be removed by a licensed contractor. If the contractor is removing hazardous wastes to be disposed of then they must be manifested as Hazardous Wastes and disposed of in accordance with the B.C. Ministry of Environment (MoE) Waste Management Act – WMA.

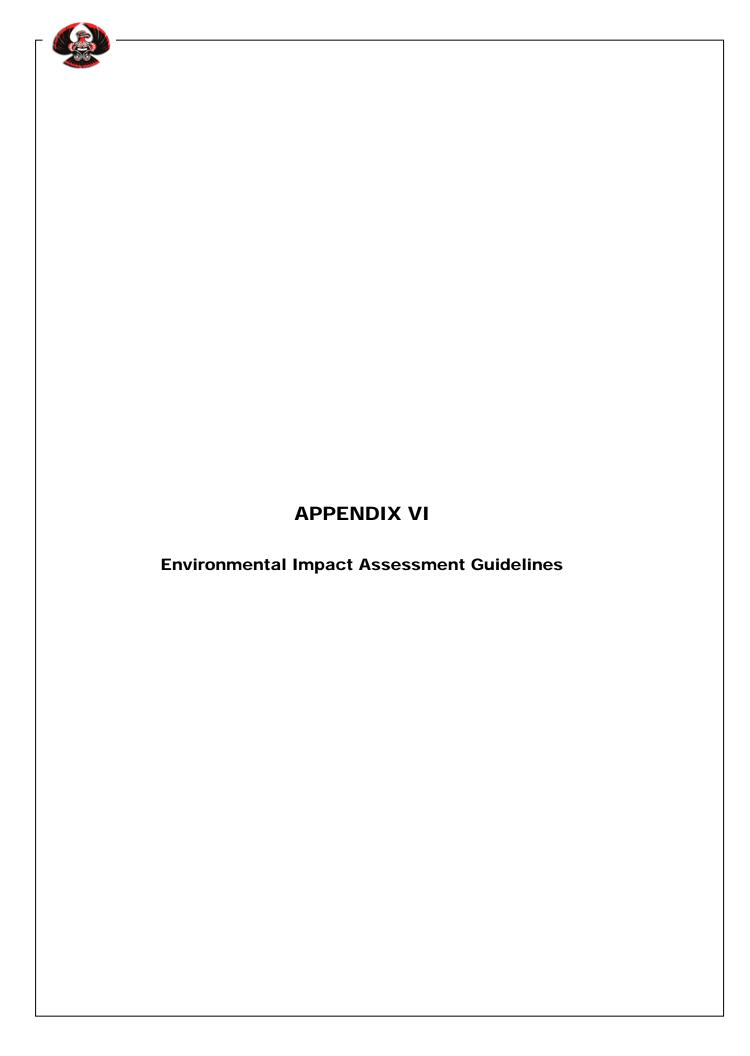
The waste management contractor must provide the Lheidli T'enneh with documentary evidence for the disposal/recycle method used for all waste materials removed from reserve.



Burn Plan Template

	LHEIDLI T'EN	NEH BURN PLAN		
Burn Location	Lat/Long	Name of Individual/Company completing the burn	If C Contact Na	company, me for Company
Fuel To Be burned (grass, wood debris etc.)	Size of Area to be Burned	Will additional fuel be u burning (i.e. will the bu use of gas or die	rn include	If yes, how much will be used?
Provide detailed description	n of area to be burned:			
What is the purpose of the l	burn?			
Detail the Burn Procedure (intended start date and a deta	ailed description of how the b	urn will be con	npleted):
List the Potential Hazard to the bu	Is that exist at and close irn area?	List the controls that adjoining properties and can be within 150 m of resid right	the environr	nent (no burn area

LHEIDLI T'ENNEH BURN PLAN SECTION TO BE COMPLETED BY BAND REPRESENTATIVE Yes No Comments Has a "NO BURN: warning been issued by the Regional District for the day of the burn? If Yes, then burn must be suspended Suspend Burn? **Environmental Considerations** Yes No Comments Will soil quality be affected by the use of Soils hydrocarbon fuels? Will Air Quality be affected by the burn? Air (will smoke be an issue?) Habitat Will important habitats be destroyed or negatively affected from the burn? Will areas of Cultural significance be **Cultural Heritage** destroyed or affected from the burn? Will there be a risk to property in the **Property** vicinity of the burn area? Does the Intended Burn constitute a high risk to the environment, safety or property? All answers are no - Burn can proceed Any of the above are Yes - Permission to proceed with burn must be denied. If Burn is to proceed then a Last Minute Risk Assessment must be completed on the day of the Burn. Potential Hazards that exist at and close to the Based on Potential Hazards list controls to be put burn area? Examples below: in place to control the burn. Proximity to Residential Buildings Weather Conditions & Wind Direction **Burn Line locations** Sources of ignition (pipelines, tanks etc.) Site walk over CLOSURE All hazards have been identified and controls put in place: Signature of Person Completing the Burn: Print Name:



CEAA Environmental Impact Assessment Information

The environmental impact process is designed to protect the environment from possible impacts from human activities or proposed human activities. Environment Canada indicates the purpose of an environmental impact assessment:

- identify possible environmental effects
- propose measures to mitigate adverse effects
- predict whether there will be significant adverse environmental effects, even after the mitigation is implemented

A number of different environmental assessments may be required for developments on LTFN lands. The detailed information below has been taken from the Environment Canada website and outlines the process for EIA submission below:

Screening

Screening is a systematic approach to documenting the environmental effects of a proposed project and determining the need to eliminate or minimize (mitigate) the adverse effects, to modify the project plan or to recommend further assessment through mediation or an assessment by a review panel. The responsible authority must ensure that the screening of the project is carried out.

Screenings will vary in time, length and depth of analysis, depending on the circumstances of the proposed project, the existing environment, and the likely environmental effects. Some screenings may require only a brief analysis of the available information and a brief report; others may need new background studies and will be more thorough and rigorous.

The responsible authority must prepare or ensure the preparation of a report which summarizes the findings of the screening.

What happens after a screening?

A responsible authority must determine the significance of the environmental effects of the project. This in turn governs whether the responsible authority can take action that will enable the project to proceed (i.e., whether to proceed with the project itself when it is the proponent, or otherwise to provide the funding, land, permit or other authorization). If the screening has identified the need for further review, the responsible authority must refer the project to a mediator or a review panel. Further review is necessary when:

- it is uncertain whether the project is likely to cause significant adverse environmental effects
- the project is likely to cause significant adverse environmental effects and it is uncertain whether these effects are justified in the circumstances
- public concerns warrant it

Public involvement in a screening is at the discretion of the responsible authority and depends on factors such as the nature of the project, its environmental setting and public concerns.

If the responsible authority decides to solicit public input as part of the environmental assessment, this input will be taken into consideration when the responsible authority decides the next step in the environmental assessment process. Where the responsible authority has determined that public participation is appropriate, it must provide an opportunity for the public to examine and comment on the screening report.

Class Screening

What is a class screening?

The class screening is a special type of screening that can help streamline the environmental assessment of certain types of projects.

The Agency has determined that these types of projects are not likely to cause significant adverse environmental effects, providing that the design standards and mitigation measures described in the class screening report are applied. There are two types of class screenings:

- A model class screening provides a two-step environmental assessment of all projects within a class. The responsible authority uses information contained in a model class screening report and prepares individual screening reports for projects within the class to account for location-specific or project-specific information and to record a conclusion on the significance of the environmental effects of that project. A statement of projects to which model class screenings have been applied is maintained on the registry. The Agency declares model class screening reports.
- A replacement class screening provides a complete environmental assessment of all projects within a class. It also provides a conclusion on the significance of the environmental effects for all projects within the class. No location-specific or project-specific information is needed, so the responsible authority does not need to prepare project-specific screening reports for projects covered by the replacement class. A statement of projects to which replacement class screenings have been applied is maintained on the registry. The Agency declares replacement class screening reports.

Comprehensive Study

What is a comprehensive study?

The majority of projects are assessed through a screening; however, some projects require a comprehensive study. These projects are described in the <u>Comprehensive Study List Regulations</u>. These tend to be large projects having the potential for significant adverse environmental effects. They may also generate public concerns.

Examples of such projects include large-scale oil and natural gas developments, nuclear power developments, electrical-generation projects, industrial plants and certain projects in national parks and others.

Early on in the comprehensive study, it must be decided whether the project should continue to be assessed as a comprehensive study, or whether it should be referred to a mediator or review panel. If it is decided that the project should continue as a comprehensive study, the project can no longer be referred to a mediator or review panel.

GUIDE TO THE BRITISH COLUMBIA ENVIRONMENTAL ASSESSMENT PROCESS

Environmental Assessment Office

March 2003



ACKNOWLEDGEMENTS

The Environmental Assessment Office gratefully acknowledges the efforts of all who contributed to the preparation of the Guide.

Georgina Naismith prepared the Guide to the British Columbia *Environmental Assessment Act* based on input from the Environmental Assessment Office: Ray Crook ensured consistency with the Act and regulations; Martyn Glassman for First Nations and public consultation; Jan Hagen for initiating the development of the new guide and Garry Alexander and Norm Ringstad for overall coordination. Key input was provided to the Environmental Assessment Office by industry, local government and environmental group representatives of the Environmental Assessment Advisory Committee; First Nations representatives of the Environmental Assessment First Nations Working Group; and relevant provincial and federal agencies.

ENKON Environmental Ltd. (ENKON) was responsible for the initial design of the Guide with revisions provided by the Environmental Assessment Office, and Allen Eade provided advice and coordination.

National Library of Canada Cataloguing in Publication Data

Main entry under title:

Guide to the British Columbia environmental assessment process. — [Rev.]

"March 2003"
Previously issued 2001.
Also available on the Internet.
ISBN 0-7726-4933-2

- 1. British Columbia. Environmental Assessment Act.
- 2. Environmental impact analysis Law and legislation British Columbia. 3. Economic development Environmental aspects British Columbia. I. British Columbia. Environmental Assessment Office.

KEB491.A31A2 G84 2003 344.711'046 C2003-960062-9 KF5505.G84 2003

DISCLAIMER

This Guide is not a legal authority and is not intended to provide legal advice or direction. The Guide provides information only, and should not be used as a substitute for the *Environmental Assessment Act* or regulations. In the event of a discrepancy, the Act and regulations prevail. Portions of the Act have been paraphrased in the Guide, and should not be relied upon for legal purposes. The procedures described in this Guide may be deviated from, based on specific project circumstances. The Environmental Assessment Office disclaims liability in respect of anything done in reliance, in whole or in part, on the contents of this Guide.

TABLE OF CONTENTS

1. Introduction	, l
2. Background	3
2.1 Purpose of Environmental Assessment	
2.2 Environmental Assessment Legislation in British Columbia	
3. Regulatory Context for Environmental Assessment	5
3.1 Provincial Land and Resource Management System	5
3.2 Relationship with Other Levels of Government	7
3.3 First Nation Consultation: Legal and Policy Context	8
4. Environmental Assessment Act	10
4.1 Principles	10
4.2 Overview of the Act	11
4.3 Overview of the Regulations	12
5. Environmental Assessment Process	13
5.1 Framework for Environmental Assessment: Eight Key Steps	13
5.1.1 Step 1: Determining if the Environmental Assessment Act Applies	13
5.1.2 Step 2: Determining the Review Path	15
5.1.3 Step 3: Determining How the Assessment will be Conducted	16
5.1.4 Step 4: Developing and Approving Terms of Reference for the Application	17
5.1.5 Step 5: Preparing and Submitting the Application	17
5.1.6 Step 6: Reviewing the Application	18
5.1.7 Step 7: Preparing the Assessment Report and Referring the Application to Ministers	19
5.1.8 Step 8: Deciding to Issue/Not Issue an Environmental Assessment Certificate	20
5.2 The Procedural Order and Terms of Reference for an Application	20
5.3 Public Consultation	24
5.3.1 General	24
5.3.2 Public Consultation Policy Regulation	25
5.4 Post-Certification	27
5.4.1 Transition to Post-Certification	
5.4.2 Concurrent Approval	
5.4.3 Post-Certification Consultation	
5.4.4 Monitoring, Evaluation and Reporting	29
5.4.5 Compliance and Enforcement	30

6. Special Circumstances	31
6.1 When an Environmental Assessment May Not be Required	
6.2 Minister Determines the Assessment Process	33
7. Access to Information: The Project Information Centre	35
List of Figures 1. Typical Environmental Assessment Led and Managed by the Environmental Assessment Office	
Appendices	
Appendix 1: Glossary of Terms	37
Appendix 2: Provincial Policy for Consultation with First Nations (2002): Principles and Stages of	
Consultation	40
Appendix 3: General Information on Consultation Methods	
Appendix 4: Environmental Assessment Act	
Appendix 5: Regulations	
Appendix 6: List of Responsible Ministers	

1. Introduction

The British Columbia *Environmental Assessment Act* (S.B.C. 2002, c. 43) (the Act) requires that certain major project proposals obtain an environmental assessment certificate before they can proceed. The types of projects that may be subject to the Act include industrial, mining, energy, water management, waste disposal, food processing, transportation and tourist destination resort projects. The current legislation came into effect on December 30, 2002, replacing the previous *Environmental Assessment Act* (R.S.B.C. 1996, c. 119), which had been in effect since June 30, 1995. The provincial government is committed to more flexible, efficient and timely reviews of proposed major projects to help revitalize the provincial economy. This is why a new, streamlined environmental assessment process was introduced in 2002

The *Environmental Assessment Act* ensures that proposed projects subject to the legislation undergo a comprehensive, integrated, coordinated and timely assessment, within the context of prevailing public policy. The legislation and accompanying regulations establish the framework for delivering environmental assessments. However, the scope, procedures and methods of each assessment are flexible and tailored specifically to the circumstances of the proposed project. This allows for each assessment to focus on the issues relevant to whether or not that project should proceed.

This Guide provides information for all interested parties on the *Environmental Assessment Act* and how environmental assessments are conducted in British Columbia. Sections 1-3 provide an introduction, background information, an explanation of the regulatory context for environmental assessment in British Columbia, and an explanation of the legal and policy context for First Nation consultation. Section 4 provides an overview of the *Environmental Assessment Act* and its accompanying regulations. Section 5 describes the process for a typical environmental assessment, led and managed by the Environmental Assessment Office, based on eight key steps. This typical process is followed in nearly all cases. However, there are special circumstances in which the typical assessment process is not followed, and these circumstances are explained in Section 6. Lastly, Section 7 provides information on accessing information through the Project Information Centre.

In addition to this Guide, supplementary guides are available that provide further information specifically for three of the key groups involved in environmental assessments: project proponents, First Nations and the public. These supplementary guides are to assist each group in understanding its role, responsibilities and opportunities to participate in an environmental assessment.

Introduction

If you have further questions on any aspect of the legislation or the environmental assessment process in British Columbia, please contact the Environmental Assessment Office in Victoria.

Location: 2nd Floor, 836 Yates Street, Victoria, British Columbia, V8V 1X4

Mail: PO Box 9426 Stn Prov Govt, Victoria, BC V8W 9V1

Phone: (250) 356-7441 (Victoria)

Toll-free calls through Enquiry BC: 1-800-663-7867 or

(604) 660-2421 (Vancouver)

Fax: (250) 356-7440

Email: eaoinfo@gems5.gov.bc.ca.

Website: www.eao.gov.bc.ca

2. BACKGROUND

2.1 Purpose of Environmental Assessment

Environmental assessment is an important component of major project planning and approval in more than 100 countries. Its primary goal is to identify and assess the potential effects that may result from development of a proposed project, and to develop measures for managing those effects. Environmental assessment is an important means of ensuring that project decision-making by governments and proponents is informed. In Canada, all provinces and the federal government implement environmental assessment procedures to assist in making decisions on whether large-scale projects should proceed.

Environmental assessment provides a framework to address a broad range of environmental, health and safety, socioeconomic, community and First Nation issues through a single, integrated process, ensuring the issues and concerns of all interested parties are considered together. Through the process of environmental assessment, potential effects of a proposed project are identified and evaluated early, providing the opportunity for a project to be modified before irreversible project design and construction decisions are made. This results in improved project design and helps to avoid costly mistakes for proponents, governments, local communities and the environment.

Environmental assessment looks at relevant environmental, health and safety, socioeconomic, community and First Nation issues together in a single, integrated process.

In general, environmental assessment includes four main elements:

- opportunities for all interested parties, including First Nations, to identify issues and provide input;
- technical studies of the relevant environmental, social, economic, heritage and/or health effects of the proposed project;
- identification of ways to prevent or minimize undesirable effects and enhance desirable effects; and
- consideration of the input of all interested parties in compiling the assessment findings and making decisions about project acceptability.

2.2 Environmental Assessment Legislation in British Columbia

Prior to 1995, proposed major projects in British Columbia were reviewed under separate processes managed by different authorities depending on the project sector (e.g., mining, energy or industrial). In 1995, the first *Environmental Assessment Act* in British Columbia was introduced. This Act established a single process for review of large-scale projects that were identified in the accompanying Reviewable Projects Regulation. It also established the Environmental Assessment Office as the neutral agency with responsibility for administering and managing the environmental assessment process.

The 1995 Environmental Assessment Act established a process for the thorough and integrated assessment of the full range of potential effects associated with large-scale projects. It also set time limits for certain steps in the process. However, after several years experience, it was determined that improvements could be made. In particular, it was determined that the legislation should provide for greater procedural flexibility in order that assessments could be designed to focus on the specific issues and circumstances associated with the individual project.

In 2002, a new *Environmental Assessment Act* (Bill 38) was introduced and came into effect on December 30, 2002. While retaining many fundamental elements of the previous Act, this legislation enables environmental assessments to be tailored to the requirements of each project, allowing for a more streamlined and efficient review process. The changes are intended to ensure environmental assessments are more focused and cost-effective, while remaining thorough, open and accountable.

Environmental assessments are tailored to the requirements of each project to ensure a focused, efficient, technically sound, timely and cost-effective review process.

3. REGULATORY CONTEXT FOR ENVIRONMENTAL ASSESSMENT

3.1 Provincial Land and Resource Management System

Environmental assessment is one component of British Columbia's overall land and resource management system. Other components include land use planning, land and resource tenuring, permitting and other review/approval mechanisms, and operations management. Each component, and its applicable laws, regulations, policies and technical guidelines, is intended to support provincial goals for economic development, environmental protection and community stability.

Environmental assessment evaluates proposed major projects within the context of the provincial government's regulatory and policy framework and technical expectations, so that a decision can be made on the overall acceptability of the project. The process results in a ministerial-level decision on whether to issue an environmental assessment certificate. The ministers responsible for this decision are:

- the Minister of Sustainable Resource Management;
- the Minister of Water, Land and Air Protection; and
- the "responsible minister" for the particular type of project (e.g., the responsible minister for mine projects is the Minister of Energy and Mines).

Issuance of an environmental assessment certificate signifies that key issues relevant to whether the project should or should not proceed have been resolved, or can be resolved by technically feasible means as project development proceeds.

Environmental assessments enable provincial ministers to decide on the overall acceptability of major development proposals, within the context of government's regulatory, policy and technical requirements, and taking into account public and First Nation input.

Relationship to Land Use Planning

Provincial land use plans provide the framework and context for setting environmental, land use and resource management goals over provincial Crown land. Environmental assessment is conducted within the context of existing land use plans. While environmental assessment examines the effects of a project on adjacent land uses, it is a project-specific review mechanism and has no authority to act as a land use planning mechanism or to re-open previously approved land use plans.

Relationship to Land and Resource Tenuring

Tenure-granting processes dispense some form of use or ownership rights to both public and private parties with respect to land and resources. Tenure rights to Crown land and resources that are required for a project to proceed may be in place when a proponent applies for an environmental assessment certificate (e.g., a mineral claim), or options to grant the necessary tenures may be reserved for the proponent subject to satisfactory completion of the environmental assessment (e.g., *Land Act* reserves). Where a project is located on private land, the proponent may own the land or have the right to exercise an option on the land.

Relationship to Provincial Permitting and Approval Processes

The actual use of land or resources may require approvals granted under other provincial legislation. Examples of such approvals include water licenses, waste management permits, access development permits, and timber cutting licenses. Typically, some form of tenure rights already exist when application is made for these approvals. In addition, the proposed activities for which approval is sought will normally have to be compatible with the prevailing land use regime. A project that is approved under the *Environmental Assessment Act* is required to obtain all other applicable provincial permits, licenses and approvals. An environmental assessment certificate does not supersede or encompass these requirements.

In practice, applicable approvals are identified during the course of an environmental assessment, and requirements are coordinated to the extent practicable. Much of the information gathered during the environmental assessment will be relevant to the approvals; however, each approval will require specific information that may only be available at a later, more detailed design stage.

A proponent may request that some provincial approval applications be processed concurrently with the environmental assessment. In that case, the agency responsible for the approval must make a decision related to issuing the approval within a specified time frame. (For more information on concurrent approval see Section 5.4.2). However, in no case can an authorization to construct or operate the project be issued until the environmental assessment has been completed and an environmental assessment certificate has been granted.

Relationship to Operations Management

Once an environmental assessment certificate and other approvals to construct and operate a project have been issued, the project is subject to ongoing operations management. This includes proponent management and monitoring activities to ensure the project is undertaken in compliance with the various approval conditions, and complementary government monitoring, inspection and enforcement activities to ensure the project complies with all relevant provincial laws, regulations and approval conditions. For projects subject to environmental assessment, elements of the required operations management may be covered in conditions of the environmental assessment certificate.

3.2 RELATIONSHIP WITH OTHER LEVELS OF GOVERNMENT

Relationship with Local Government Authorities

A proposed project located partially or wholly on private land may be subject to a local Official Community Plan and/or zoning or other by-laws. In addition, local government permitting requirements and procedures may apply, such as building permits or development permits. In this case, separate applications to the appropriate local government authorities may be required. Project-specific environmental assessment procedures may require the proponent or the Environmental Assessment Office to consult with local government(s) and may specify opportunities for local government(s) to provide comments on the assessment. Local governments may use opportunities to participate in the environmental assessment process to ensure that issues of concern to them are identified and assessed.

Relationship with Federal Authorities and the *Canadian Environmental Assessment Act*

A project may be subject to the *Canadian Environmental Assessment Act* as well as the *British Columbia Environmental Assessment Act*. In this case, the Environmental Assessment Office works closely with the Canadian Environmental Assessment Agency and other federal agencies to ensure the requirements of both levels of government are met through a coordinated process.

As signatories to the "Canada-wide Accord on Environmental Harmonization" and the supporting "Sub-agreement on Environmental Assessment", Canada and British Columbia seek to provide consistency and the timely and efficient use of resources in conducting environmental assessments. In 1997, Canada and British Columbia entered into a bilateral agreement on environmental assessment cooperation (the "Canada-British Columbia Agreement for Environmental Assessment Cooperation"). This agreement, designed to ensure coordination in the review of projects subject to both federal and British Columbia environmental assessment legislation, was extended on an interim basis in 2002. Under this agreement, the requirements of both processes are met through coordinated assessment procedures to minimize duplication and overlap. However, at the conclusion of a cooperative assessment, each level of government retains the authority to make a separate project decision. The current agreement can be viewed on the Project Information Centre website (www.eao.gov.bc.ca).

At the time of publication of this Guide, a new long-term bilateral agreement is being negotiated to reflect the 2002 British Columbia *Environmental Assessment Act* and changes envisioned to the *Canadian Environmental Assessment Act*.

British Columbia has an agreement with the Government of Canada to minimize duplication between the provincial and federal environmental assessment processes and facilitate a "one project—one review" approach when both processes are triggered.

Relationship with Neighbouring Jurisdictions

Some projects located within British Columbia may have the potential to have an effect in neighbouring jurisdictions (Alberta, Yukon, Northwest Territories, Alaska, Washington State, Idaho and Montana). Under these circumstances, the environmental assessment procedures may require the proponent or the Environmental Assessment Office to consult with authorities in neighbouring jurisdictions, and there may be opportunities for neighbouring jurisdictions to provide comments during the assessment. British Columbia has signed a Memorandum of Understanding with Washington State to facilitate notification and information exchange regarding major project proposals in the vicinity of the other jurisdiction.

3.3 First Nation Consultation: Legal and Policy Context

Court decisions have established that provincial government activities cannot infringe on existing aboriginal rights and/or title unless there is proper justification. The Courts have further held that where a First Nation has asserted but not yet proved aboriginal rights and/or title, there is a constitutional and fiduciary obligation to consult and consider the interests being asserted.

The Provincial Consultation Policy (2002) describes the Province's approach to consultation with First Nations on aboriginal rights and/or title that have been asserted but have not been proven through a Court process. In this Policy, potentially existing aboriginal rights and/or title are defined as, and referred to as, "aboriginal interests". The Policy, which may be updated from time to time, recognizes that the Province, through consultation, must consider and attempt to address and/or accommodate aboriginal interests prior to making decisions that may affect those interests.

In accordance with legal and policy requirements, the Province will consider aboriginal interests in relation to an environmental assessment to ensure that First Nation issues and concerns are identified, and the Province's legal obligations towards First Nations are met. The Environmental Assessment Office operates under the terms of the most up-to-date version of the Policy, which can be viewed on

the Project Information Centre website (www.eao.gov.bc.ca). The Policy identifies guiding principles and stages in consultation. Information on these consultation principles and stages is provided in Appendix 2.

First Nation consultation requirements are established for every environmental assessment, within the framework of the Policy and any future updates of that Policy. First Nations with interests in the area of the proposed project (i.e., the project is in proximity to the First Nation's claimed traditional territory) or whose rights may be affected are provided the opportunity to be consulted by the proponent and the Environmental Assessment Office.

As a result of a recent (2002) court case¹, proponents of a reviewable project may also have a duty to consult in good faith with First Nations and to seek workable accommodations of First Nation interests (separate from any specific obligations that may be required as part of a project assessment under the *Environmental Assessment Act*). The Environmental Assessment Office advises proponents to contact its staff as early as possible to:

- a) determine whether there are First Nations with interests that may be affected by the project; and
- b) discuss consultation requirements.

Environmental assessments include First Nation consultation requirements to ensure aboriginal interests are considered and attempts are made to address and/or accommodate First Nation issues and concerns.

¹ Haida Nation v. British Columbia and Weyerhaeuser (2002) BCAA 462.

4. Environmental Assessment Act

4.1 PRINCIPLES

There are several fundamental principles that underlie the *Environmental Assessment Act* and the conduct of environmental assessment in British Columbia. Therefore, while the methods and procedures used may vary to suit the specific circumstances of each project, in general, all assessments are designed to incorporate the following principles.

Access to Information: Interested parties have access to information and documentation related to environmental assessment in British Columbia, and individual project reviews, through the Project Information Centre website (see Section 7). Where Internet access is inadequate, hard (paper) copies of some documents may also be housed in the region of a proposed project.

Balanced Decision Making: Assessments identify and evaluate project benefits as well as costs. Certification decisions are made by three ministers with a broad range of portfolio interests, ensuring balanced, politically accountable decision making.

Comprehensiveness: Assessments are comprehensive in scope, assessing the relevant environmental, economic², social, health, and/or heritage effects of on-site and off-site facilities and activities for the life cycle of the project.

Consultation: Assessments incorporate consultation with all potentially affected parties, including government agencies, First Nations and the public, and opportunities for those parties to provide input. Consultation requirements are developed for each project to ensure the methods and procedures are appropriate for the individuals and groups concerned.

Coordination: The requirements for projects subject to both federal and provincial environmental assessment legislation are coordinated in a single process. Provincial permitting requirements are identified during the environmental assessment to facilitate a streamlined transition once an environmental assessment certificate has been issued

² Environmental assessment includes assessment of the potential economic effects of a proposed project (such as the impacts and benefits on the local, regional and provincial economy and the number of jobs that would be created by the project). However, environmental assessment does not include an evaluation of the economic feasibility of the project, except in sectors where it is normal government practice to do so as part of the review/approval process. It is the responsibility of the project proponent to determine whether the project is economically feasible and represents a sound business investment.

Flexibility: Assessment methods and procedures are tailored to the circumstances presented by individual projects. This facilitates development of an efficient and effective assessment that focuses on the issues relevant to a ministerial decision on whether or not the project should proceed.

Integration: All relevant issues are addressed through one process. Proponents are required to document the issues in integrated submissions, which are considered by all review participants. At the end of each review, one report is prepared on all assessment-related matters.

Neutral Administration: The Environmental Assessment Office is a neutral agency dedicated to delivering environmental assessments in an open, accountable and neutral manner. Environmental Assessment Office staff lead and manage project assessments according to the procedures defined in the legislation, regulations, and related operating procedures.

Timeliness: All assessments are subject to legislated time limits for major actions and decision points to ensure review-related activities are conducted in a timely and efficient manner. Additional time limits may be established on a project-by-project basis as appropriate.

Principles underlying the Environmental Assessment Act include access to information, balanced decision-making, comprehensiveness, consultation, coordination, flexibility, integration, neutral administration and timeliness.

4.2 Overview of the Act

The *Environmental Assessment Act* establishes the requirement for environmental assessments and the framework for how they are to be conducted. A copy of the Act is provided in Appendix 4. Key matters included in the legislation are:

- establishment of the Environmental Assessment Office to neutrally administer and manage environmental assessments, and the powers and responsibilities of that office;
- establishment of the Project Information Centre to facilitate access to information;
- powers of the Minister of Sustainable Resource Management in relation to environmental assessments, such as to designate a project as reviewable under the Act, make regulations, and appoint parties to conduct assessments;
- powers of other ministers in relation to environmental assessments, such as to make a decision on issuance of an environmental assessment certificate; and
- general steps, requirements and decision-making points that apply to all assessments, and identification of steps which must be completed within fixed time limits.

The Act does not specify which projects are subject to environmental assessment, but requires that this information be set out in regulation (see "Reviewable Projects Regulation" in Section 4.3).

4.3 Overview of the Regulations

The following regulations accompany the *Environmental Assessment Act*. Copies of the regulations are provided in Appendix 5.

Concurrent Approval Regulation: Under the *Environmental Assessment Act*, a project proponent may apply to have applications for other provincial approvals reviewed concurrently with the application for an environmental assessment certificate. This regulation sets out the procedures related to this provision, such as the deadline by which the proponent must apply for concurrent review of applications for other approvals, and requirements for response and decision-making by regulatory agencies.

Prescribed Time Limits Regulation: The *Environmental Assessment Act* requires that certain steps in an environmental assessment be carried out within a time limit. Time limits apply to both government and proponent actions. This regulation sets out the specific period within which each time-limited step must be carried out, which may be a number of calendar days or a number of years.

Public Consultation Policy Regulation: This regulation sets out general policies with respect to public consultation that the Environmental Assessment Office must take into account when determining consultation requirements for an environmental assessment. The policies relate to the implementation and assessment of the proponent's public consultation program, the provision of public notice, access to information, and formal public comment periods.

Reviewable Projects Regulation: This regulation defines which projects are subject to the *Environmental Assessment Act* by establishing categories of projects and quantified thresholds for each category. Thresholds are set for new projects, modifications to existing projects, and, in a few cases, for project decommissioning. Thresholds relate to project size, production capacity, or other criteria relevant to determining whether or not the project is likely to result in significant effects. All projects that meet or exceed the thresholds are automatically subject to the Act. This regulation also identifies which of the project's development phases (construction, operations, modification, dismantling and abandonment) are included in the assessment.

Transition Regulation: This regulation defines projects which, although reviewable in size based on the criteria set out in the Reviewable Projects Regulation, are "grandparented" (exempted) from the application of the *Environmental Assessment Act* because they have been reviewed in detail and granted one or more key approvals before the Act came into force. This regulation has no relevance to a project that has not previously been reviewed.

5. ENVIRONMENTAL ASSESSMENT PROCESS

5.1 FRAMEWORK FOR ENVIRONMENTAL ASSESSMENT: EIGHT KEY STEPS

The following section outlines the general framework for a typical environmental assessment based on eight key steps.

- 1) Determining if the Environmental Assessment Act applies
- 2) Determining the review path
- 3) Determining how the assessment will be conducted (scope and procedures)
- 4) Developing and approving terms of reference for the application
- 5) Preparing and submitting the application
- 6) Reviewing the application
- 7) Preparing the assessment report and referring the application to ministers
- 8) Deciding to issue/not issue an environmental assessment certificate

Figure 1 provides a flowchart of a typical assessment. References to the relevant sections of the *Environmental Assessment Act* and/or regulations are provided in footnotes.

5.1.1 Step 1: Determining if the Environmental Assessment Act Applies

Key Question: Is the proposed project subject to the Environmental Assessment Act?

Projects subject to the *Environmental Assessment Act* are called "reviewable projects". There are three ways a project may be considered reviewable:

- it falls within a category of project that is included in the Reviewable Projects Regulation and meets or exceeds the prescribed thresholds⁴;
- the Minister of Sustainable Resource Management designates it as reviewable⁵; or
- at the request of the proponent, the Environmental Assessment Office designates it as reviewable.⁶

³ Section 1 of the Act.

⁴ Section 5 of the Act.

⁵ Section 6 of the Act.

⁶ Section 7 of the Act.

Figure 1. Typical Environmental Assessment Led and Managed by the Environmental Assessment Office (EAO) Alternatives to Typical Process Typical Environmental Assessment Step 1: Determining if the Environmental Assessment Act Applies YES Project proceeds NO project is included in the Reviewable Projects Regulation; or to permitting minister designates project reviewable; or EAO designates project reviewable (proponent requested) Step 2: Determining the Review Path Project referred to Environmental Assessment process led and managed by EAO assessment not minister required Step 3: Determining How the Assessment will be Conducted EAO issues Procedural Order establishing framework for Procedural Order Assessment assessment, including scope of assessment and methods and amended if required conducted by commission, panel or other party Step 4: Developing & Approving Application Terms of Reference in accordance with Procedural Order, EAO and proponent conduct issue identification/scoping and consultation with government agencies, First Nations and public Procedural Order proponent develops draft terms of reference amended if required EAO coordinates review of draft terms of reference (usually includes public comment period) proponent revises terms of reference as required EAO approves final terms of reference Step 5: Preparing & Submitting the Application proponent conducts studies in accordance with terms of reference, and prepares and submits application EAO determines if application contains required information and Procedural Order amended if required assesses proponent's public consultation program (within 30 Application accepted for review Application deficient proponent provides any EAO identifies deficiencies additional required copies proponent revises application Step 6: Reviewing the Application application reviewed in accordance with Procedural Order (180 days to complete Steps 6 and 7) Procedural Order proponent carries out consultation in accordance with approved consultation plan and any additional required measures government agencies and First Nations review application amended if required public comment period (30-75 days) Step 7: Preparing the Assessment Report & Referring to Ministers Assessment report prepared application, report, recommendations and EAO prepares draft report on the assessment findings reasons referred to EAO coordinates review of draft report EAO refers application, final report, recommendations and ministers for decision reasons to ministers for decision Step 8: Deciding to Issue/Not Issue a Certificate Ministers make decision (within 45 days) issue environmental assessment certificate; or refuse to issue environmental assessment certificate; or require further assessment

14

In most cases, the project proponent contacts the Environmental Assessment Office and provides basic project information. The Environmental Assessment Office determines if it is a category of project that is included in the Reviewable Projects Regulation and, if so, if it meets the thresholds for that category. The Environmental Assessment Office then confirms whether or not the Act applies to the project.

In a few exceptional cases, the Minister of Sustainable Resource Management may designate a proposed project as reviewable even though it is not included in the Reviewable Projects Regulation. This could occur when the project may have significant adverse effects, and the minister is satisfied that it would be in the public interest for the project to undergo an environmental assessment.

The proponent of a project that is not included in the Reviewable Projects Regulation may apply to the Environmental Assessment Office to have the project designated as reviewable. In this case, the Environmental Assessment Office considers the reasons for the request and makes a decision on whether or not to make the designation.

5.1.2 Step 2: Determining the Review Path

Key Question: Is the typical environmental assessment process, led and managed by the Environmental Assessment Office, appropriate for this project?

In nearly all cases, the environmental assessment will be led and managed at the staff level by the Environmental Assessment Office.⁷ However, the *Environmental Assessment Act* provides for variations from this process in exceptional cases. The Environmental Assessment Office will examine any special circumstances related to the project that would warrant either:

- that the project be referred immediately to the Minister of Sustainable Resource Management to determine how the assessment will be conducted. Further details on when this may occur and the options available to the minister are provided in Section 6.2; or
- that the requirements for an environmental assessment be waived. 9 Section 6.1 provides more detail on circumstances when this may occur.

The following steps describe how a typical environmental assessment led and managed by the Environmental Assessment Office would be conducted.

⁷ Section 10(1)(c) of the Act.

⁸ Section 10(1)(a) of the Act.

⁹ Section 10(1)(b) of the Act.

5.1.3 Step 3: Determining How the Assessment will be Conducted

Key Question: What will be the scope of the assessment and what procedures and methods will be used to conduct the assessment?

The Environmental Assessment Office is responsible for determining how the assessment will be conducted, including the scope of the assessment and the procedures and methods to be used. ¹⁰ Environmental Assessment Office staff consider input and advice from government agencies, First Nations, the public and the proponent, as appropriate, in making this determination.

The Environmental Assessment Office issues a procedural order that sets out the process for conducting the assessment. The level of detail contained in the procedural order will vary depending on the amount of information available at the time the order is issued. In some cases the order may set out specific requirements related to the assessment, or, where there is not yet sufficient information to identify all requirements, the order may set out procedures to determine those requirements. In general, the order will address the following issues:¹¹

- the facilities and activities that comprise the reviewable project (the project scope);
- the procedures and methods to be used in conducting the assessment;
- the potential effects to be considered in the assessment;
- information required from the proponent, primarily in its application for an environmental assessment certificate (the order will normally require the proponent to develop terms of reference for the application);
- information from sources other than the proponent, if any;
- First Nation consultation requirements;
- public consultation requirements; and
- time limits for activities in the assessment not otherwise covered by legislated time limits.

Once issued, the procedural order is legally binding and therefore provides certainty about how the assessment will proceed. The procedural order may be varied later in the process if the proponent modifies the project, or if necessary to complete an effective and timely assessment. ¹² However, variations are intended to accommodate unforeseen changes and are not intended to be routine.

More detailed information on the procedural order is provided in Section 5.2.

¹⁰ Section 11 of the Act.

¹¹ Section 11(1) and 11(2) of the Act.

¹² Section 13 of the Act.

5.1.4 Step 4: Developing and Approving Terms of Reference for the Application

Key Question: What information must the proponent provide in its application for an environmental assessment certificate?

The project proponent is required to submit an application for an environmental assessment certificate.¹³ To ensure the application will contain the necessary information, the proponent will, in most cases, be required to prepare terms of reference for the application, in consultation with the Environmental Assessment Office, other government agencies, First Nations, the public and other parties as appropriate. The terms of reference set out the information requirements and how they will be met, and must be approved by the Environmental Assessment Office.

Specific procedures related to development of the terms of reference may be included in the procedural order. For example, the order may specify there be a public comment period on draft terms of reference. More information on the terms of reference is provided in Section 5.2.

5.1.5 Step 5: Preparing and Submitting the Application

Key Question: Does the application contain the information required for the assessment?

The proponent prepares the application according to the approved terms of reference and any other requirements specified in the procedural order. In most cases, preparation of the application continues the iterative process, and is developed through ongoing discussions between the proponent, the Environmental Assessment Office, other government agencies, First Nations, the public and other parties.

The proponent submits the application to the Environmental Assessment Office, which has 30 days to ensure the application contains the required information. ¹⁵ If the Environmental Assessment Office identifies any deficiencies in the application, the proponent must address them. The proponent then revises and resubmits the application. The Environmental Assessment Office may only accept an application for review if it contains the required information, as specified in the terms of reference. Upon acceptance of the application, the Environmental Assessment Office will notify the proponent and request the proponent to supply any additional copies that may be required for the purposes of the assessment. ¹⁶

¹³ Sections 8, 16(1) and 16(2) of the Act.

¹⁴ Section 11 of the Act.

¹⁵ Section 16(3) and 24(1)(a) of the Act; Section 2 of the Prescribed Time Limits Regulation.

¹⁶ Section 16(4) of the Act.

If the proponent does not submit the application within three years after terms of reference for the application have been finalized, the assessment may be suspended or terminated.¹⁷

5.1.6 Step 6: Reviewing the Application

Key Question: Does the application adequately document the potential effects of the project and how any potential adverse effects could be avoided or mitigated?

The review of the application normally begins on the date the Environmental Assessment Office receives the required additional copies from the proponent. If no additional copies of the application are required, the review of the application begins on the date that the Environmental Assessment Office notifies the proponent of the acceptance of the application for review. The Environmental Assessment Office conducts the review in accordance with the procedures established in the procedural order, or in any variation to that order. Application review normally includes: review by government agencies, First Nations and the public; First Nation and public consultation; a formal public comment period; and opportunities for the proponent to respond to issues raised.

Government has up to 180 days (approximately six months) from the date the review of the application commences to complete the review, prepare the assessment report and refer the application to the ministers for a decision on issuance of an environmental assessment certificate (Step 7).¹⁹ The time required will depend on the complexity of the project and the issues raised. Government agency, First Nation and public review of the application, any formal public comment period, and opportunities for the proponent to respond to issues raised, are normally scheduled within the 180 days.

The Environmental Assessment Office may suspend the 180 day period:

- if the review is delayed at the request of the proponent (e.g., if the proponent requires more time to respond to issues than is provided for in the procedural order);
- because of actions taken or not taken by the proponent (e.g., if the proponent has not completed required consultations); or
- if the proponent is required to provide additional information.²⁰

When the proponent is required to provide additional information, the 180 day period will normally be suspended only if the required information is substantial enough that the assessment cannot effectively proceed until the information is submitted. If additional information is required on a particular issue, but the assessment can still effectively proceed on all other aspects of the review, the review period would not normally be suspended.

¹⁷ Section 24(3) of the Act; Section 5(a) of the Prescribed Time Limits Regulation.

¹⁸ Section 16(5) of the Act.

¹⁹ Section 24(1)(b) of the Act; Section 3 of the Prescribed Time Limits Regulation.

²⁰ Section 24(2) of the Act.

The maximum time that the review of the application may be suspended is three years from the date of suspension, unless a different suspension period is provided for in the procedural order. If the review of the application is suspended on more than one occasion, the total time of all suspensions may not exceed three years, unless a different suspension period is provided for in the procedural order.²¹

The time limit for review of the application may also be extended beyond 180 days if required to complete an effective assessment.²² For example, if a significant supplement or addendum to the application is submitted, the review period may be extended to allow for an extended or additional public comment period.

If the proponent is requested by the Environmental Assessment Office to submit additional information in relation to the application during the course of the assessment, the proponent must provide that information within three years of the date of the request.²³

5.1.7 Step 7: Preparing the Assessment Report and Referring the Application to Ministers

Key Question: What are the findings of the assessment?

At the end of the application review, and within the 180 day time limit, the Environmental Assessment Office prepares an assessment report, which documents the findings of the environmental assessment, including the issues raised in relation to the project and how these issues have been or could be addressed.²⁴ The Environmental Assessment Office may also prepare recommendations to the ministers and reasons for the recommendations.²⁵

The assessment report and application are referred to three ministers: the Minister of Sustainable Resource Management; the Minister of Water, Land and Air Protection; and the minister designated as responsible for that category of reviewable project.²⁶ A list of responsible ministers is provided in Appendix 6. For some water management projects and waste disposal projects, the Minister of Water, Lands and Air Protection is the responsible minister. In those cases, the referral would be made to only two ministers.

²¹ Section 6 of the Prescribed Time Limits Regulation.

²² Section 24(4) of the Act.

²³ Section 24(3) of the Act; Section 5(a) of the Prescribed Time Limits Regulation.

²⁴ Section 17(2)(a) of the Act.

²⁵ Sections 17(2)(b) and 17(2)(c) of the Act.

²⁶ Section 17(1) of the Act. The responsible minister for each project category is established by Order in Council (see Appendix 7).

5.1.8 Step 8: Deciding to Issue/Not Issue an Environmental Assessment Certificate

Key Question: Should an environmental assessment certificate be issued for this project?

After referral of the application and assessment report, ministers have 45 days to decide whether or not to issue an environmental assessment certificate, or whether to require further assessment.²⁷ In making this decision, the ministers consider the information provided by the Environmental Assessment Office and any other matters they consider relevant.²⁸ The ministers must also consider whether the Province has fulfilled its legal obligations to First Nations.

If ministers decide to grant an environmental assessment certificate for the project, the Environmental Assessment Office delivers the decision and the certificate to the proponent²⁹, notifies government agencies and First Nations involved in the review, and makes the decision and certificate available through the Project Information Centre website. The certificate usually contains project-specific conditions that the proponent must adhere to in proceeding with the project. Further information on post-certification requirements and activities is provided in Section 5.4. The certificate must specify a deadline, between three and five years after the date the certificate is issued, by which the project must be substantially started.³⁰

5.2 THE PROCEDURAL ORDER AND TERMS OF REFERENCE FOR AN APPLICATION

This section builds on the information in Sections 5.1.3 (Step 3) and 5.1.4 (Step 4), providing more detail on the main elements that may be included in a procedural order, and on the terms of reference for an application.

In general, when matters related to the environmental assessment can be specified at the time the procedural order is issued, they will be included in the original order. However, because the procedural order is issued at the early stage of the assessment, in most cases there will not yet be sufficient information available to specify all the assessment requirements. Therefore, the procedural order is more likely to set out procedures, including an issue identification and scoping process, to determine the potential effects to be assessed, the information to be provided by the proponent in the application, and consultation requirements. The issue identification and scoping process will enable the development of terms of reference for the application, which will contain the detailed information and consultation requirements that the proponent must satisfy in its application.

²⁷ Sections 17(3)(c) and 24(1)(c) of the Act; Section 4 of the Prescribed Time Limits Regulation.

²⁸ Sections 17(3)(a) and 17(3)(b) of the Act.

²⁹ Section 17(4) of the Act.

³⁰ Section 18(1) of the Act.

The issue identification and scoping process will involve the Environmental Assessment Office and the proponent, in consultation with government agencies, First Nations, the public and other parties as appropriate, and will typically include some assessment of baseline conditions. Consultation with First Nations and the public may contribute to determining the need for baseline studies. In most cases, the proponent prepares draft terms of reference. The Environmental Assessment Office then coordinates a review of the draft, which may include a formal public comment period in some cases. Following review of the draft, the proponent makes revisions as required. The final terms of reference must be approved by the Environmental Assessment Office.

It is possible that, despite best efforts, potential effects and information requirements are identified after the terms of reference for the application have been approved. This could be before or after the application has been submitted. If necessary, the procedural order could be varied or terms of reference amended to ensure that the assessment of effects is complete.³¹

Project Scope

The project scope refers to the physical facilities and activities that comprise the project for purposes of the assessment. This usually includes all dedicated on-site and off-site facilities needed for the project to function, as well as the activities associated with operating those facilities.

The project scope also identifies which of the project's development phases – construction, operations, modification, dismantling and abandonment – are to be included in the assessment. For most projects this is specified in the Reviewable Projects Regulation. In general, all phases are included for projects with a definite life expectancy (e.g., mines), whereas for projects with an indeterminate life expectancy (e.g., pipelines), the assessment does not normally include dismantling and abandonment.

Usually, the project scope is determined early and specified in the procedural order. In that case, if the proponent later modifies the project, it may be necessary to vary the original order to revise the scope of project. However, if project alternatives are still under consideration, the procedural order would not specify the project scope, but might address the procedure to be used to select the preferred alternative. In this case, the terms of reference for the application would include the requirement to report on the procedure used for selection of the preferred alternative.

Consultation

The procedural order may identify some of the persons or organizations to be consulted during the assessment. However, it is not usually possible to identify all the parties who will need to be consulted at the time the procedural order is issued. Consequently, the order may stipulate known parties, but in most cases will provide for the proponent and the Environmental Assessment Office to identify the parties to be consulted as the assessment proceeds. Parties to be consulted may include the general public, stakeholder groups, First Nations, government agencies or neighbouring jurisdictions.

³¹ Section 13 of the Act

The procedural order usually contains provisions related to notifying parties about key steps in the assessment, access to information, opportunities to be consulted and opportunities to comment. The order may set out some of these provisions, while providing for other matters to be negotiated as the assessment progresses.

Comment periods, during which review participants may submit comments on the project and on key documentation, are established in the procedural order to ensure all parties have a guaranteed opportunity to express their views during the course of the assessment. There will usually be at least one formal public comment period of between 30 and 75 days during the course of an assessment.³² This comment period is usually held during the review of the proponent's application (Step 6). An additional public comment period is also held, usually on the draft terms of reference, unless the Environmental Assessment Office is satisfied that an additional comment period is either impracticable or unnecessary.³³ The duration of this and any additional public comment periods is established on a case-by-case basis. Further information on public consultation during an environmental assessment and the Public Consultation Policy Regulation is provided in Section 5.3.

Time Limits

The procedural order may stipulate time limits for activities in the assessment that are not otherwise covered by legislated time limits. Time limits may be set to provide greater certainty for review parties with respect to review duration. Examples of the use of time limits include establishing the length of public comment periods and the time within which the proponent may respond to comments submitted on the application.

Information from Sources Other than the Proponent

While most information required for the assessment is provided by the proponent, primarily in the application, in some cases information may also be required from other sources. Such input is most likely to be sought during the later stages of an assessment, once the review of the application is underway, and is therefore unlikely to be included in the procedural order or terms of reference. For example, the Environmental Assessment Office may retain independent technical consultants or mediators to provide advice on specific issues. However, if it were to be known at an early stage that information would be required from sources other than the proponent, this could be addressed in the procedural order or terms of reference.

³² Section 7(1) of the Public Consultation Policy Regulation.

³³ Section 7(2) of the Public Consultation Regulation.

Class Assessments

The *Environmental Assessment Act* provides for the use of partial or full class assessments to address the potential adverse effects of specified categories of reviewable projects.³⁴ Partial class assessments would cover certain specified effects and could replace the need for a proponent to provide, in its application, information on these effects. Full class assessments would cover all significant potential effects, and could replace all environmental assessment and certification requirements.

At the time this Guide was published, no class assessments had been established. However, should any partial class assessments be established in the future, the role of a partial class assessment in fulfilling the information requirements for the environmental assessment may be set out in the procedural order.³⁵ If a full class assessment applied, the project would not be the subject of a procedural order, as all assessment requirements would be specified in the provisions of the full class assessment.

Coordination with the Canadian Environmental Assessment Act

When a project is subject to the British Columbia *Environmental Assessment Act* and the *Canadian Environmental Assessment Act*, the Environmental Assessment Office works closely with the Canadian Environmental Assessment Agency and other federal agencies to ensure the legislated environmental assessment requirements of both levels of government are met and integrated through a coordinated process. In accordance with the 2002 interim extension to the bilateral agreement on environmental assessment cooperation (see Section 3.2), the two levels of government will develop a project-specific workplan that sets out the process, information requirements and analysis necessary to meet the requirements of each party. Both governments will work with the proponent during development of the terms of reference and preparation of the application, and federal agencies will provide input to the assessment report, to ensure both federal and provincial reporting requirements are fulfilled.

The procedural order establishes how the assessment process will be conducted and addresses such matters as project scope, consultation requirements, time limits, and information requirements.

³⁴ Section 20 of the Act.

³⁵ Section 11(2)(d) of the Act.

5.3 Public Consultation

5.3.1 General

Environmental assessment is a balanced and open process, which includes participation by all interested members of the public, including individuals, community organizations, and special interest groups (e.g., business, environmental, outdoor recreation, trade, residents' and women's groups). While there are separate obligations related to First Nation consultation (see Section 3.3), aboriginal people may also participate as part of the broader public. Public consultation during an environmental assessment contributes to the gathering and sharing of all relevant information related to the potential effects of a proposed project. This may include not only environmental effects, but also economic, social, heritage and health effects, where these arise.

Emphasis is placed on beginning consultations early. Proponents are encouraged to identify potentially affected members of the public and undertake consultation activities as early as possible to facilitate effective issue identification. This leads to more complete issue identification at an early enough stage to influence project planning decisions, before irreversible project location or design decisions are made. General information on consultation methods that may be used during an environmental assessment is provided in Appendix 3.

Environmental assessment is a balanced and open process that encourages early involvement by interested members of the public to help identify all the relevant issues.

The Environmental Assessment Act includes provisions for public notification, access to information and consultation. The Public Consultation Policy Regulation (see Section 5.3.2) sets out general policies with respect to public consultation that the Environmental Assessment Office must take into account when determining the consultation requirements for an environmental assessment. Additional consultation requirements and opportunities for participation are determined on a project-by-project basis, to best suit the characteristics of the project and the communities and interests, which may be affected.

In general, each assessment includes:

- information sharing: providing information to the public on the project, the assessment process, the consultation process, and the requirements placed on the proponent;
- notification: providing public notice about key steps in an assessment, such as when an application is accepted for review;
- participation and consultation: providing opportunities for the public to identify interests and potential impacts related to the project, and to submit comments;
- issue resolution: ensuring public issues that are relevant to the assessment are addressed, which may include opportunities for the public to participate in issue resolution; and

• reporting of public issues: ensuring any reports on public consultation activities, as well as comments submitted by the public, are taken into consideration in preparing the assessment report and in developing any recommendations.

At the end of each assessment, public issues are reported on, so they can be taken into consideration by ministers in making their decision on whether or not to certify the project.

Environmental assessments include public notice, access to information, public consultation, public comment periods, and consideration of and reporting on public issues.

5.3.2 Public Consultation Policy Regulation

The Public Consultation Policy Regulation sets out general policies with respect to public consultation that must be taken into account in every assessment that is led and managed by the Environmental Assessment Office.³⁶ A copy of the regulation is provided in Appendix 5. Policies set out in the regulation include that:

- the proponent is required to conduct a public consultation program that is acceptable to the Environmental Assessment Office³⁷;
- the proponent is required to present, in its application for an environmental assessment certificate, a report on consultation activities undertaken in relation to the project, and a proposed consultation plan to be carried out during review of the application³⁸;
- within the 30 day period during which the Environmental Assessment Office determines whether the proponent's application can be accepted for review, the Environmental Assessment Office is to make a written assessment of the adequacy of any public consultation measures the proponent has undertaken or proposed in relation to its application³⁹;
- the Environmental Assessment Office's assessment of the proponent's public consultation program is to specify any further public consultation activities considered necessary to ensure adequate public consultation, whether those activities are to be carried out by the proponent or the Environmental Assessment Office, and a time limit within which the additional activities are to be carried out⁴⁰;

³⁶ Refers to environmental assessments led and managed by the Environmental Assessment Office under section 10(1)(c) of the Act.

³⁷ Section 4(1)(a) of the Public Consultation Policy Regulation.

³⁸ Section 4(1)(b) of the Public Consultation Policy Regulation.

³⁹ Sections 4(2) of the Public Consultation Policy Regulation.

⁴⁰ Section 4(3) of the Public Consultation Policy Regulation.

Environmental Assessment Process

- public notice is given, by means of newspaper advertisements, open letters or other methods satisfactory to the Environmental Assessment Office, concerning the availability of the proponent's application for review, the duration and purpose of any formal public comment periods, and any open house or public meeting being held in relation to the assessment⁴¹ (the notice is given at least seven days before the start of a formal comment period or before an open house or public meeting⁴²);
- the Project Information Centre is required to provide public access to specified documentation related to the assessment⁴³ (further information about the Project Information Centre and the documentation that is made available to the public is provided in Section 7); and
- there is at least one formal public comment period during the assessment of between 30 and 75 days⁴⁴, and at least one additional public comment period unless the Environmental Assessment Office is satisfied that it would be either impracticable or unnecessary.⁴⁵

The Public Consultation Policy Regulation sets out general policies related to such matters as the proponent's consultation program, public notice about the assessment, public comment periods, and documents to be available through the Project Information Centre.

⁴¹ Section 5(1) and 5(2) of the Public Consultation Policy Regulation.

⁴² Section 5(3) of the Public Consultation Policy Regulation

⁴³ Section 6 of the Public Consultation Policy Regulation.

⁴⁴ Section 7(1) of the Public Consultation Policy Regulation.

⁴⁵ Section 7(2) of the Public Consultation Policy Regulation

5.4 Post-Certification

5.4.1 Transition to Post-Certification

The environmental assessment focuses on those issues that are relevant to whether or not a project should be certified by ministers ("strategic issues"). Other issues raised during the assessment which will require attention before the project can proceed, but not at this level of decision-making, are addressed during the post-certification stage. Post-certification issues may be addressed either through regulatory permitting procedures or, if non-statutory in nature, by other means that may be established in conditions of the environmental assessment certificate.

During an environmental assessment, procedures are put in place to ensure there is a smooth transition to post-certification permitting and other follow-up activities. For example, a lead ministry may assume responsibility to act as the primary point of contact for the proponent, and for coordinating permitting activities.

5.4.2 Concurrent Approval

A proponent may request that some applications for provincial approvals be processed concurrently with the environmental assessment review. Frovisions related to concurrent approval are set out in the Concurrent Approval Regulation (see Appendix 5 for a copy of the regulation). With concurrent approval, applications for statutory authorizations such as licenses, permits and certificates are reviewed while the environmental assessment process is ongoing. However, no authorizations may be issued until the assessment is completed and an environmental assessment certificate is issued.

To be eligible for concurrent review, the approval must be required to construct, operate, modify, dismantle, abandon or otherwise undertake part or all of the reviewable project that is the subject of the environmental assessment.⁴⁸ Any such authorization is eligible for concurrent review except a Certificate of Public Convenience and Necessity (CPCN) under the *Utilities Commission Act*.⁴⁹

⁴⁶ Section 23(1) of the Act.

⁴⁷ Section 9 of the Act.

⁴⁸ Sections 1 and 3 of the Concurrent Approval Regulation.

⁴⁹ Section 3(2)(a) of the Concurrent Approval Regulation.

The Environmental Assessment Office may specify in the procedural order, or in any variation to the order, the deadline by which the proponent must apply for concurrent review.⁵⁰ If no other earlier deadline is so specified, the proponent must apply for concurrent review of approvals no later than either:

- seven days after the date on which the Environmental Assessment Office notified the proponent of acceptance of the application for an environmental assessment certificate, if no additional copies of the accepted application were required;⁵¹ or
- if additional copies of the accepted application for an environmental assessment certificate were required, the date on which the Environmental Assessment Office receives those copies.⁵²

When the concurrent approval provisions apply, the responsible regulatory authority reviews the approval application expeditiously, and must notify the proponent and the Environmental Assessment Office in writing, to the extent practicable at that stage of review, of any additional information requirements. The responsible regulatory authority must provide such notice within 75 days of the date that the Environmental Assessment Office notified the proponent of acceptance of the application for an environmental assessment certificate.⁵³

If an environmental assessment certificate is issued, the regulatory authority must, within 60 days after issuance of the certificate, either:

- issue the approval;
- refuse to issue the approval, indicating the reasons for the refusal; or
- specify a later date on which the proponent may expect a decision, indicating the reasons for the postponement.⁵⁴

Regulatory authorities responsible for issuing the approvals will be involved in the environmental assessment. Therefore, if there is doubt about whether or not an approval will be issued, that information would be included in the assessment report and taken into consideration in the ministers' decision.

⁵⁰ Section 5(a) of the Concurrent Approval Regulation.

⁵¹ Section 5(b) of the Concurrent Approval Regulation.

⁵² Section 5(c) of the Concurrent Approval Regulation.In deciding whether or not to issue an approval, the regulatory agency must also consider the Province's legal obligations to First Nations, including the duty to consult.

⁵³ Section 8(1) of the Concurrent Approval Regulation.

⁵⁴ Section 8(3) of the Concurrent Approval Regulation.

Proponents have the option of requesting that other provincial approvals (such as permits or licenses) required for the project be reviewed concurrently with the environmental assessment. This can result in more timely issuance of those approvals.

5.4.3 Post-Certification Consultation

Once an environmental assessment certificate is issued, the environmental assessment process is concluded. However, post-certification consultation may be included as a condition of an environmental assessment certificate, and the proponent may be required to report on the results of those consultations. Further consultation may also be required in relation to post-certification approvals.

Provincial agencies responsible for post-certification approvals review the information collected and consultation during the environmental assessment to determine whether the environmental assessment process fully addressed the consultation requirements. Agencies may decide there is no need for proponents to undertake further consultation, or that additional consultation is required on specific issues related to that approval. Some level of notification or consultation may be required under the approval statute, regardless of consultation that occurred during the environmental assessment.

The Environmental Assessment Office encourages proponents to maintain the contacts established during the environmental assessment, in order to keep First Nations, local residents and other concerned citizens apprised of project activities. A post-certification liaison committee may be established to ensure that the transition from planning to construction and project implementation is managed effectively. Such a committee could also provide a forum to ensure that ongoing community and First Nation interests are considered as the project proceeds.

5.4.4 Monitoring, Evaluation and Reporting

The environmental assessment certificate may contain requirements for:

- monitoring the effects of the project;
- comparing the anticipated effects of the project, as set out in the application, with the actual effects;
- evaluating the adequacy of the measures taken to prevent or mitigate any adverse effects; and
- periodically reporting the results of the above activities to the Environmental Assessment Office or another agency.

Monitoring plans may specify the key parameters that need to be monitored, sampling requirements (e.g., frequency) and analytical procedures. Impact management procedures and/or contingency plans to respond to issues and unforeseen impacts during the construction or operational phases may also form part of the monitoring plan. Appropriate arrangements for liaison between the proponent, contractors, government, First Nations and the public may be a necessary part of monitoring programs.

Evaluation generally involves assessing the project's compliance with the certification terms and conditions. It may also include evaluating the actual effectiveness of approved mitigation measures through a monitoring program. This may involve field inspection and appraisal by the appropriate regulatory authorities, and adjusting the mitigation requirements to more effectively manage impacts.

Project certification may include ongoing requirements for First Nation and public consultation, and for ongoing monitoring and reporting on project effects.

5.4.5 Compliance and Enforcement

Regulatory agencies have several options available to ensure project compliance. In addition to agency requirements, the *Environmental Assessment Act* prohibits:

- developing a reviewable project without an environmental assessment certificate⁵⁵;
- providing information that is false or misleading⁵⁶; and
- developing projects contrary to the terms of the environmental assessment certificate.⁵⁷

Sanctions and penalties for these prohibited activities include fines of up to \$200,000 and imprisonment for up to 12 months.⁵⁸

⁵⁵ Section 8(1) of the Act.

⁵⁶ Section 41(2)(c) of the Act.

⁵⁷ Sections 8(2) and 34 of the Act.

⁵⁸ Section 43 of the Act.

6. Special Circumstances

6.1 WHEN AN ENVIRONMENTAL ASSESSMENT MAY NOT BE REQUIRED

As explained in Section 5.1.1, there are three situations in which a project may be considered reviewable under the *Environmental Assessment Act*:

- 1) it falls within a category of project that is included in the Reviewable Projects Regulation and meets or exceeds the prescribed thresholds;
- 2) the Minister of Sustainable Resource Management (the minister) designates it as reviewable; or
- 3) at the request of the proponent, the Environmental Assessment Office designates it as reviewable.

If the project has been designated reviewable by the minister (situation #2), or if it has been designated reviewable by the Environmental Assessment Office following a request from the proponent (situation #3), an environmental assessment will always be required.

When the project is reviewable because it is included in the Reviewable Projects Regulation (situation #1), an environmental assessment will be required in nearly all cases. However, the Environmental Assessment Office has the option to waive a project out of the process without undertaking an environmental assessment under the Act, if the Environmental Assessment Office is satisfied that the project will not result in any significant adverse effects, when practical impact management measures are taken into account. ⁵⁹ In such cases, the requirement to obtain an environmental assessment certificate would be waived.

The Environmental Assessment Office considers the waiver option only in rare cases where it can readily be determined, without the need for detailed analysis and/or further study or information gathering, that the potential for significant adverse effects is minimal, taking into consideration best management practices or readily available mitigation options. The waiver power is not considered an option for most reviewable projects for the following two reasons.

The test in the legislation is strict — to issue a waiver order, the Environmental Assessment Office
must be satisfied that there is no potential for significant adverse effects, taking into account available
mitigation measures.

⁵⁹ Section 10(1)(b) of the Act.

2) The Reviewable Projects Regulation differs little from the regulation of the same name under the previous *Environmental Assessment Act*. That regulation was refined through a series of amendments after it was first enacted on June 30, 1995. As a result, there is a high degree of confidence that it includes only those projects that have some potential for significant adverse effects, and that warrant an environmental assessment.

The limited circumstances in which a waiver could be considered include the following.

- 1) The primary purpose of the project is to implement a required impact management strategy, either as a new undertaking or as a change to an existing project. This situation is most likely to occur when a project has been assessed under another credible environmental assessment process, such as under the Canadian Environmental Assessment Act, and that process requires a mitigation measure which takes the form of a project or activity that is reviewable under the provincial Environmental Assessment Act (e.g., construction of additional water storage at a dam to assure minimum flows for fish). If the other environmental assessment process included an assessment of the potential adverse effects associated with the mitigation measure, the Environmental Assessment Office may have a high degree of confidence that the mitigation measure will have no significant adverse effects. Based on past experience, this situation should arise only infrequently.
- 2) The project is a relatively minor change to a "grand-parented" project. A grand-parented project is one which, although reviewable in size based on the criteria set out in the Reviewable Projects Regulation, is exempted from the application of the *Environmental Assessment Act* because either it was "substantially started" on the date the Act came into effect, or it had been reviewed in detail and granted one or more key approvals before that date. It is possible that any new issues raised by minor amendments to a grand-parented project could be addressed satisfactorily by the same mitigation measures already being applied to the existing project, and that no additional environmental assessment is required to establish this. Based on past experience, this situation should arise only infrequently.
- 3) The project is of a type where management practices to address the primary impact concerns have been codified or standardized in regulations or rules of practice. It is unlikely that the types of major projects which are covered by the Reviewable Projects Regulation would be amenable to a management regime that could be completely codified. In a typical situation, the issues raised by larger-scale projects include site-specific issues, which require local assessment and project-specific impact management measures. Even if some aspects of a project could be managed using standardized rules of practice, there will typically be other strategic-level issues, which do not lend themselves to this approach, and would therefore require an environmental assessment.

⁶⁰ Section 51(1) and 51(2) of the Act; Transition Regulation.

If the Environmental Assessment Office waives a project out of the environmental assessment process, the waiver order may include conditions. For example, the proponent may be required to undertake specified consultation measures before proceeding with the project, or to provide specified information which would not otherwise be covered by regulatory requirements (e.g., regarding wildlife impacts) to a government agency.

In rare circumstances, the Environmental Assessment Office may waive the requirement for an environmental assessment when it can be readily determined that the potential for significant adverse effects is minimal, taking into account practical impact management measures.

6.2 MINISTER DETERMINES THE ASSESSMENT PROCESS

As noted in Section 5.1.2 (Step 2), in special circumstances the Environmental Assessment Office may refer a reviewable project to the Minister of Sustainable Resource Management to determine how the assessment will be conducted, including the scope of the assessment and the procedures and methods to be used.⁶¹ Examples of this may occur are when:

- an alternative forum for conducting the assessment, such as an independent commission of inquiry or quasi-judicial hearing panel, may be more appropriate than the normal Environmental Assessment Office-led process; or
- it would facilitate coordination and harmonization with the assessment procedures of another level of government (e.g., if the federal government were conducting a panel hearing under the *Canadian Environmental Assessment Act*).

The minister may appoint a commission, hearing panel, or any other person or body (including the Environmental Assessment Office) to conduct the environmental assessment.⁶² The minister may confer certain powers and protections on a commission or hearing panel, as set out in British Columbia's *Inquiry Act*, such as the power to summon witnesses.⁶³ The minister may set the assessment scope, procedures and methods to be used, or may delegate some or all of this responsibility to the party assigned to conduct the assessment.⁶⁴

⁶¹ Sections 10(1)(a) and 14 of the Act.

⁶² Section 14(3)(a) of the Act.

⁶³ Section 14(4) of the Act.

⁶⁴ Sections 14(1) and 14(3)(b) of the Act.

Special Circumstances

Because the minister has broad discretion to determine how an assessment is conducted, there is no typical process. Each assessment will be designed to meet the exceptional circumstances identified by the Environmental Assessment Office in referring the project to the minister. Therefore, additional information on how the assessment will be conducted in this situation is not included in this Guide. However, as in a typical assessment described in Section 5.1, on completion of the assessment, the commission, hearing panel or other party that has conducted the assessment prepares an assessment report. The assessment report, along with the application and any recommendation and reasons, is referred to the Minister of Sustainable Resource Management, the Minister of Water, Land and Air Protection and the responsible minister for a decision.⁶⁵ The ministers have 45 days to decide whether or not to issue an environmental assessment certificate.⁶⁶

In some situations, the Environmental Assessment Office may refer a project to the Minister of Sustainable Resource Management to determine how the assessment will be carried out. As appropriate, the minister may appoint a commission, hearing panel, or other person or body to conduct the assessment, depending on the circumstances.

⁶⁵ Sections 17(1) and 17(2) of the Act.

⁶⁶ Sections 17(3) and 24(1)(c) of the Act; Section 4 of the Prescribed Time Limits Regulation.

7. Access to Information: The Project Information Centre

The *Environmental Assessment Act* establishes a Project Information Centre to facilitate access to general information about the environmental assessment process, as well as specific information on individual project assessments.⁶⁷ The principal means of accessing the Project Information Centre is through the website (www.eao.gov.bc.ca). When a project is located in a region where Internet access is not adequate, hard (paper) copies of select documents may be housed in local public facilities, such as libraries or government agents' offices.

The Public Consultation Policy Regulation identifies documentation related to each environmental assessment that should normally be made available to the public.⁶⁸ This documentation includes:

- the information that is required in the proponent's application for an environmental assessment certificate (the terms of reference);
- the proponent's application and any supplementary information in final form submitted by the proponent;
- any public notices given during the environmental assessment;
- any orders issued by the Environmental Assessment Office or the Minister of Sustainable Resource Management;
- the assessment by the Environmental Assessment Office of the proponent's consultation program;
- comments received during a formal public comment period on the proponent's application, or on other information submitted by the proponent;
- proponent responses to comments received during a formal public comment period on the application, or on other information submitted by the proponent;
- the assessment report and any recommendations and reasons;
- the ministers' decision on issuing the environmental assessment certificate;
- the environmental assessment certificate; and
- documentation submitted to the Environmental Assessment Office by proponents in accordance with certification requirements to report on the status of compliance with certificate conditions.

⁶⁷ Section 25 of the Act.

⁶⁸ Section 6(1) of the Public Consultation Policy Regulation.

Access to Information

The assessment report and any recommendations and reasons are expected to be made available to the public within 45 days of the referral to ministers for a decision on issuance of a project approval certificate. ⁶⁹ All other documentation is expected to be made available within seven days of receipt by the Environmental Assessment Office. ⁷⁰

Information on the Project Information Centre website is updated on an ongoing basis. All parties with an interest in an environmental assessment are encouraged to visit the Project Information Centre website regularly to keep up to date on new information as it becomes available. Information on how to contact the Project Information Centre is provided below.

Project Information Centre

Website: www.eao.gov.bc.ca E-mail: eaoinfo@gems5.gov.bc.ca Phone: (250) 356-7441 (Victoria)

Toll-free calls through Enquiry BC at 1-800-663-7867 or

(604) 660-2421 (Vancouver) Fax: (250) 356-7440

The Project Information Centre website contains extensive information on environmental assessments. Visit the website regularly to keep up to date on new information.

⁶⁹ Section 6(2)(a) of the Public Consultation Policy Regulation.

⁷⁰ Section 6(2)(b) of the Public Consultation Policy Regulation.

APPENDIX 1: GLOSSARY OF TERMS

Act: British Columbia's Environmental Assessment Act, S.B.C. 2002, c. 43.

application: an application for an environmental assessment certificate that is filed by a project proponent.⁷¹

assessment report: a report prepared on completion of an environmental assessment which summarizes the procedures followed during, and the findings of, an assessment, and which is submitted to ministers.⁷² The assessment report is prepared by the party that conducted the assessment which may be the Environmental Assessment Office, a commission, a hearing panel or other person or body appointed by the minister.

baseline studies: information on relevant pre-existing environmental, economic, social, heritage and/or health conditions at the site of, or in the area surrounding, a proposed project, to enable a determination of actual project effects through comparisons before and after development.

class assessment: assessment of a specified category of reviewable project conducted in accordance with prescribed procedures approved by the Executive Director of the Environmental Assessment Office.⁷³ The assessment may be of specified potential adverse environmental, economic, heritage or health effects (partial class assessment), or all potential significant adverse environmental, economic, heritage or health effects (full class assessment).

environmental assessment: a project planning tool and information-gathering process which measures the potential impacts of proposed projects and identifies ways to avoid, mitigate or compensate for potential impacts. The term "environmental assessment" is often used interchangeably with other similar terms such as "environmental impact assessment" and/or "project assessment".

Environmental Assessment Office: the provincial body that is responsible for administration of the *Environmental Assessment Act* and regulations.⁷⁴

environmental assessment certificate: a certificate issued by ministers at the conclusion of an environmental assessment, representing an approval-in-principle level of endorsement by the Province, and allowing a proponent to obtain any other statutory authorizations necessary to carry out the reviewable project.⁷⁵

⁷¹ Sections 16(1) and 16(2) of the Act.

⁷² Section 17(2)(a) of the Act.

⁷³ Section 20 of the Act.

 $^{^{74}}$ Section 2 of the Act.

⁷⁵ Section 17(3)(c)(i) of the Act.

Executive Director: the government official appointed to head the Environmental Assessment Office and to oversee all aspects of its operations.⁷⁶

grandparented project: a project which, although reviewable in size based on the criteria set out in the Reviewable Projects Regulation, is exempted from the application of the *Environmental Assessment Act* because either it was "substantially started" on the date the Act came into effect, or it had been reviewed in detail and granted one or more key approvals before the Act came into force.

issue: an identified concern or other matter related to the potential effects of a proposed project, or related to the environmental assessment process.

issue tracking document: a document prepared by the Environmental Assessment Office to keep track of issues raised during an environmental assessment and how they are being/will be addressed.

mitigation: measures implemented to control, reduce or eliminate a potential adverse impact of a project, including restorative measures.

minister: the Minister of Sustainable Resource Management.

ministers: the Minister of Sustainable Resource Management, the Minister of Water, Land and Air Protection and the responsible minister.⁷⁷

post-certification issue: an issue which is addressed following issuance of an environmental assessment certificate, either through review of a permit or other approval application or, if non-statutory in nature, by other means which may be specified in the certificate.

procedural order: an order issued by the Environmental Assessment Office, the minister, a commission member, a hearing panel or another person appointed by the minister to conduct an environmental assessment, which establishes the scope of the environmental assessment and the methods and procedures to be used.⁷⁸

proponent: any person or organization proposing to undertake a reviewable project in British Columbia, including the government of Canada, the government of British Columbia, a First Nation, a company, a municipality, a regional district, another province or another jurisdiction.⁷⁹

⁷⁶ Section 3 of the Act.

⁷⁷ Section 1 of the Act.

⁷⁸ Section 11(1) and 14(1) of the Act.

⁷⁹ Section 1 of the Act.

responsible minister: the minister designated by Cabinet to share decision-making authority with the Minister of Sustainable Resource Management and the Minister of Water, Land and Air Protection with respect to whether or not to grant an environmental assessment certificate. ⁸⁰ The responsible minister is usually the minister with key programming or regulatory responsibility for the project sector within which a reviewable project falls.

⁸⁰ Section 1 of the Act.

Appendix 2: Provincial Policy for Consultation with First Nations (2002): Principles and Stages of Consultation

CONSULTATION PRINCIPLES

While the nature and scope of consultation may vary, the fundamental principles of consultation are the same for all aboriginal interests contemplated by the Provincial Consultation Policy (2002). Consultation efforts should be made diligently and meaningfully, and with the intention of fully considering aboriginal interests. Where a sound claim of aboriginal rights and/or title is made out, consultation efforts must attempt to address and/or accommodate a First Nation's concerns relating to the impact of proposed activities on the aboriginal interests that it identifies or of which the Crown is otherwise aware. In practical terms, this means the quality of consultation is of primary importance, and the soundness of the claim will dictate the scope and depth of required consultation.

The following principles set out in the policy apply to all consultation efforts, and should be followed throughout the entire process of consultation:

- the onus to prove aboriginal rights or title lies with the First Nation claiming the existence of those rights or title;
- through consultation, the Province must consider aboriginal interests prior to making land or resource decisions concerning Crown land activities that are likely to affect those interests and attempt to address and/or accommodate concerns that are raised, provided that those concerns relate directly to aboriginal interests that are sound and to impacts of Crown decisions on those interests;
- consultation should be carried out as early as possible in the decision-making process;
- the Crown must ensure the adequacy of any consultation activities it undertakes or that are undertaken on its behalf;
- decision-makers should take steps to ensure consultation activities involve representatives from all potentially affected First Nations;
- consultation processes need to be effective and timely, carried out in good faith, and, wherever possible, meet applicable legislative timelines;
- the consultation process should inform decision-makers of the possibility that the decision(s) that they make on proposed activities may result in an infringement of aboriginal interests. The question of whether infringement appears likely and whether efforts to attempt to address and/or reach workable accommodations of aboriginal interests are likely to be adequate to justify any such infringement, should be considered by decision makers;
- consultation on activities that involve a number of agencies should be integrated wherever possible to ensure maximum clarity and efficiency;
- consultation processes should be clearly defined to the First Nations in question;

- consultation processes should illustrate how information provided by a First Nation is or is to be considered in decision making processes and planning;
- consultation processes can be carried out in a variety of ways, depending on the circumstances and nature of the proposed activity. Methods for meaningful consultation should be selected in relation to the nature of the proposed activity, the requests of the First Nation in question (where those are reasonable), the soundness of the aboriginal interests that are at issue, and other relevant factors; and
- the consultation process will inform the First Nation(s) in question of the potential effect of a proposed activity. Information should be provided in a manageable and understandable format, with adequate time for review, wherever possible within the context of time limits imposed for the making of statutory decisions.
- all letters, meetings, telephone calls, site visits, and other efforts by the Crown to obtain information about aboriginal interests prior to making land and resource use decisions, are elements of the consultation process and records of them should be kept.

STAGES OF CONSULTATION

The following is a summary of the stages of consultation described in the Provincial Consultation Policy (2002).

- 1) **conduct pre-consultation assessment:** Clearly define the First Nations in question and ensure consultation involves all potentially affected First Nations.
- 2) initiate consultation: Identify and assess soundness of aboriginal interests.
- 3) consider the impact of the decision on aboriginal interests: Decision-makers must consider the possibility that the decision(s) may result in an infringement of aboriginal interests.
- 4) consider whether any likely infringement of aboriginal interests could be justified: Aboriginal interests may be proven subsequently to be existing aboriginal rights and/or title. Therefore, where there is a sound claim to aboriginal rights or title, consultation should inform decision-makers of the likelihood of infringement, efforts made to address issues and/or reach workable accommodations, and any justification for infringement.
- 5) look for opportunities to address and/or reach workable accommodations of aboriginal interests and/or negotiate resolution: In doing this, agencies will consider the potential for setting precedents that may impact other provincial ministries or agencies.

For more information please consult the Supplementary Guide to First Nations.

Appendix 3: General Information on Consultation Methods

This appendix provides general information on some consultation methods that may be used during an environmental assessment. The methods are divided into two general categories: methods for information dissemination and methods for direct consultation.

METHODS FOR INFORMATION DISTRIBUTION

Publications

The proponent or the Environmental Assessment Office may produce publications about a project undergoing assessment, the environmental assessment process for the project, or the environmental assessment process in general. Publications may range from lengthy documents on specific aspects of a project, to general information brochures, fact sheets or newsletters. They may serve a number of purposes:

- present facts, discuss issues, and document alternative means of implementing a project;
- provide the results of studies; and/or
- provide status reports and updates on the assessment.

In addition, publications may be used to solicit feedback, for example by incorporating a return section for comments.

Media

Regular press from the proponent releases describing progress with respect to studies, impact assessment reports, and public consultation may be appropriate, especially in the communities that will be most affected

News releases for local radio and print media may be used in relation to public information sessions. These may be used to advertise and inform before the session, and to provide follow-up after the session. Media interviews given by a spokesperson for the proponent before a public information session may also be an effective way to inform the public and generate interest in attending the session.

Internet

The Environmental Assessment Office maintains a Project Information Centre website (www.eao.gov.bc.ca) that provides general information about the environmental assessment process, as well as specific information on individual project assessments. The website provides access to project-related documents such as the application for an environmental assessment certificate, comments submitted during the assessment, and notices about the assessment. This is a main source of up-to-date information for all interested parties.

The proponent may also establish a project website to post information about the proposal, including recent press releases and the results of studies being conducted in relation to a project. An interactive website may be used by proponents for surveys and questionnaires, and to invite comments on the proposal. It could also link to the Environmental Assessment Office website.

Members of the public with an interest in a project may also use the Internet to provide information and to organize their activities. Concerned groups may use a website to provide advice on how to get involved and provide links to the Environmental Assessment Office or proponent websites.

METHODS FOR DIRECT CONSULTATION

Open Houses

Purpose

• Provide an informal setting for people to drop in to obtain information at their leisure, for the proponent to provide information about the project and receive feedback, and for the Environmental Assessment Office to provide information on the process.

Format

• Typically, an open house consists of a display complemented by handout materials. Representatives of the proponent, and possibly the Environmental Assessment Office, are available to meet with people and answer questions one-on-one. Attendees may be asked to complete a questionnaire before departing or to submit it by mail.

Considerations

- Often used as a lead-in for another activity (such as a public meeting), or as a follow-up to previous activities (such as release of information).
- Do not necessarily lead to a representative understanding of the concerns of the larger community or of specific groups, though may provide a good understanding of the views of some people.
- May be useful to have an attendance/comment sheet for follow-up or to identify contacts for future consultation activities.
- Sensitive to people's schedules.

- Allows people to peruse presentation materials at their own pace and to ask questions that they might not want to ask at a public meeting.
- Allows for response to questions in considerable detail and/or to make arrangements for follow-up.

Public Meetings

Purpose

• Provide an opportunity to make a formal presentation to the public and for the public to obtain answers to questions and provide feedback. Usually involve the proponent as well as the Environmental Assessment Office and/or relevant government agencies.

Format

- Follows a set agenda.
- Sometimes chaired or facilitated by a neutral party.

Considerations

- Can accommodate a large number of people.
- May not be an effective forum for conveying very detailed or technical information, or for obtaining an in-depth and representative understanding of the concerns and views of a particular group.
- Need to chair effectively so that a good cross-section of the audience can ask questions and give feedback

Site Visits

Purpose

• Provide an opportunity for people to visit a particular development site in order to obtain first-hand knowledge about a project or a specific issue of concern.

Format

- Usually proponent representatives meet with invited participants to provide a verbal orientation to the site, a review of the development proposal, and a tour.
- The proponent may wish to provide handouts with more detailed background data or information.

Considerations

- Can be an appropriate means of introducing the project to government staff, First Nations or the public, and for increasing knowledge about the project and the proponent.
- Allows for a direct and immediate exchange of information between the proponent and participants.
- May not be possible to accommodate a large number of people.
- Can provide ideas for future problem-solving activities, but is not, by itself, suitable for building consensus or making decisions.
- Proponent representatives hosting the visit should have good communication skills, particularly if the project is controversial.

• Access to the facilities and public safety concerns should be considered.

Workshops

Purpose

• Provide a structured forum where one or more small groups of people work together on a common problem or task. The goals can include achieving consensus on issues, approaches and/or solutions.

Format

- Most effective when run by neutral professional facilitator(s).
- Plenary sessions should introduce and conclude a workshop.
- A round-table, or hollow square set-up, works best for group discussion.

Considerations

- A useful approach for problem-solving and building consensus.
- It is important for participants to have a clear understanding of what is to be accomplished during a workshop, so workshop expectations should be clarified at the beginning.
- For this technique to be successful, participants need to be committed to achieving the goals of the workshop.
- Facilitators need to be prepared to work through disagreement/confrontation between stakeholder groups.
- Providing participants with material prior to the meeting can enhance the effectiveness of the session.
 An information package distributed well in advance of the meeting can facilitate pre-meeting preparation.

Focus Group Sessions

Purpose

• A meeting of invited participants designed to gauge the probable response of one or more groups to a proposed project. Participants are specifically selected to represent particular groups or stakeholder interests

Format

• Normally run by professional facilitators, a focus group can last from a few hours to a full day. Participants are presented with one or more "project options" and asked to provide their reactions to the material. The facilitators question the participants to find out more about the nature and intensity of their views, and also the substance of any recommendations that they would make.

Considerations

A technique for gaining a detailed understanding of people's perspectives, values, and concerns.
 Focus groups are particularly useful when preliminary ideas have already been developed and need to be tested.

- Provides information and ideas, which can be used in other consultation activities, such as public meetings and workshops.
- Is not a technique for providing information to the general public, nor is it a forum to respond directly to questions, build consensus or make decisions.

Invited Presentations to Stakeholder Groups

Purpose

• An opportunity to provide information and address the questions of a specific audience.

Format

• Proponent representative(s) delivers a presentation of a specified length on specific topics. This is usually followed by a question and answer session.

Considerations

- It is important to be clear on the expectations for the presentation (e.g., scope, level of detail, issues to be covered) and the audience to whom the presentation will be given, so that the material and style of presentation can be tailored accordingly.
- Where the presentation is part of a larger agenda or meeting, the presenter should obtain clarification of his/her role in the session, beyond the presentation itself.
- While the primary focus is on providing information, the session may also enable the presenter to gain a better understanding of the concerns and issues of the audience.

APPENDIX 4:

Environmental Assessment Act

APPENDIX 5: REGULATIONS

REVIEWABLE PROJECTS REGULATION
CONCURRENT APPROVAL REGULATION
PRESCRIBED TIME LIMITS REGULATION
PUBLIC CONSULTATION POLICY REGULATION
TRANSITION REGULATION

APPENDIX 6: LIST OF RESPONSIBLE MINISTERS

Environmental assessments result in a ministerial-level decision on whether to issue an environmental assessment certificate. The ministers who make this decision are the Minister of Sustainable Resource Management, the Minister of Water, Land and Air Protection and the "responsible minister" for that particular type of project. This appendix provides the list of responsible ministers for each category of reviewable project.

CATEGORY OF REVIEWABLE PROJECT	RESPONSIBLE MINISTER
Industrial Projects	Minister of Competition, Science and Enterprise
Mine Projects	Minister of Energy and Mines
Energy Projects	Minister of Energy and Mines
Water Management Projects that raise significant local community issues	Minister of Community, Aboriginal and Women's Services
Water Management Projects other than those that raise significant local community issues	Minister of Water, Land and Air Protection
Waste Disposal Projects that raise significant local community issues	Minister of Community, Aboriginal and Women's Services
Waste Disposal Projects other than those that raise significant local community issues	Minister of Water, Land and Air Protection
Food Processing Projects	Minister of Agriculture, Food and Fisheries
Transportation Projects when the Ministry of Transportation is not the proponent	Minister of Transportation
Transportation Projects when the Ministry of Transportation is the proponent	Minister of Community, Aboriginal and Women's Services
Tourist Destination Resort Projects	Minister of Competition, Science and Enterprise

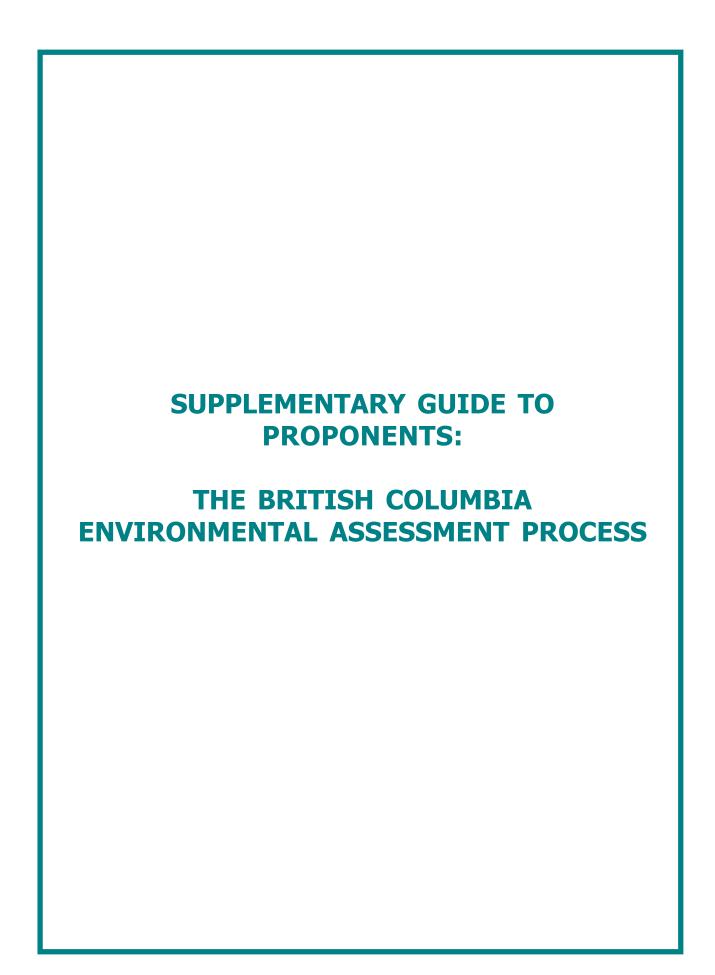


TABLE OF CONTENTS

1. Introduction	1
1.1 General	1
1.2 Purpose of Environmental Assessment	1
1.3 Requirement to Consult First Nations	
1.4 Requirement to Consult the Public	
1.5 Coordination with the Canadian Environmental Assessment Act	
2. The Environmental Assessment	4
2.1 Step 1: Determining if the Environmental Assessment Act Applies	6
2.1.1 Project is Included in the Reviewable Projects Regulation	6
2.1.2 Minister Designates the Project as Reviewable	6
2.1.3 Proponent Applies to Have a Project Designated Reviewable	
2.2 Step 2: Determining the Review Path	
2.2.1 Minister Determines How the Assessment will be Conducted	
2.2.2 Environmental Assessment not Required	
2.2.3 Assessment Led and Managed by the Environmental Assessment Office	
2.3 Step 3: Determining How the Assessment will be Conducted	8
2.4 Step 4: Developing and Approving Terms of Reference for the Application	
2.5 Step 5: Preparing and Submitting the Application	
2.6 Step 6: Reviewing the Application	
2.7 Step 7: Preparing The Assessment Report and Referring the Application to Ministers	
2.8 Step 8: Deciding to Issue/Not Issue an Environmental Assessment Certificate	
3. Post-Certification	15
3.1 General	15
3.2 Concurrent Approval	15
3.3 Monitoring, Evaluation and Reporting	
3.4 Environmental Management	
3.5 Compliance and Enforcement	19
List of Figures	
1. Proponent Activities in a Typical Environmental Assessment Led and Managed by the Environ Assessment Office (EAO)	mental
Appendices	
Appendix 1: Guidance on Consulting with First Nations	
Appendix 2: Guidance on Consulting with the Public	
Appendix 3: Guidance on Submitting Electronic Documentation	32

1. Introduction

1.1 GENERAL

This "Supplementary Guide to Proponents" provides information for proponents of projects that are, or may be, subject to the *Environmental Assessment Act*. Readers should note that this document is not designed as a stand-alone guide. The information is supplemental to that provided in the "Guide to the British Columbia Environmental Assessment Process" and is to be read in conjunction with that document. It is also suggested that proponents review the "Supplementary Guide to First Nations" and "Supplementary Guide to the Public" to gain a complete overview of consultation and participation opportunities during an environmental assessment.

Throughout this document, reference is made to relevant sections of the "Guide to the British Columbia Environmental Assessment Process" where appropriate. Therefore, for ease of reading, the "Guide to the British Columbia Environmental Assessment Process" is referred to simply as "the Guide".

1.2 Purpose of Environmental Assessment

Environmental assessment provides for early identification of a project's potential effects on baseline conditions, and for evaluation of those effects, before irreversible project design and construction decisions are made. Generating this analysis helps foster improved project design, enabling proponents to modify projects to address identified issues of concern. This, in turn, may help to avoid costly mistakes for proponents, costs for the public sector, and adverse impacts on First Nations, local communities and the environment.

Proponents may also benefit in other ways. Permit approval procedures may be more routine and timely following environmental assessment certification, since key issues will have been addressed at a strategic level during the environmental assessment review. In the global market place, which is placing increasing emphasis on the sustainability of commodity production of all types, environmental assessment may enhance a proponent's marketing efforts.

In general, environmental assessment is an iterative project planning approach. Proponents are encouraged to modify and improve project proposals during the course of the assessment in response to feedback received from interested parties. The goal is to refer the best practicable version of the project to ministers for decision.

1.3 REQUIREMENT TO CONSULT FIRST NATIONS

In accordance with current case law, the Province has a constitutional and fiduciary duty to consult where sound claims to aboriginal rights and title are at issue. Accordingly, the Environmental Assessment Office has an obligation to consider aboriginal interests in relation to an environmental assessment to ensure that legal obligations towards First Nations are met, First Nation issues and concerns identified, and adequate efforts made to address those issues and concerns.

As a result of a recent (2002) court case¹, proponents of a reviewable project may have a duty to consult in good faith with First Nations and to seek workable accommodations of First Nation interests (separate from any specific obligations that may be required as part of a project assessment under the *Environmental Assessment Act*). Proponents are advised to contact the Environmental Assessment Office as early as possible to identify which First Nations to approach to:

- a) determine whether there are First Nations with interests that may be affected by the project, thereby requiring consultation; and
- b) discuss consultation requirements within the environmental assessment process, including during development of the terms of reference for an application and in the terms of reference.

Further information on the legal requirements to consult First Nations and on the Provincial Consultation Policy (2002) is contained in Section 3.3 and Appendix 2 of the Guide. The Provincial Consultation Policy (2002), or any updated version of it, may be viewed on the Project Information Centre website (www.eao.gov.bc.ca).

There is broad flexibility to discuss with First Nations the manner in which they wish to be involved in an environmental assessment. However, general proponent responsibilities and activities related to First Nation consultation during the course of a typical assessment are included in the discussion in Section 2. Further guidance on consulting with First Nations is provided in Appendix 1 of this supplement.

1.4 REQUIREMENT TO CONSULT THE PUBLIC

Environmental assessment includes participation by all interested members of the public. Public consultation during an environmental assessment contributes to the gathering and sharing of all relevant information related to the potential effects of a proposed project. At the end of the assessment, public issues are reported on, so they can be taken into consideration by ministers in making their decision on project approval.

¹ Haida Nation v. British Columbia and Weyerhaeuser (2002) BCAA 462

Proponents are encouraged to identify potentially affected members of the public and undertake consultation activities as early as possible to facilitate effective issue identification. The general proponent responsibilities and activities related to public consultation during the course of a typical environmental assessment are included in the discussion in Section 2 below. Further guidance on consulting with the public is provided in Appendix 2 of this supplement.

1.5 COORDINATION WITH THE CANADIAN ENVIRONMENTAL ASSESSMENT ACT

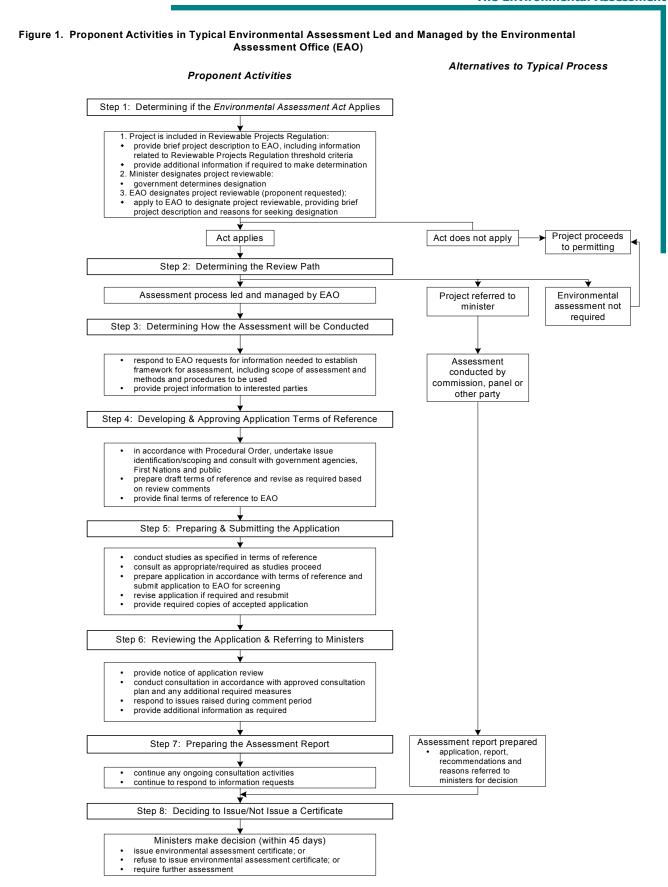
When a project is subject to the *British Columbia Environmental Assessment Act* and the *Canadian Environmental Assessment Act*, the Environmental Assessment Office works closely with the Canadian Environmental Assessment Agency and other federal agencies to ensure the legislated environmental assessment requirements of both levels of government are met and integrated through a coordinated process. In accordance with the Canada-British Columbia agreement on environmental assessment cooperation (see Section 3.2 of the Guide), the two levels of government develop a project-specific workplan that sets out the process, information requirements and analysis necessary to meet the requirements of each party. Both governments will work with the proponent during development of the terms of reference and preparation of the application, and federal agencies will provide input to the assessment report, to ensure both federal and provincial reporting requirements are fulfilled

2. THE ENVIRONMENTAL ASSESSMENT

This section provides information on the proponent's role and responsibilities during a typical environmental assessment conducted under the *Environmental Assessment Act*, as outlined in Section 5 of the Guide. In general, the proponent is responsible for:

- clarifying with the Environmental Assessment Office whether the project requires an environmental assessment certificate;
- working with the Environmental Assessment Office through a consultative issue identification and scoping process to determine the issues and effects to be addressed in the assessment, and the information and consultation requirements;
- developing terms of reference for an application for an environmental assessment certificate;
- conducting the required studies and preparing the application and associated materials;
- producing and distributing the required copies of the application, and advertising the availability of the application for review;
- directly consulting with the public and First Nations to develop an understanding of community values and interest in the project, and to identify and respond to issues of concern; and
- consulting with government agencies and making the necessary applications for statutory permit approvals.

A flowchart of a typical environmental assessment focusing on the proponent's activities is provided in Figure 1. The flowchart and the discussion in Sections 2.1 to 2.8 are based on the eight steps set out in Section 5.1 of the Guide.



2.1 Step 1: Determining if the *Environmental Assessment*Act Applies

A project is subject to the *Environmental Assessment Act* when:

- 1) it falls within a category of project that is included in the Reviewable Projects Regulation and is of sufficient size to meet or exceed the prescribed thresholds²;
- 2) the Minister of Sustainable Resource Management designates it as reviewable³; or
- 3) at the request of the proponent, the Executive Director of the Environmental Assessment Office designates it as reviewable.⁴

2.1.1 Project is Included in the Reviewable Projects Regulation

The proponent of a project proposal which is, or may be, included in the Reviewable Projects Regulation, should contact the Environmental Assessment Office once the project concept is developed to confirm whether the project is subject to the *Environmental Assessment Act*. Proponents should provide a short written description of the project. A one- or two-page letter or outline is normally sufficient for this purpose. Information related to the criteria set out in the Reviewable Projects Regulation should be included, and will be requested if not initially provided.

In most cases, Environmental Assessment Office staff are able to determine quickly whether or not the project is reviewable under the Act. However, if there is some uncertainty, the Environmental Assessment Office will consult with other agencies with particular expertise (e.g., the Ministry of Water, Land and Air Protection may assist in determining the reviewability of a special waste project). The proponent may be required to provide additional information on a particular aspect of the proposal to facilitate a determination on the applicability of the Act. The Environmental Assessment Office then confirms whether or not the Act applies to the project.

2.1.2 Minister Designates the Project as Reviewable

In exceptional cases, the Minister of Sustainable Resource Management may designate a proposed project as reviewable, even though it is not included in the Reviewable Projects Regulation, if the project may have significant adverse effects, and the minister is satisfied that it would be in the public interest for the project to undergo an environmental assessment. The information required of the proponent in this case would vary from project to project, depending on the special circumstances and reasons why the designation was being considered. Consequently, this supplement does not address proponent responsibilities in these circumstances.

² Section 5 of the Act.

³ Section 6 of the Act.

⁴ Section 7 of the Act.

2.1.3 Proponent Applies to Have a Project Designated Reviewable

If a proponent wishes to obtain an environmental assessment certificate for a project that is not included in the Reviewable Projects Regulation, the proponent may apply to have the project designated as reviewable by the Executive Director of the Environmental Assessment Office. The application should include a description of the project and information related to the criteria set out in the Reviewable Projects Regulation for that type of project. The application should clearly state the reasons why the proponent wishes the designation, and should include any relevant data and information to support those reasons. The Environmental Assessment Office will consider the reasons for the request and make a decision on whether or not to make the designation.

2.2 Step 2: Determining the Review Path

In nearly all cases, the environmental assessment will be led and managed at the staff level by the Environmental Assessment Office. However, under special circumstances the Environmental Assessment Office may either:

- immediately refer the project to the Minister of Sustainable Resource Management to determine how the assessment will be conducted⁵; or
- determine that an environmental assessment is not required.

2.2.1 Minister Determines How the Assessment will be Conducted

Because the minister has broad discretion to determine how an assessment is conducted, there is no typical process. Each assessment will be designed to meet the exceptional circumstances identified by the Environmental Assessment Office in referring the project to the minister. Consequently, the requirements and responsibilities of the proponent will be different in every case and are not covered in this supplement. (See Section 6.2 of the Guide for further information on circumstances when the minister may determine the assessment process.)

2.2.2 Environmental Assessment not Required

In exceptional cases, the Environmental Assessment Office may consider waiving the requirement for an environmental assessment certificate, even though the project is included in the Reviewable Projects Regulation, when it is determined that the project will not result in any significant adverse environmental, economic, social, heritage or health effects.

⁵ Section 10(1)(a) of the Act.

⁶ Section 10(1)(b) of the Act.

If the Environmental Assessment Office is considering waiving the requirements for an environmental assessment, the proponent may be required to provide further information to clarify the likelihood of impacts. Such information may relate to the project location and design, or the impact management measures available to manage any potential adverse effects.

2.2.3 Assessment Led and Managed by the Environmental Assessment Office

For most reviewable projects, the proponent will be required to obtain an environmental assessment certificate through a process led and managed by the Environmental Assessment Office. Therefore, the information in the remainder of Section 2 deals with the steps, and the requirements of the proponent, in a typical Environmental Assessment Office-led process.

2.3 Step 3: Determining How the Assessment will be Conducted

The Environmental Assessment Office is responsible for determining how the assessment will be conducted, including the scope of the assessment and the procedures and methods to be used, and for issuing a procedural order. However, the Environmental Assessment Office may consider input and advice from the proponent and other parties in making this determination.

The proponent is responsible for providing information about the project to interested parties, undertaking consultations with government agencies, First Nations and the public, and working with the Environmental Assessment Office to begin the issue identification and scoping process. The proponent's consultation at this stage, and the issue identification and scoping process, will lead to the development and finalization of the terms of reference for the application (Step 4).

Proponents are encouraged to identify potentially affected members of the public and undertake public consultation activities as early as possible. The Environmental Assessment Office will conduct its own preliminary identification of potentially interested parties, and will advise the proponent of any additional parties that should be contacted.

The Environmental Assessment Office will determine which, if any, First Nations may have interests affected or impacted by the project, and will advise the proponent as early as possible in the assessment process. The proponent should identify any arrangements between the proponent and First Nations showing First Nation support for the project.

⁷ Section 11(1) of the Act.

Proponent responsibilities with respect to First Nation and public consultation that may be addressed in the procedural order include:

- consulting with specified First Nations or members of the public, including about the conduct of studies:
- providing information on the project to First Nations and the public in an understandable form, the assessment process, the consultation process, and the requirements placed on proponents to consult;
- developing consultation plans for approval by the Environmental Assessment Office under the Public Consultation Policy Regulation, and/or carrying out prescribed consultation plans;
- providing opportunities for First Nations and/or members of the public to participate in studies;
- notifying First Nations and the public about the availability of the application for review, and about open houses, public meetings or other consultation activities; and
- reporting in the application on the consultation activities undertaken and planned, the issues identified by First Nations and the public through consultations, and how the proponent proposes to address issues that are relevant to the assessment.

2.4 Step 4: Developing and Approving Terms of Reference for the Application

The proponent may be required to provide information at any point in the assessment. However most, if not all, the information required from the proponent will be provided in the application for an environmental assessment certificate. Consequently, the procedural order will normally include a requirement for the proponent to prepare terms of reference for the application. The terms of reference must be approved by the Environmental Assessment Office to ensure they will adequately address the identified issues.

Development of the terms of reference is a key step for the proponent. Terms of reference are developed in accordance with any requirements set out in the procedural order, and are based on an issue identification and scoping process conducted in cooperation with the Environmental Assessment Office. The issue identification and scoping process normally includes consultation with government agencies, First Nations, the public and other parties as appropriate. The goal is to ensure that all the potential effects and issues of relevance to the assessment are incorporated in the terms of reference, so that the application will be as complete as possible when submitted. The Environmental Assessment Office is responsible for determining which issues are relevant to the environmental assessment, and which are outside the scope of the assessment. The Environmental Assessment Office will seek policy guidance from other agencies, if required, in making this determination.

In accordance with the Public Consultation Policy Regulation, the terms of reference will normally require the proponent to:

- conduct a public consultation program that is acceptable to the Environmental Assessment Office⁸; and
- provide in the application a report on consultation activities undertaken in relation to the project and a proposed consultation plan to be carried out during review of the application.⁹

First Nations are also consulted under the *Environmental Assessment Act* process. If First Nations choose not to participate in the environmental assessment, not to respond to consultation efforts by the proponent or the Environmental Assessment Office, or not to provide information to the proponent or the Environmental Assessment Office, the proponent may be required to identify and report on First Nation interests through other means, such as independent studies or literature reviews.

Following the issue identification and scoping process, the proponent prepares draft terms of reference, which are submitted to the Environmental Assessment Office. The Environmental Assessment Office coordinates a review of the draft terms of reference, which may include review by government agencies, First Nations and/or the public. There may be a formal, time-limited public comment period on the draft terms of reference. The Environmental Assessment Office will advise the proponent of any required additions or revisions. The terms of reference must be approved by the Environmental Assessment Office. There is no time limit on the preparation and approval of terms of reference unless one is stipulated in the procedural order. The final version of the terms of reference will be posted on the Project Information Centre website.

2.5 Step 5: Preparing and Submitting the Application

The proponent is responsible for preparing the application according to the approved terms of reference.¹⁰ This involves conducting all the required studies and consultation measures, and reporting on the results in the application documentation. In most cases, preparation of the application continues the iterative process, with ongoing discussions between the proponent, the Environmental Assessment Office, other government agencies, First Nations, the public and other parties as appropriate.

⁸ Section 4(1)(a) of the Public Consultation Policy Regulation.

⁹ Section 4(1)(b) of the Public Consultation Policy Regulation.

¹⁰ Sections 16(1) and 16(2) of the Act.

Once the application is prepared, the proponent submits it to the Environmental Assessment Office. The Environmental Assessment Office has 30 days to screen the application to ensure it contains the required information¹¹, as set out in the terms of reference. If the application is deficient in presenting the required information, the Environmental Assessment Office will identify the deficiencies in writing.¹² The proponent then revises and resubmits the application. The Environmental Assessment Office may only accept an application for review if it contains the required information.¹³

In accordance with the Public Consultation Policy Regulation, during this 30 day screening period the Environmental Assessment Office will usually assess the adequacy of any public consultation measures that the proponent has taken, or proposes to take, in relation to the application, and will specify any further measures that the proponent must carry out. Additional measures may relate to the provision of public notice, access to information, consultation with the general public, or consultation with specified parties. The Environmental Assessment Office may also specify a period within which the additional measures must be carried out. (See Section 5.3.2 of the Guide for further information on the Public Consultation Policy Regulation). The Environmental Assessment Office will also assess the adequacy of the proponent's First Nation consultation.

When the application is accepted, the Environmental Assessment Office notifies the proponent in writing and may require the proponent to supply and distribute any additional hard (paper) copies that may be required by government reviewers, First Nations or other parties. ¹⁴ The proponent may also be required to provide an electronic copy of the application in an acceptable format for posting on the Project Information Centre website. The proponent should contact the Project Information Centre at the early stage of application planning (prior to finalizing terms of reference for individual studies with project consultants) to ensure all documentation that may form part of the application is prepared in an appropriate electronic format. Guidance on submitting electronic documentation is provided in Appendix 3 of this supplement.

If the proponent does not submit the application within three years after terms of reference for the application have been finalized, the assessment may be suspended or terminated.¹⁵ If a delay is anticipated, the proponent should contact the Environmental Assessment Office well before the three-year deadline to discuss the situation and whether an extension to the deadline is warranted to allow additional time for submission of the application.

If the proponent intends to apply for concurrent review of any applications for provincial approvals¹⁶, the proponent must do so no later than the applicable deadline. For more information on applying for concurrent approvals see Section 3.2 of this supplement.

¹¹ Section 16(3) and 24(1)(a) of the Act; Section 2 of the Prescribed Time Limits Regulation.

¹² Note that the 30-day screening does not constitute a review of the adequacy of the application to address the issues. That detailed review occurs during Step 6, the application review.

¹³ Section 16(3) of the Act.

¹⁴ Section 16(4) of the Act.

¹⁵ Section 24(3) of the Act; Section 5 of the Prescribed Time Limits Regulation.

¹⁶ Section 23(1) of the Act.

2.6 Step 6: Reviewing the Application

Review of the application formally begins on the date that the Environmental Assessment Office receives the required copies of the accepted application from the proponent. If no additional copies are required, the review begins on the date that the Environmental Assessment Office notifies the proponent that application is accepted. From that date, government has up to 180 days to complete the review of the application, prepare the assessment report, and refer the application to ministers for a decision.¹⁷ The Environmental Assessment Office conducts the review in accordance with the procedures established in the procedural order, or in any variation to that order.¹⁸

The Environmental Assessment Office and the proponent may both be required to provide notice in relation to the review of the application. The intent of notification is to reach individuals who may want to participate in the review or may be affected in some way by the project, including but not limited to, residents of the community in which the project is located and residents of adjacent communities. The proponent is usually responsible for advertising the availability of the application for comment, and for implementing any further notification procedures indicated by the Environmental Assessment Office (e.g., flyers, posters, etc.). Details of the proposed advertising plans should accompany the application, since there will be a relatively short time frame for arranging advertising once the application has been accepted for review.

In general, when the proponent is required to provide notification, this is normally accomplished through advertising in local newspapers in the vicinity of the proposed project. In some cases, notification may be required in newspapers with a broader distribution if there are significant regional or provincial interests. Where satisfactory in the Environmental Assessment Office's opinion, other means of giving notice may also be used (e.g., mailing of notices).

In most cases there is a formal public comment period of between 30 and 75 days for public review of the application. The length of the public comment period on the application is determined by the Environmental Assessment Office, taking into account anticipated public interest, extent of preapplication consultation and other factors. In addition, First Nations and government agencies review the application and have the opportunity to provide comments. The proponent is provided an opportunity to respond to comments, and a time limit may be specified for the submission of such responses. During the application review, the proponent will be required to carry out the consultation measures stipulated in the proponent's consultation plan, and any additional measures specified by the Environmental Assessment Office.

¹⁷ Section 24(1)(b) of the Act; Section 3 of the Prescribed Time Limits Regulation.

¹⁸ Section 16(5) of the Act.

The Environmental Assessment Office may keep track of issues raised by the public and other parties by means of an issue tracking document which may be posted on the Project Information Centre website. Issues that are recorded may originate from a variety of sources, including:

- discussions during the issue scoping and identification process that are facilitated by the Environmental Assessment Office, and any ensuing correspondence;
- written comments submitted to the Environmental Assessment Office during the comment periods;
- analysis and advice recorded by the Environmental Assessment Office during project-related meetings, and any follow-up communications where further attention is needed;
- public and First Nation comments recorded by the proponent or Environmental Assessment Office at consultation sessions; and
- proponent responses to comments.

As the application is being reviewed, the proponent may be required to provide additional information to address certain issues more fully. If this information is substantial enough that the assessment cannot effectively proceed until the information is submitted, the Environmental Assessment Office may suspend the review. In this case, the 180 day time limit would be put on hold until the required information were received. When additional information is required on a particular issue but the assessment can still effectively proceed on all other aspects of the project, the review period will not normally be suspended. The proponent may request that the 180 day review period be put on hold if more time is required to respond to issues than was provided for in the procedural order. (For further information on suspension or extension of the 180 day review period, see Section 5.1.6 of the Guide.)

2.7 Step 7: Preparing The Assessment Report and Referring the Application to Ministers

On completion of the application review, the Environmental Assessment Office prepares an assessment report. The assessment report will normally be prepared in consultation with other government agencies and First Nations involved in the assessment. The assessment report documents the findings of the environmental assessment, including the issues raised in relation to the project and how the issues have been or will be addressed¹⁹, and it will include the proponent's responses to issues raised. The Environmental Assessment Office may also document any recommendations to ministers and the reasons for the recommendations.²⁰

¹⁹ Section 17(2)(a) of the Act.

²⁰ Sections 17(2)(b) and 17(2)(c) of the Act.

2.8 Step 8: Deciding to Issue/Not Issue an Environmental Assessment Certificate

After referral of the application and assessment report, ministers have 45 days to decide whether or not to issue an environmental assessment certificate, or whether to require further assessment.²¹

In accordance with current case law, compliance with the *Environmental Assessment Act* may not, in and of itself, be sufficient to meet the Province's legal obligations to First Nations. Accordingly, in deciding whether to issue an environmental assessment certificate, the ministers must carefully consider whether these legal obligations have been met.

If ministers decide to grant an environmental assessment certificate for the project, the Environmental Assessment Office delivers the decision and the certificate to the proponent.²² If ministers decide to require further assessment, this could be in any form the ministers deem appropriate. The certificate will contain project-specific conditions that the proponent must adhere to in proceeding with the project.

²¹ Section 17(3) of the Act; Section 4 of the Prescribed Time Limits Regulation.

²² Section 17(4) of the Act.

3. Post-Certification

3.1 GENERAL

The proponent of a project that is subject to the *Environmental Assessment Act* is still required to obtain all other applicable approvals, such as permits and licenses. These are identified during the course of an environmental assessment and requirements are coordinated to the extent practicable. As part of the project-specific environmental assessment process, procedures will be put in place to ensure the smooth transition to permitting once an environmental assessment certificate has been issued. Once the environmental assessment certificate has been issued, regulatory agencies may issue other approvals required for the project.

3.2 CONCURRENT APPROVAL

A proponent may request that some or all provincial approval applications be processed concurrently with the environmental assessment review.²³ Provisions related to concurrent approval are set out in the Concurrent Approval Regulation (a copy of the regulation is contained in Appendix 5 of the Guide). To be eligible for concurrent review, the approval must be required to construct, operate modify, dismantle, abandon or otherwise undertake part or all of the reviewable project that is the subject of the environmental assessment.²⁴

If a proponent wishes to apply for concurrent review of approvals, the proponent must provide written notice to the Environmental Assessment Office:

- identifying the approvals that are being applied for concurrently;
- attaching copies of those applications and supporting material; and
- requesting that those applications be given concurrent consideration during the environmental assessment.²⁵

²³ Section 23(1) of the Act.

²⁴ Section 1 and 3 of the Concurrent Approval Regulation.

²⁵ Section 4 of the Concurrent Approval Regulation.

The Environmental Assessment Office may specify in the procedural order, or in any variation to the order, the deadline by which the proponent must apply for concurrent review of approvals. ²⁶ If no other earlier deadline is so specified, the proponent must apply for concurrent review of approvals no later than either:

- seven days after the date on which the Environmental Assessment Office notified the proponent that the application for an environmental assessment certificate was accepted for review, if no additional copies of the accepted application were required²⁷; or
- if additional copies of the accepted application for an environmental assessment certificate were required, the date on which the proponent submitted those additional copies to the Environmental Assessment Office.²⁸

The Environmental Assessment Office will respond in writing to the proponent confirming whether or not the applications for concurrent review are accepted.²⁹ The Environmental Assessment Office will refuse to allow use of the concurrent approval provisions for any approval that is not legitimately required to construct, operate or otherwise undertake the reviewable project (e.g., for aspects of the project not subject to environmental assessment). When there is uncertainty regarding whether an approval is eligible for concurrent review, the Environmental Assessment Office will consult with the applicable regulatory authority before making a decision.³⁰

When the concurrent approval provisions apply, the regulatory authority responsible for issuing the approval must review the approval application expeditiously. Within 75 days of the date that the Environmental Assessment Office notified the proponent of acceptance of the application for an environmental assessment certificate, the regulatory authority must notify the proponent and the Environmental Assessment Office in writing of any additional information requirements.³¹

If an environmental assessment certificate is issued, the regulatory authority must, within 60 days after issuance of the certificate, either:

- issue the approval;
- refuse to issue the approval, indicating the reasons for the refusal; or
- specify a later date on which the proponent may expect a decision, indicating the reasons for the postponement.³²

²⁶ Section 5(a) of the Concurrent Approval Regulation.

²⁷ Section 5(b) of the Concurrent Approval Regulation.

²⁸ Section 5(c) of the Concurrent Approval Regulation.

²⁹ Section 6(1) and 6(2) of the Concurrent Approval Regulation.

³⁰ Section 6(3) of the Concurrent Approval Regulation.

³¹ Section 8(1)(b) of the Concurrent Approval Regulation.

³² Section 24(1)(d) of the Act; Section 8(3) of the Concurrent Approval Regulation.

In deciding whether or not to issue an approval, the regulatory agencies must consider the Province's legal obligations to First Nations, including the duty to consult. Agencies review the information collected and consultation during the environmental assessment to determine whether the environmental assessment process fully addressed the consultation requirements.

Regulatory authorities responsible for issuing the approvals will be involved in the environmental assessment. Therefore, if there were doubt about whether or not an approval would be issued, that information would be included in the assessment report and taken into consideration in the ministers' decision.

The provisions for concurrent approval do not apply to federal or local government authorizations. If a project is subject to a local Official Community Plan and zoning by-laws, the proponent may need to apply separately to the appropriate local government for by-law changes to allow the project to proceed if the existing zoning is not compatible. In addition, local government permitting requirements and procedures may apply, such as for building permits or development permits. In this case, separate applications to the appropriate local government authorities may be required.

3.3 Monitoring, Evaluation and Reporting

Environmental assessment involves predicting the potential effects of a proposed project and defining ways to prevent, minimize or mitigate any adverse effects. Based on past experience, modeling techniques, and other methods, it is possible to estimate the nature and magnitude of many effects and to identify successful ways to deal with them. However, impact prediction is not an exact science. It is therefore important to monitor, evaluate and report on conditions at and around a project during and after construction, to determine if the impact management methods are working.

An environmental assessment certificate may contain requirements for monitoring and evaluating the effects of a project, and reporting on the results. As well, many projects are also subject to requirements associated with other statutory approvals, which may include proponent responsibilities for implementing management and mitigation plans, evaluating compliance with permitted limits, and reporting the results to regulatory agencies. The requirements of other approvals are taken into consideration in developing the conditions of a project approval certificate to ensure a coordinated overall monitoring, evaluation and reporting system is in place.

3.4 Environmental Management

A post-certification monitoring, evaluation and reporting system includes two key elements: an environmental management system and an environmental management plan.

An environmental management system provides the framework for a proponent to address environmental concerns in an orderly and consistent manner through the allocation of resources, assignment of responsibilities, and ongoing evaluation of practices, procedures and processes.

An environmental management plan sets out the mitigation, monitoring and other measures to be conducted during construction, operation and/or decommissioning of the project to eliminate adverse effects, or reduce or offset them to acceptable levels. The plan includes a step-by-step description of the actions the proponent (including all contractors, sub-contractors and employees) will take to implement these measures. The plan may define respective roles and responsibilities for the implementation of the plan, the monitoring of results, and the reporting and review of the plan's implementation and success. Appropriate arrangements for liaison and consultation between the proponent, contractors, government, First Nations and the public may be a necessary part of the plan.

The objectives of an environmental management plan include:

- providing a mechanism to track the success of the environmental management measures and to determine whether the compliance levels set were appropriate and effective;
- providing government agencies, First Nations and the public with assurance that the detailed design elements (which may not be available until after the environmental assessment is completed) will incorporate appropriate environmental management measures;
- collating all environmental management and mitigation measures into one, coordinated plan;
- setting out contingency plans to be implemented in an adaptive management framework, should the monitoring and evaluation determine the need for further mitigative measures; and
- providing a vehicle to assist government meet its commitment to act as the steward of public resources, in partnership with the proponent.

3.5 COMPLIANCE AND ENFORCEMENT

The *Environmental Assessment Act* prohibits the development of a project contrary to the terms of the environmental assessment certificate.³³ Staff from appropriate regulatory agencies may inspect any works or activities on the site of a reviewable project. In the event of non-compliance with conditions of an environmental assessment certificate, the Minister of Sustainable Resource Management may halt the construction, operation, modification, dismantling or abandonment of a project until the proponent complies, or may require the proponent to carry out measures to mitigate the effects of non-compliance.³⁴ The minister may also propose a compliance agreement, whereby the certificate holder undertakes to comply with certificate requirements.³⁵

³³ Sections 8(2) and 34 of the Act.

³⁴ Section 34(1)(b) of the Act.

³⁵ Section 36 of the Act.

APPENDIX 1: GUIDANCE ON CONSULTING WITH FIRST NATIONS

Introduction

This appendix provides proponents with information and guidance on consulting with First Nations. The information is intended to assist proponents in gaining an understanding of the value of First Nation consultation and how First Nations may themselves view meaningful consultation. The information is important as the respective parties often have differing and conflicting perspectives. This appendix also provides an overview of the types of issues that are typically of concern to First Nations and may be raised during an environmental assessment, and a list of references to other potentially usual information.

Some of this information and advice on First Nation consultation and First Nation interests was developed following discussions with First Nation environmental assessment practitioners. It is derived from comments on what consultation should be and how, if it is to be considered meaningful by a First Nation, it should incorporate and address First Nation interests. These practitioners recognized that while the Province and proponents do not consider consultation to be a joint decision-making process, it can nonetheless be a process that leads to mutually acceptable decisions. A mutually acceptable decision may also provide additional legal certainty to proponents.

It must be noted that this information is included as general guidance to provide proponents with some information on what to expect in discussions with First Nations. It is not intended to suggest that all of these considerations are necessary or appropriate in specific consultations.

COMMUNITY KNOWLEDGE/TRADITIONAL KNOWLEDGE

First Nations may have unique knowledge and information that can be brought into an environmental assessment process to help assess the potential impacts of a proposed project and inform recommendations and decisions. This community-based knowledge also is seen by some as having the potential to contribute to the conservation, management and sustainable use of biological diversity (which is itself linked to the cultural diversity of indigenous peoples). This information is sometimes referred to as traditional knowledge.³⁶ Traditional knowledge is a body of knowledge built up over time, and continuing into the present, by people living in close contact with the natural environment. It includes understanding of plants and animals (properties or locations), the functioning and management of ecosystems, and the reliance on species for food, medicines, fuel, or shelter. In addition to informing the environmental assessment process, traditional knowledge can assist with building relationships between First Nations and the proponents responsible for project studies.

There are several ways First Nation traditional knowledge and community information can be brought into the environmental assessment process:

- by First Nations providing comments on project-related documentation, such as the application; through existing studies and information;
- through new studies such as archaeological overview/impact assessments and current and traditional use studies;
- and as sub-components of other studies such as wildlife and socio-economic studies.

Proponents, the Environmental Assessment Office and First Nations usually work together when planning current and traditional use studies, which are one of several ways of collecting community knowledge. Such studies should be performed in consultation with the aboriginal people affected and must be conducted in a professional way to ensure credibility. Ideally, they are conducted by someone acceptable to First Nations to avoid disputes about the results. The information produced from such studies can be integrated with more scientific modes of information collection and used to fulfil the proponent's and the Environmental Assessment Office's legal obligations.³⁷

³⁶ Guidelines for Environmental Assessments and Traditional Knowledge, Alan Emory and Associates, 47 Okanagan Dr., Nepean, Ontario, K2H 7E9, March, 1997

³⁷ The Environmental Assessment Office does not usually require traditional use studies to be conducted on private fee simple land where there is no legal right of access, on land that has been extensively disturbed such that any potential aboriginal rights can no longer be practiced, or on linear corridors where there is room to avoid specific sites.

First Nations are often concerned about how their knowledge will be used or put into practice. They may present the following principles to guide discussions and practices, or as preconditions for imparting their traditional or community knowledge:

- respect for the rights of the holders of the knowledge;
- confidentiality (except for mutually agreed upon purposes);
- involvement of the holders of knowledge; and
- beneficial use to the interests of the holders of the knowledge.

CONSULTATION FEATURES

Of overall importance to aboriginal people is that, regardless of the consultation process used, they and their concerns are treated with respect and that they are heard before decisions are made. Key features that First Nations have identified as demonstrating respect in the consultation process include:

early involvement: Consultation should occur as early as possible in the planning of any development and should initially focus on building relationships. The first meeting is often only to make introductions, provide an overview of the project, and begin the process of discussing how consultation should be done.

comprehensiveness: Consultation should include a range of considerations such as:

- involving First Nations in relevant studies;
- incorporating community and traditional knowledge into baseline studies;
- identifying First Nation interests potentially impacted by a project; and
- identifying and developing prevention, avoidance and mitigation measures to address any significant potential adverse impacts on First Nation interests.

flexibility: Each consultation process will be different since it will depend on the particular proposed project and the political, traditional and social structure and organization of the First Nation(s) potentially affected by the project. An appropriate consultation program is often achieved by involving First Nations in the design of the consultation process.

inclusiveness: Consultation may involve elected officials as well as community consultations.

accommodations: Proponents should consider the need to attempt to accommodate First Nation interests impacted by their project.

provision of understandable information: Project information should be provided in an appropriate and understandable form, and may include site tours, visuals and large-scale maps to facilitate identification of locations and sites. There should be opportunities to ask questions and obtain answers.

follow-up: First Nations may want time to reflect on the information they receive and then schedule follow-up meetings to discuss concerns. Opportunities for both written and oral feedback on projects may be desirable.

protocol agreements: Protocol agreements may be negotiated that include provisions for such things as resources, time frames, dispute resolution, the involvement of First Nations in the selection of consultants conducting research on topics of interest to them, and the role of First Nations in project monitoring.

ongoing consultation: Consultation must not only begin early, but may continue into the post-certificate permitting stage and include such things as compliance monitoring.

recognition of the need for First Nation agreement: Proponents should recognize those issues that clearly require First Nation agreement (e.g., the use of First Nation reserve land).

informed decision-making: The goal of consultation should be to arrive at a decision that is fully informed as to the potential impacts of a project on First Nation interests.

FIRST NATION CAPACITY

It is important for proponents to recognize that participation in the assessment of major projects may present resource and capacity issues to some First Nations. Insufficient human and financial resources may affect the ability of First Nations to consult in a timely and comprehensive manner. Consequently, First Nations may request funding for:

- developing their understanding of the environmental assessment process;
- participating in meetings, including travel to attend meetings, participate on committees or in workshops, etc.;
- ceremonial costs;
- professional assistance to enhance participation;
- internal consultation and decision making; and
- economic benefit agreement discussions/negotiations.

Potential sources of funding include the Environmental Assessment Office (subject to appropriations), proponents, federal departments such as Department of Indian and Northern Affairs, and the Canadian Environmental Assessment Agency when the project is subject to a panel review under the *Canadian Environmental Assessment Act*. First Nations often request assistance from the proponents. While there is no specific legal requirement to provide such funding, First Nations often regard it as important to their meaningful participation and, from a proponent's perspective, there often exists a good business case for providing such funding.

Examples of First Nation Issues Raised in Environmental Assessments

The following lists identify issues sometimes raised by First Nations in relation to a proposed project. It is not intended to imply that all these issues will be relevant in every case, or that a proponent is obligated to address all of these issues in relation to any specific project.

Economic Issues

First Nations often approach environmental assessments from the perspective of their potential economic interests in a project. Consequently, they may see development of benefit agreements as part of doing business, rather than as a cost of doing business. Issues identified by First Nations for consideration may include:

- number of jobs aboriginal people are eligible and qualified for
- training opportunities for aboriginal workers
- potential income levels for aboriginal workers
- impacts on land tenure/lease arrangements on reserve land
- potential economic return to aboriginal communities
- potential benefits to aboriginal communities in the vicinity of the project (e.g., subsidized power supply, service contracts, etc.)
- employment equity practices (all phases of project)
- number of aboriginal people potentially unable to continue traditional fishing, hunting and trapping activities in the area as a result of the project
- existing tourism activities which could be affected
- loss of land use, foreshore use, or mineral use
- impacts on current aboriginal food sources/food as an income source for the community.

Environmental Issues

- effects on medicinal herbs and plants traditionally gathered in the area
- effects on quantity and quality of traditional aboriginal food sources
- impacts on water quality
- impacts on water supply
- increased access to previously isolated areas
- impacts of seismic activities (e.g., in oil and gas exploration)
- cumulative effects, especially on wildlife.

Social Issues

- services for aboriginal people (e.g., education, housing, health care, recreation, fire protection and judicial services)
- aboriginal community social stability (e.g., community cohesion, family breakdown)
- proposed relocation of a community
- community infrastructure that may affect aboriginal communities (e.g., water supply, sewage)
- number of people able to move back to a community due to employment opportunities provided by a project
- community-healing projects
- off-reserve housing
- isolated communities exposed to an outside workforce unfamiliar with aboriginal culture
- traditional lifestyles (e.g., conflict with the time for harvesting medicinal herbs and work schedule).

Heritage and Cultural Issues

Impacts on:

- archaeological sites of interest to aboriginal people
- designated aboriginal cultural sites
- documented but undesignated sites
- secret sites (e.g., ritual bathing pools)
- undocumented aboriginal cultural sites with no permanent physical presence (e.g., two-week berry picking)
- means of identifying sites unrecorded on current maps.

Health Issues

• long-term impact of emissions and discharges on aboriginal people living in the area, taking into account extended exposures based on typical water consumption, food ingestion, air exposure

REFERENCES TO OTHER SOURCES OF INFORMATION

Government of BC

- A Guide to Aboriginal Organizations and Services in British Columbia (provides addresses and phone/fax numbers): http://www.mcaws.gov.bc.ca/aboriginal_dir/guide.htm
- Profiles of First Nation Bands and Tribal Councils, Indian and Northern Affairs Canada, http://esd.inac.gc.ca/fnprofiles/FNProfiles_home.htm
- Archaeological Impact Assessment Guidelines and Archaeological Resource Handbook, Ministry of Sustainable Resource Management: http://www.srmwww.gov.bc.ca/arch/pubs/impweb/ impact.html

- Environmental Assessment Office website and Project Information Centre: www.eao.gov.bc.ca
- Treaty Negotiation Office: http://www.gov.bc.ca/tno/
- Ministry of Water, Land and Air Protection: http://www.gov.bc.ca/wlap/
- Ministry of Sustainable Resource Management: http://www.gov.bc.ca/srm/

Government of Canada

- Aboriginal Business Canada: www.abc.gc.ca
- Canadian Environmental Assessment Agency: www.ceaa.gc.ca
- Consolidated Statutes of Canada: canada.justice.gc.ca/FTP/EN/Laws/Title/C/index.html
- Indian and Northern Affairs, Canada: www.inac.gc.ca
- Indian Bands in British Columbia, Department of Indian and Northern Affairs: http://esd.inac.gc.ca/fnprofiles/FNProfiles home.html

Books of Interest

- Asch, Michael (ed.), Aboriginal and Treaty Rights in Canada: Essays on Law, Equality, and Respect for Difference, Vancouver: UBC Press, 1997
- Cail, Robert, Land, Man, and the Law: The Disposal of Crown Lands in British Columbia, 1871-1913, Vancouver: UBC Press, 1974
- Coull, Cheryl, A Traveller's Guide to Aboriginal B.C.: Whitecap Books, 1996
- Duff, Wilson, The Impact of the White Man, Victoria: British Columbia Provincial Museum, 1969
- Fisher, Robin, Contact and Conflict, Vancouver: UBC Press, 1977
- Harris, Cole, Making Native Space: Colonialism, Resistance, and Reserves in British Columbia, Vancouver: UBC Press, 2002
- Helm, June (ed.), The Handbook of North American Indians: Volume 6, Subarctic, Wash.: Smithsonian Institution, 1981
- Hill, Roger and Pam Sloan, Corporate Aboriginal Relations
- Kunin, Roslyn (ed.), Prospering Together: The Economic Impact of the Aboriginal Title Settlements in B.C.: Laurier Institute, 1998
- McKee, Chris, Treaty Talks In British Columbia, Vancouver: UBC Press, 1997
- Miller, J.R. (ed.), Sweet Promises: a Reader on Indian-White Relations in Canada: University of Toronto Press, 1991
- Miller, J.R., Skyscrapers Hide the Heavens: A History of Indian-White Relations in Canada, Toronto; Buffalo: University of Toronto Press, 2000
- Muckle, Robert J., The First Nations of British Columbia, 1998
- Suttles, Wayne (ed.), The Handbook of North American Indians: Volume 7, Northwest Coast, Wash.: Smithsonian Institution, 1990
- Tennant, Paul, Aboriginal Peoples and Politics: the Indian Land Question in British Columbia, 1849-1989, Vancouver: UBC Press, 1990
- Walker, Deward E. (ed.), The Handbook of North American Indians: Volume 12, Plateau, Wash.: Smithsonian Institution, 1998

Aboriginal Media

- Ravens Eye: www.ammsa.com/raven
- Kahtou, 5526 Sinku Drive, P.O. Box 192, Sechelt, BC V0N 3A0; (604) 885-7391
- Native Voice, 200-1755 E. Hastings, Vancouver, BC, V5L 1T1, (604) 255-3137
- Ha-Shilth-Sa (Nuu Cha Nulth)
- Secwepemec News (Shuswap), 345 Yellowhead Highway, Kamloops, BC V2H 1H1, (250) 828-9784

Other

- BC Superior Courts: www.courts.gov.bc.ca/welcome.htm (Haida v. British Columbia and Weyerhaeuser (2002) BCAA 462; Taku River Tlingit First Nation v. Ringstad et al (2002) BCAA 59)
- BC Treaty Commission: bctreaty.net
- Delgamuukw v. British Columbia: www.droit.umontreal.ca/doc/csc-scc/en/pub/1997/vol3/html/ 1997scr3_1010.html
- Henderson's Annotated Indian Act: http://www.bloorstreet.com/200block/sindact.htm
- Native Links: www.johnco.com/nativel/
- Turtle Island Native Network: www.turtleisland.org/front/ front.htm
- Centre for Indigenous Environmental Resources: www.cier.mb.ca/
- First Nations Environmental Network: www.fnen.org/
- First Nations Summit: www.fns.bc.ca
- Union of BC Indian Chiefs: www.ubcic.bc.ca/welcome.html
- First Nations Information Sharing (includes maps of claims land): www.bcfn.org/isp/
- Canada Aboriginal Programs: http://www.bcfn.org/alt_funding/CCAP%20JUNE%202001.pdf

Appendix 2: Guidance on Consulting with the Public

This appendix provides proponents with information and guidance on consulting with the public. The information is intended to assist proponents in gaining an understanding of the value of public consultation and to provide guidance on how consultation might be undertaken in relation to an environmental assessment.

PURPOSE OF PUBLIC CONSULTATION

Public consultation and participation in the environmental assessment process is intended to improve project design and decision-making by ensuring that community perspectives and issues about a project are known before the project proceeds to development. Benefits of public consultation may include:

- ensuring that public concerns relevant to the assessment are identified so they may be adequately addressed;
- identifying stakeholder groups that may need more comprehensive consultation efforts;
- providing useful local information and knowledge for completing the required baseline and impact assessment studies;
- improving overall community and public understanding of the project;
- preparing local communities and residents for managing the social, economic and land use impacts of a project;
- preparing interested workers and suppliers for training, employment and business opportunities related to the project;
- helping proponents to develop options to enhance positive effects of a project and prevent or mitigate adverse effects; and
- enabling more comprehensive information about a project proposal to be compiled for government decision-making.

CONSULTATION METHODS

Information Dissemination

Proponents should make information about the project proposal available to the public as early as possible. This information should be easily accessible and widely available. When providing general notices and information, details for obtaining further information should be clearly advertised. Examples of methods for providing public information include:

- publications such as brochures, newsletters and fact sheets
- exhibits or displays in public locations
- media notices and interviews by proponent representatives
- advertising in provincial, local and special interest newspapers
- project website.

Direct Consultation

Proponents are encouraged to contact those individuals with a direct interest in the project and give them an opportunity to provide feedback. Those who have a direct interest will vary in every case, but may include local community groups, adjacent landowners and local businesses. Providing opportunities for feedback is important to ensure that information has been received and understood.

It is also important that proponents provide opportunities to discuss the project with concerned members of the public face to face. Personal exchanges help to clarify the interests of the group and the basis for their support and/or concerns about a project. Such consultation gives proponents the opportunity to ensure that the details of the development proposal are correctly understood. Planned meetings or sessions at which people can meet and speak with the proponent will help the public to put a "face" to the project.

Examples of direct consultation include:

- public open houses
- public meetings or panels
- workshops and focus groups
- surveys and questionnaires (could include use of Internet or mail)
- phone lines (could include establishment of a toll-free number to respond to inquiries)
- television/radio call-in programs
- project specific mailing lists
- project site visits and field offices with locally-based staff
- interviews
- mediation and negotiation
- personal exchanges.

General information on select consultation methods that may be used during an environmental assessment is provided in Appendix 3 of the Guide.

GUIDING PRINCIPLES AND TIPS FOR CONDUCTING A PUBLIC CONSULTATION PROGRAM

Good public consultation emphasizes two-way dialogue, respect for different views, and finding a mutual basis for resolving concerns. The goals of public participation are more readily attained when the following guiding principles are followed:

- early identification and contact with the full range of individuals and groups who will want to be involved in project planning, before irrevocable decisions are made;
- providing the public with enough time to respond meaningfully;
- tailoring participation strategies to gain effective public input at each stage of the assessment precess;
- two-way communication which promotes understanding and problem-solving; and
- ongoing consultation and follow-up regarding issues.

With respect to the public living in the vicinity of the project, the following questions may help focus consultation efforts on issues related to community values and public opinion.

- Is the proposal consistent with lifestyles in the community?
- Is the proposal going to alter the size or composition of the community?
- Is the community flexible and open to change? (i.e., is it a growing or evolving community or does it have very traditional values?)
- What has the proponent done to ensure that the project is consistent with community values?

The following are tips to keep in mind when developing a public consultation program.

Provide Comprehensive and Accessible Information: Do not assume that the public is already knowledgeable about the project proposal. Information presented should be comprehensive and designed to inform members of the public with different levels of knowledge. Technical studies and reports should include easy-to-understand summaries.

Consult Early: Make sure that your public consultation program is arranged to enable community views to be considered during the project design stage. A proactive and committed proponent will work to resolve issues early. Early issue identification and resolution will improve public acceptance of a proposal.

Identify a Spokesperson and be Available: Members of the public will want to put a face to the project. The best way to do this is to designate a spokesperson to act as the first point of contact for those interested in the proposal. Encourage the public to communicate its support for a proposal, as well as its questions, concerns and issues.

Be Flexible: Be prepared to adjust your process and timing to respond to public issues. Proponents are advised to err on the side of holding "one more meeting" to ensure that the public understands the proposal.

Be Objective: Make sure that when you present information about the project, particularly in print or broadcast media, that your focus is on informing the public about the project, not promoting the project. Material should be worded in a value-free, objective manner.

Be Transparent: A demonstrated commitment to a fair and open process will enhance credibility. Adequate public meetings and transparent issue resolution processes will also contribute to this credibility.

Be Neutral: There are effective ways of ensuring impartiality in the consultation process. Neutral, third party consultants are often used in public consultation, and are effective at focusing discussions about a proposal.

Be Inclusive: Involving stakeholders in issue resolution will build trust within the community; they will know their interests are taken seriously, and will feel they are providing meaningful input into decisions that will affect them. By permitting and promoting feedback, you will have a better sense of the level and quality of information available about your project.

APPENDIX 3: GUIDANCE ON SUBMITTING ELECTRONIC DOCUMENTATION

Purpose

The Environmental Assessment Office publishes key environmental assessment review materials (e.g., applications for environmental assessment certificates, review comments and other related information) through the web-based electronic Project Information Centre (ePIC). This enables all review participants to access information online at www.eao.gov.bc.ca. The web-based system can be accessed using both Netscape and Internet Explorer web browsers. The ePIC website is designed to complement the government's New Era Commitments for leadership in electronic government and for open and accountable government.

The purpose of this guideline is to assist project proponents and other review participants to develop and submit all documents in an electronic format that enables the Environmental Assessment Office to post the documents on the website in a consistent, timely and efficient manner. It is important for project proponents to understand and conform to these guidelines early in project planning, when initial studies and reporting that may become part of a forthcoming application are being conducted.

For further clarification and information on the following requirements, please contact the Project Information Centre by phone at (250) 356-7441, by fax at (250) 356-7440 or by e-mail at eaoinfo@gems5.gov.bc.ca.

SUBMISSION OF ELECTRONIC DOCUMENTATION

All electronic documentation required by the Environmental Assessment Office for inclusion on the Project Information Centre website must be submitted either on CD, 3.5 high-density diskette, or via e-mail.

All electronic documentation must be submitted in Portable Document Format (PDF) to the Environmental Assessment Office without security measures. If required by proponents, security measures will be enabled on the PDF files that are posted on the Environmental Assessment Office website.

It is recommended that all PDF files be no larger than 5 mb, and at no time greater than 10 mb in size. As appropriate, PDF files should be broken into logical sections (e.g., chapter 1, section 1, volume 1, etc.).

When assigning filenames, common sense should prevail. For example, the title and location within a document should correspond directly to the filename. For example, chap1.pdf would be chapter one, and fig_1.1.pdf would be Figure 1.1, as listed in the Table of Contents. All file names must be in lower case letters or numbers with no spaces. Dashes (-) and underscores (_) are acceptable, but slashes (/ or $\$) are not.

Tables, Pictures, Figures and Drawings

When submitting large documents (e.g., applications and appendices), please include the tables, pictures, figures and drawings in the correct locations throughout the document as it would be in paper format. If the Table of Contents lists tables, pictures, figures and drawings as separate documents, then please include them as separate files.

Table of Contents

Inclusion of the report's Table of Contents is vital and should be a separate document (e.g., toc.pdf). Submitting a Table of Contents as a separate file will enable the Project Information Centre to provide linkages to individual PDF files contained in the application and supporting materials, facilitating ease of navigation for the user.

Please ensure that electronic documentation accompanies formal submission of hard-copy documentation.

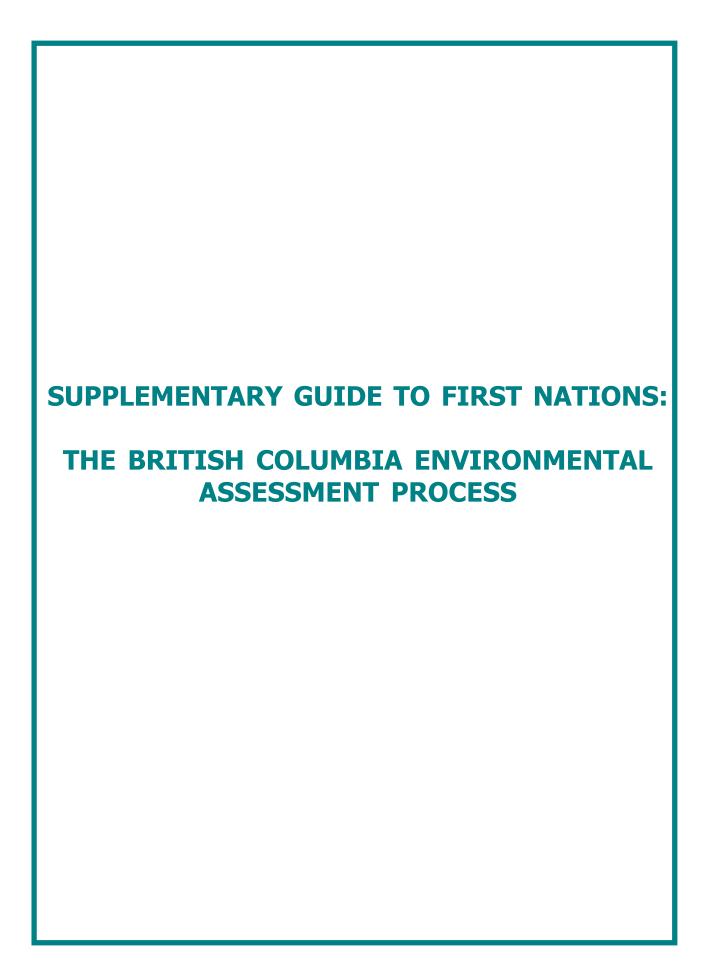


Table of Contents

1. Introduction	1
2. First Nation Consultation During an Environmental Assessment	2
2.1 Pre-Consultation Assessment	
2.2 Initial Consultation with First Nations	3
2.3 Developing and Establishing Assessment Procedures and Consultation Requirements	3
2.4 Terms of Reference for the Application	5
2.5 Preparation of the Application	5
2.6 Review of the Application and Addressing First Nation Interests	5
2.7 Assessment Report and Ministerial Decision	6
3. First Nation Capacity	8
Appendix Appendix 1: First Nation Consultation: Summary of Roles and Activities	9

1. Introduction

This "Supplementary Guide to First Nations" provides information on First Nation consultation and participation opportunities during a typical environmental assessment, and how First Nation issues are addressed. Readers should note that this document is not designed as a stand-alone guide. The information is supplemental to that provided in the "Guide to the British Columbia Environmental Assessment Process" and is to be read in conjunction with that document and the Provincial Consultation Policy.

The Environmental Assessment Office considers aboriginal interests in the environmental assessment process to ensure that legal obligations towards First Nations are met, First Nation issues and concerns identified, and adequate efforts made to address those issues and concerns. To accomplish this, specific First Nation consultation requirements are established for each assessment, within the framework of the Provincial Consultation Policy. For information on the legal and policy context for First Nation consultation, see Section 3.3 and Appendix 2 of the "Guide to the British Columbia Environmental Assessment Process".

Throughout Section 2 of this document, reference is made to relevant sections of the "Guide to the British Columbia Environmental Assessment Process" where appropriate. Therefore, for ease of reading, the "Guide to the British Columbia Environmental Assessment Process" is referred to simply as "the Guide".

2. FIRST NATION CONSULTATION DURING AN ENVIRONMENTAL ASSESSMENT

The *Environmental Assessment Act* includes provisions for notification and consultation. Specific First Nation consultation procedures, including the role and responsibilities of the proponent, are determined on a project-by-project basis. Consultation and participation activities provided to First Nations are opportunities for them to identify objectives, interests and concerns in relation to the proposed project, as well as provide information based on expert knowledge and expertise.

Environmental assessment involves several parties. Parties with the greatest interest in consultation with First Nations include the Province (Environmental Assessment Office and other provincial government agencies with regulatory responsibilities), proponents, and First Nations themselves. In addition, federal government agencies have an interest where the project is also subject to the *Canadian Environmental Assessment Act*.

The information in this section explains in more detail how First Nation consultation is addressed in a typical environmental assessment, with reference to the eight steps set out Section 5.1 of the Guide.

- Step 1: Determining if the Environmental Assessment Act applies
- **Step 2: Determining the review path**
- Step 3: Determining how the assessment will be conducted
- Step 4: Developing and approving terms of reference for the application
- **Step 5: Preparing and submitting the application**
- **Step 6: Reviewing the application**
- Step 7: Preparing the assessment report and referring the application to ministers
- Step 8: Deciding to issue/not issue an environmental assessment certificate

The table provided in Appendix 1 summarizes the roles and activities of the Environmental Assessment Office, the proponent and First Nations during an assessment.

2.1 Pre-Consultation Assessment

When an environmental assessment is required for a proposed project, the Environmental Assessment Office will conduct a pre-consultation assessment. The pre-consultation assessment will determine which, if any, First Nations may have interests affected or impacted by the project. Evidence of arrangements between the proponent and First Nations showing First Nation support for the project may also be identified during this assessment. The information acquired through the pre-consultation assessment will help inform subsequent determinations with respect to the extent of consultation that may be required.

2.2 Initial Consultation with First Nations

First Nations identified in the pre-consultation assessment will be contacted by the Environmental Assessment Office and the proponent to determine whether or not they may have interests potentially affected by the project. This information will inform the determination of the scope of issues to be reviewed, and the assessment procedures to be followed. The Environmental Assessment Office will relay to proponents non-confidential information received from First Nations regarding the project and any proposals made by First Nations regarding the consultation process.

2.3 Developing and Establishing Assessment Procedures and Consultation Requirements

The Environmental Assessment Office is responsible for determining project-specific assessment procedures and consultation requirements (Step 3), including First Nation consultation requirements to be placed on the proponent and consultations to be undertaken by the Environmental Assessment Office. Procedures and requirements related to First Nation consultation are developed consistent with the Provincial Consultation Policy (2002), or the most up-to-date version of that policy, to ensure that legal obligations to consult First Nations in relation to the proposed project are met. While there are separate obligations related to First Nation consultation, aboriginal people also participate in environmental assessments as part of the broader public.

First Nation consultation requirements are developed using information obtained through the preconsultation assessment, information from First Nations themselves, and other existing information (e.g., archaeological overview assessments, impact assessments, legal advice etc.). The Environmental Assessment Office will involve federal agencies and provincial agencies that may have post-certification consultation obligations to ensure consultation requirements are integrated to the extent practicable. The Environmental Assessment Office issues a procedural order to establish the scope of the assessment and the procedures and methods to be used. In most cases, the procedural order will provide for First Nation consultation arrangements to be developed as the assessment proceeds. Procedures and requirements of the assessment related to First Nation consultation may include:

- notifying First Nations when the application is accepted for review, when orders are issued by the Environmental Assessment Office, and when a decision is made by ministers;
- providing information on the project to First Nations in an understandable form, the assessment process, the consultation process, and the requirements placed on proponents;
- providing opportunities for First Nations to identify interests and comment on documents such as draft consultation plans, draft terms of reference for the proponent's application, the application, consultation reports, and draft assessment reports;
- providing opportunities for First Nations to participate on committees, working groups, etc. that may be established as part of the assessment process;
- monitoring and assessing the proponent's consultations; and
- providing opportunities to discuss impacts on First Nation interests, how those interests may be addressed or accommodated, and how issues relevant to the environmental assessment may be resolved.

In general, requirements placed on the proponent include:

- consulting directly with First Nations;
- carrying out the consultation program set out in the application;
- carrying out any additional consultation measures that may be specified by the Environmental Assessment Office;
- reporting on consultation activities;
- reporting on the issues identified by First Nations through consultations; and
- reporting on how the proponent proposes to address and/or attempts to accommodate any potential adverse impacts.

As part of the assessment, First Nations may be asked to provide information on a range of issues, including Traditional Knowledge (sometimes referred to as Traditional Ecological Knowledge) and information about asserted current use of lands and resources for traditional purposes. Other information may be sought to assess the soundness of any assertions with respect to aboriginal rights and/or title. If First Nations choose not to participate in the environmental assessment, not to respond to consultation efforts by the proponent or the Environmental Assessment Office, and not to provide information to the proponent or the Environmental Assessment Office, the proponent may be required to identify and report on First Nation interests through other means, such as independent studies or literature reviews.

2.4 Terms of Reference for the Application

The terms of reference for the application contain the detailed information and consultation requirements that the proponent must address in its application (Step 4). The terms of reference are developed by the proponent based on an issue identification and scoping process. First Nations are consulted by the proponent and the Environmental Assessment Office during the development of the terms of reference to ensure all potential effects and issues of concern to First Nations that are relevant to the assessment are identified and considered. The final terms of reference must be approved by the Environmental Assessment Office.

2.5 Preparation of the Application

The proponent is responsible for preparing the application in accordance with the approved terms of reference (Step 5). This will involve conducting all the required studies and consultation measures, and reporting on them. The proponent may also consult First Nations regarding the terms of reference for individual studies that are of interest to First Nations.

Before accepting an application for review, the Environmental Assessment Office must ensure the application contains all the required information, as established in the terms of reference, and will assess the adequacy of the proposed First Nation consultation program. Once the application is accepted, the Environmental Assessment Office will require the proponent to provide additional copies of the application to First Nations as appropriate. Following the acceptance and receipt of the necessary copies of the application, First Nations will be notified and advised of the proposed timeframe for providing comments to the Environmental Assessment Office, and any other procedural measures identified in the procedural order.

2.6 Review of the Application and Addressing First Nation Interests

The review of the application is conducted in the manner set out in the procedural order (Step 6). First Nations are formally notified of the review by the Environmental Assessment Office and invited to provide comments.

The Environmental Assessment Office and the proponent will discuss with First Nations and other parties how to prevent, mitigate, or accommodate any potential adverse effects the project may have on First Nation interests. Discussions are normally based on information provided in the application and associated studies, comments received from First Nations and other parties, information provided by First Nations, and other relevant information.

During the application review, the Environmental Assessment Office will assess whether the proposed project is likely to result in an infringement of possible aboriginal rights and/or title. In this assessment, the following questions may be considered:

- Does the proposed activity potentially interfere with asserted aboriginal activities on the land?
- Will the project provide for First Nation involvement or economic benefit?
- To what extent, if any, will the activity change or damage the nature of the land or the availability of resources?
- Will the project affect renewable resources and the ability to exercise aboriginal rights?
- Will any of the land be sold to third parties as part of this activity?
- Will long term leases or tenures be provided to third parties? If so, are they renewable, and does the renewal involve further changes to the land or further extraction of resources?

The Environmental Assessment Office may vary the scope of the assessment and/or the procedures set out in the procedural order, if required, to allow for changes related to First Nation participation in the review process, changes to review timelines, or further attempts to accommodate First Nation interests.

If, despite Environmental Assessment Office or proponent attempts to consult, a First Nation chooses not to cooperate or identify its interests or how they may be affected by a project, the Environmental Assessment Office will consider how the ministers can best make an informed decision. Factors that may be considered include the chronology of attempts to consult (e.g., efforts made to meet with the First Nation and reminders of opportunities to comment), reviews of existing information (e.g., the Environmental Assessment Office may require the proponent to conduct a literature review or independent study to identify First Nation interests), and legal advice.

If the Environmental Assessment Office concludes that there is a likelihood that project certification could result in an infringement of aboriginal rights and/or title, the Environmental Assessment Office will assess whether any potential infringements could be justified and whether further attempts should be made to address the issues and reach workable accommodations or negotiated resolutions. All such actions and the outcomes will be documented in the assessment report provided to ministers.

2.7 Assessment Report and Ministerial Decision

On completion of the application review, the Environmental Assessment Office prepares an assessment report, any recommendations to ministers and the reasons for the recommendations. The assessment report identifies First Nation comments and issues raised in relation to the project, the Province and the proponent's responses to those issues, and how First Nation issues have been or could be addressed. First Nations will normally be consulted in the preparation of the assessment report, and a draft of the report will in most cases be distributed to First Nations for review and comment before being finalized and forwarded to ministers. In this way, ministers are apprised of First Nation views

on the project, and are able to take those into consideration in making their decision on whether to issue an environmental assessment certificate.

The application, assessment report, recommendations and reasons are referred to the ministers responsible for making a decision on issuance of an environmental assessment certificate. After receiving a referral, the ministers must make a decision within 45 days on whether to issue an environmental assessment certificate, refuse to issue a certificate, or require further assessment (Step 8). In doing so, the ministers must also consider whether the Province has met its constitutional and fiduciary obligations to First Nations. The Environmental Assessment Office will notify First Nations of the ministers' decision. The decision, assessment report and any recommendations and reasons will be made available through the Project Information Centre website, and hard (paper) copies may be provided to First Nations if required. If ministers decide to issue an environmental assessment certificate, the proponent can proceed with the detailed planning necessary to obtain required permits and approvals.

3. First Nation Capacity

Participation in the environmental assessment of major projects may present resource and capacity issues to some First Nations. Consequently, First Nations request funding from the proponent, the Environmental Assessment Office, or federal agencies for such purposes as:

- developing an understanding of the environmental assessment process;
- participating in meetings, including travel to attend meetings, participate on committees or in workshops, etc.;
- ceremonial costs:
- professional assistance to enhance participation;
- internal consultation and decision making; and
- economic benefit agreement discussions/negotiations.

On a case-by-case basis, the project proponent may negotiate funding with First Nations to assist in ensuring their participation in the assessment. However, there is no legal requirement for proponents to do so.

The Environmental Assessment Office may provide funding to assist First Nations to participate in the environmental assessment process. Such funding is available subject to appropriations and is provided according to government guidelines. It is intended to assist with such things as travel and technical expertise. It is not intended to duplicate studies or conduct parallel reviews.

Federal departments such as the Department of Indian and Northern Affairs may also provide funding in some cases. The Canadian Environmental Assessment Agency may provide funding when the project is subject to a panel review under the Canadian *Environmental Assessment Act*.

Appendix 1: First Nation Consultation: Summary of Roles and Activities

The table in this appendix provides a summary of the roles and activities of the Environmental Assessment Office, the proponent, and First Nations related to First Nation consultation during an environmental assessment. The roles and activities are set out according to the steps in a typical environmental assessment described in Section 5.1 of the Guide. The table begins at Step 3, "Determining How the Assessment will be Conducted", since Steps 1 and 2 ("Determining if the *Environmental Assessment Act* Applies" and "Determining the Review Path") do not normally involve consultation.

ENVIRONMENTAL ASSESSMENT OFFICE	PROPONENT	FIRST NATION		
STEP 3: DETERMINING HOW THE ASSESSMENT WILL BE CONDUCTED				
1. Identify interested First Nations 2. Complete First Nation pre-consultation assessment 3. Advise the proponent of First Nations with potential interestsInitiate consultation (introductory information-sharing meetings with First Nations and proponent) 4. Assess soundness of any claim related to aboriginal rights and/or titleIntegrate consultation approach with other agencies 5. Initiate discussion/consultation with First Nations to: identify interests discuss the scope of issues to be assessed develop Environmental Assessment Office and proponent consultation requirements identify information to be provided by proponents and First Nations develop the assessment process 6. Finalize procedural orderlssue procedural order	Provide project overview information (may include preliminary impact assessment, literature review) dentify any arrangements with First Nations showing First Nation support for the projecthitiate consultation (introductory information-sharing meetings)	Participate in preliminary meetings with proponent and/or Environmental Assessment Office Identify interests and provide input with regard to the scope of issues, consultation requirements and the assessment process Provide comments on draft procedural order if requested		
Step 4: Develo	ping and Approving Terms of Reference for	the Application		
Ensure consultation approach is integrated with other agencies Continue discussion/consultation with First Nations to: identify First Nation interests determine the effects to be assessed develop Environmental Assessment Office and proponent consultation requirements determine information to be provided in the application Finalize and approve terms of reference for the application Make terms of reference available to First Nations through the Project Information Centre website or other means	Continue providing project information Continue consultation to identify issues and interests and effects to be assessed Develop terms of reference for the application	Continue discussions with the proponent and Environmental Assessment Office to identify interests Provide input on the effects to be assessed, consultation requirements and other requirements to be included in the terms of reference Provide comments on the draft terms of reference for the application		
Step 5: Preparing and Su	bmitting the Application for an Environment	al Assessment Certificate		
Carry out consultation in accordance with the procedural order, Provincial Consultation Policy and legal requirements Provide information on the assessment process to First Nations Determine if the submitted application meets requirements and can be accepted for reviewIdentify any deficiencies in the application Assess the adequacy of the proponent's information distribution and consultationIdentify need for additional consultation measures Accept the application once it meets requirements	Carry out consultation in accordance with the procedural order and any legal requirements Provide information on the project to First NationsRequest First Nations to identify interests in relation to the project Develop terms of reference for individual studies as required Conduct studiesConsider any First Nation comments Prepare application, including:report on consultation undertaken and plannedreport on how First Nation interests will to be addressed or adverse impacts prevented, mitigated, or compensated Submit the application for review Upgrade the application if required	Provide input to assist with studies, including development of terms of reference for studies of interest Provide information to substantiate any assertions with regard to interests and concerns		

ENVIRONMENTAL ASSESSMENT OFFICE	PROPONENT	FIRST NATION		
Step 6: Reviewing the Application				
1. Notify First Nations of acceptance of application 2, Conduct review in accordance with the procedural order, Provincial Consultation Policy and legal requirements 3. Notify First Nations of opportunities to comment on the application 4. Involve First Nations in accordance with the procedural order, Provincial Consultation Policy and legal requirements 5. Consider the impacts on First Nation interests (and possibly obtain legal advice on soundness of assertions) 6. Ensure information is made available to First Nations through the Project Information Centre website or other means 7. Notify First Nations regarding the availability of information 8. Consider First Nation comments and issuesif required, vary the scope of assessment and/or procedures, including the requirements for further consultations 9. Prepare consultation chronology (meetings, letters, site visits, phone calls, and other efforts made by Environmental Assessment Office and proponent to obtain information about First Nation interests) 10. Assess potential infringements, justification, need for accommodation/negotiation etc.	Provide copies of the application to First Nations Carry out consultation in accordance with the procedural order, consultation plan and any legal requirements Carry out any additional consultation measures required by the Environmental Assessment Office Respond to comments submitted on the application Propose additional measures to address outstanding issues	1. Identify contact person to represent First Nation interests 2. Participate in the review process by: - submitting comments on the adequacy of the proponent's consultation report and consultation plan - submitting comments on the application and impacts on First Nation interests - providing information to support claims - participating in any working groups, committees etc. that may be established for the assessment - providing advice, analysis and recommendations to the proponent and Environmental Assessment Office		
Step 7: Preparing the	e Assessment Report and Referring the App	lication to Ministers1		
Prepare the assessment report, including information on First Nation interests and how they are to be addressed Advise ministers of: First Nation comments/positions the potential for any unjustifiable infringements of aboriginal rights or title the fulfillment of legal obligations		Provide comments on all or portions of the draft assessment report		
Step 8: Ministers' Decision on Issue/Not Issue an Environmental Assessment Certificate				
Notify First Nations regarding the ministers' decision Make information on the assessment report decision and any recommendations and reasons available to First Nations through the Project Information Centre website or other means	Continue any further information distribution, consultation or other measures that may be a condition of certification			

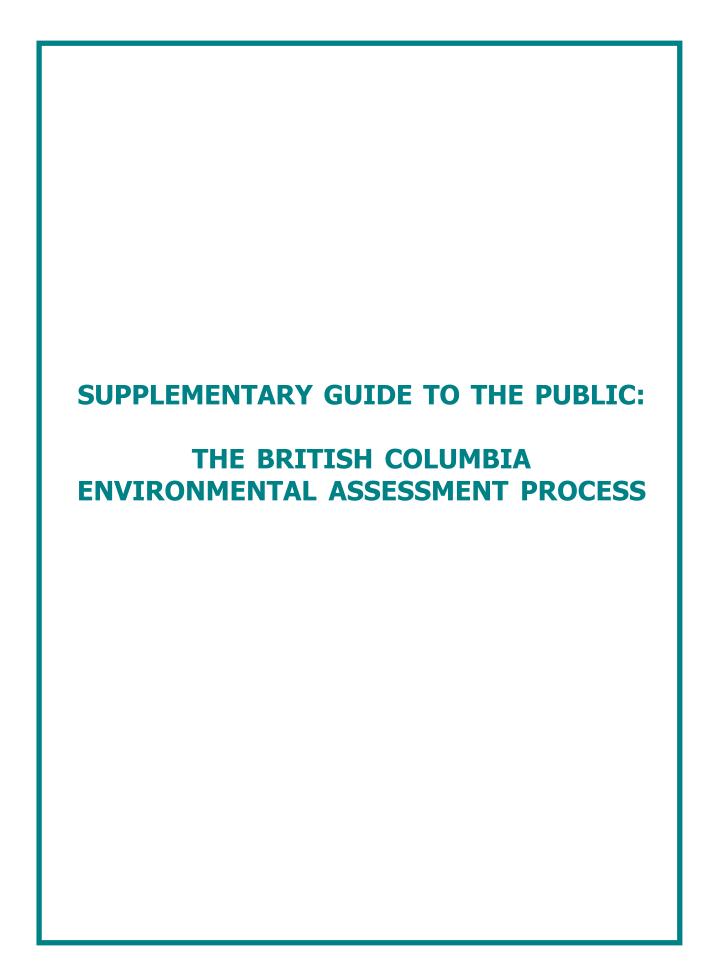


TABLE OF CONTENTS

1. Introduction	1
1.1 Goals of Public Consultation and Participation	1
1.2 Why Get Involved?	
1.3 When to Get Involved	
2. General Roles and Responsibilities	
2.1 What to Expect From the Environmental Assessment Office	3
2.2 What to Expect From Project Proponents	4
3. Consultation and Participation During an Environmental Assessment	6
3.1 Initial Consultation with the Public	
3.2 Developing and Establishing Assessment Procedures and Consultation Requirements	
3.3 Terms of Reference for the Application	
3.4 Preparation of the Application	
3.5 Review of the Application and Addressing Public Issues	
3.6 Assessment Report and Ministerial Decision	
4. Advise on How to Doutisingto in an Environmental Aggagement	11
4. Advice on How to Participate in an Environmental Assessment	
4.2 Tips For Participating in an Environmental Assessment	
4.2 Tips For Farticipating in an Environmental Assessment 4.3 Questions to Ask	
4.4 Where to Get Information	14
Appendix	
Appendix 1: Public Consultation: Summary of Roles and Activities	15

1. Introduction

This "Supplementary Guide to the Public" provides further information for members of the public who wish to gain an understanding of public consultation and participation opportunities during a typical environmental assessment. It also provided information on how public issues are taken into account and on how to make the most of opportunities for public participation. Readers should note that this document is not designed as a stand-alone guide. The information is supplemental to that provided in the "Guide to the British Columbia Environmental Assessment Process" and is to be read in conjunction with that document.

Throughout this document, reference is made to relevant sections of the "Guide to the British Columbia Environmental Assessment Process" where appropriate. Therefore, for ease of reading, the "Guide to the British Columbia Environmental Assessment Process" is referred to simply as "the Guide".

1.1 Goals of Public Consultation and Participation

The purpose of public consultation and participation in an environmental assessment is to ensure that community perspectives and public issues in relation to a proposed project are identified and considered before decisions are made on whether the project proceeds to development.

Goals of public consultation and participation include:

- ensuring that public concerns relevant to the assessment are identified, so that they may be adequately addressed:
- identifying stakeholder groups that may need more comprehensive consultation efforts;
- obtaining useful local information and knowledge for completing the required baseline and impact assessment studies:
- improving overall community and public understanding of the project;
- preparing local communities and residents for managing the social, economic and land use effects of a project;
- preparing interested workers and suppliers for training, employment and business opportunities related to the project;
- helping proponents to develop options to enhance positive effects of a project and prevent or mitigate adverse effects; and
- enabling more comprehensive information to be compiled about a project proposal for government decision-making.

1.2 WHY GET INVOLVED?

Projects that are subject to an environmental assessment may have the potential to impact a community or a region. While proponents are required to consider a range of factors in their project design, it is likely they may not be able to identify all issues. Public participation provides a means for proponents to learn about and incorporate local information, priorities and concerns into a project's design. It thereby contributes to better project planning. Public input is essential to fully identify all potential effects and issues associated with a project, so they may be adequately considered in the environmental assessment. Public participation in the environmental assessment process helps to ensure that community values and public goals for community development are considered in project planning and decision-making.

1.3 WHEN TO GET INVOLVED?

Early identification of potential impacts can assist in developing options to enhance positive effects and prevent or mitigate the adverse effects of a project. Therefore, the public is advised to get involved early and identify the issues that it would like addressed at the earliest opportunity. The earlier you make your concerns and ideas about a project known, the more likely the proponent will be able to address them and include them in project design. As the proponent progresses through the environmental assessment, and project design and mitigation plans are refined, it becomes more difficult to change project plans.

2. GENERAL ROLES AND RESPONSIBILITIES

2.1 What to Expect From the Environmental Assessment Office

The Environmental Assessment Office leads and manages each environmental assessment according to the requirements of the *Environmental Assessment Act*, the accompanying regulations, and the procedural order issued for that assessment (see Section 5.1 of the Guide for an overview of a typical environmental assessment). Environmental Assessment Office staff play an important role in clarifying the environmental assessment process for all those participating in the review. They are able to provide helpful advice with respect to the public consultation program and the environmental assessment in general.

The following summarizes the major responsibilities of the Environmental Assessment Office with respect to public consultation and participation.

Advice and Direction: providing advice and direction to the public about consultation and participation opportunities throughout the environmental assessment process.

Notification: placing notices related to the assessment on the Project Information Centre website; sending letters of notification regarding the application to parties on the project e-mail distribution list; providing project updates as the review proceeds; and directing the proponent to issue public notices.

Project Information Centre: ensuring access to information by placing documents related to the project on the Project Information Centre website, and arranging for documents to be available in the region of the proposed project, as appropriate, where Internet access is inadequate.

Establishing Appropriate Forums for Public Input on Technical Issues: as appropriate, holding meetings that are open to the public and hosting public workshops or other forums for facilitating public consideration of technical issues.

Establishing Public Comment Periods: ensuring adequate opportunities for the public to identify interests and provide comments on project proposals.

Assessing the Adequacy of Consultation: monitoring and assessing the proponent's public consultation activities, including, in most cases, preparing a written assessment of the proponent's consultation program during the 30 day screening of the application.

Consulting with the Public: in some cases, undertaking public consultation, either alone or jointly with the proponent, to assist in identifying and addressing public issues and concerns.

Considering Public Issues: ensuring public concerns and interests that are relevant to the assessment are discussed and taken into account.

Reporting on Public Issues: at the end of the assessment, providing the ministers an assessment report that states public issues and how they have been, or could be, dealt with.

2.2 What to Expect From Project Proponents

The following summarizes the major responsibilities of the proponent with respect to public consultation and participation.

Public Notification and Advertising: issuing public notices about the environmental assessment, and advertising in relation to the availability of project documentation for review and public consultation activities and events.

Adequate Distribution of Information: providing information on the proposed project in an understandable form to the public and stakeholder groups in communities potentially affected by the project.

Meaningful Public Discussions: undertaking discussions with the public and community groups, using appropriate methods to identify and analyze public concerns.

Conducting a Public Consultation Program: developing and carrying out a public consultation program, providing details of the consultation program in the application, and carrying out additional consultation measures that may be specified by the Environmental Assessment Office.

Consultation with Specified Members of the Public: undertaking consultations with any additional persons and organizations identified by the Environmental Assessment Office that may have interests affected by the proposed projects.

Reporting on Public Consultations: reporting on the consultations undertaken and the results of the consultations.

Responding to Issues Raised: arranging for follow-up consideration of, and response to, specific issues and concerns identified by the public during consultation; providing information and cooperating with the Environmental Assessment Office to address public issues and concerns; and developing appropriate modifications to project design and implementation to address concerns.

Reporting on Issues: reporting on issues and concerns identified by the public through consultations, and how the proponent proposes to address any potential adverse impacts.

3. Consultation and Participation During an Environmental Assessment

This section provides further information on public consultation and participation opportunities in a typical environmental assessment, led and managed by the Environmental Assessment Office, with reference to the eight steps set out in Section 5.1 of the Guide.

- Step 1: Determining if the Environmental Assessment Act applies
- **Step 2: Determining the review path**
- Step 3: Determining how the assessment will be conducted
- Step 4: Developing and approving application terms of reference
- Step 5: Preparing and submitting the application
- **Step 6: Reviewing the application**
- Step 7: Preparing the assessment report and referring the application to ministers
- Step 8: Deciding to issue/not issue an environmental assessment certificate

The table in Appendix 1 summarizes the roles and activities of the Environmental Assessment Office, the proponent and the public during the assessment.

3.1 Initial Consultation with the Public

In many cases, a proponent will have contacted members of the public who may have an interest in the proposed project before discussions with the Environmental Assessment Office about the environmental assessment commence. These preliminary discussions normally provide the public with general information about the proposal and the opportunity to identify potential concerns about, or support for, the project. Initially, the proponent may contact the most readily identifiable stakeholders, such as adjacent landowners, and organizations such as local chambers of commerce or environmental groups.

Once it has been determined that the project is subject to the *Environmental Assessment Act* and that an environmental assessment will be required (Steps 1 and 2), the Environmental Assessment Office will encourage the proponent to continue identifying potentially affected members of the public and undertaking consultation activities as early as possible. The Environmental Assessment Office will conduct its own preliminary identification of potentially interested parties, and will advise the proponent of any additional parties that should be contacted.

3.2 Developing and Establishing Assessment Procedures and Consultation Requirements

The Environmental Assessment Office is responsible for determining the project-specific assessment procedures and consultation requirements (Step 3), including public consultation requirements, which the proponent must undertake, and consultations, which the Environmental Assessment Office will undertake. The Environmental Assessment Office uses information obtained through the proponent's initial consultations, information provided from members of the public themselves, and other existing information in developing these requirements. The Environmental Assessment Office will involve federal agencies and provincial agencies that may have post-certification consultation obligations to ensure consultation requirements are integrated to the extent practicable.

The Public Consultation Policy Regulation (see Section 5.3.2 and Appendix 5 of the Guide) sets out general policies that the Environmental Assessment Office must take into account when determining the public consultation requirements for an environmental assessment. The policies relate to the implementation and assessment of the proponent's public consultation program, the provision of public notice, access to information, and formal public comment periods.

How the public is to be consulted

Consultation and participation activities are opportunities for the public to identify objectives, interests and concerns in relation to the proposed project. The Environmental Assessment Office and/or the proponent may use various consultation methods including:

- open houses and public meetings,
- workshops and focus group sessions,
- project site visits,
- presentations to stakeholder groups, and
- participation on committees or working groups.

Further information on consultation methods that may be used in an environmental assessment is contained in Appendix 3 of the Guide.

How the public is provided with notice

The Environmental Assessment Office usually notifies the public by posting on the Project Information Centre website, newspaper advertising, issuing open letters or any other means that it considers satisfactory. The proponent normally provides notification by advertising in local newspapers published near the proposed project. If there are significant provincial or regional interests, notices may be required in newspapers with a broader distribution.

Opportunities for the public to provide comments

Formal public comment periods are established to ensure guaranteed opportunities for members of the public to express their views during the course of the assessment. During comment periods, the public is invited to submit comments to the Environmental Assessment Office on the proposed project and on key documentation.

Comment periods are most likely to occur in connection with draft terms of reference for an application and on the application itself. If a significant supplement or addendum to the application is needed to address certain issues more fully, an extension to the comment period or an additional comment period may be needed. Specific time limits will be set for any public comment periods. These limits will be identified in the public notices issued by the Environmental Assessment Office and/or the proponent. Comments may be submitted by mail, fax or e-mail, as specified in the public notices.

3.3 Terms of Reference for the Application

The terms of reference for the application contain the detailed information and consultation requirements that the proponent must address in its application (Step 4). The proponent first prepares draft terms of reference, which are submitted to the Environmental Assessment Office. The Environmental Assessment Office coordinates a review of the draft terms of reference, which may include a formal, time-limited public comment period. A comment period at this stage would be to determine whether or not the draft terms of reference address all the potential effects and issues of public concern that are relevant to the assessment. In addition, the public may have the opportunity to comment on any proposed consultation program included in the draft terms of reference.

Once all comments have been considered and any required changes made to the draft terms of reference, this document is finalized and approved by the Environmental Assessment Office. The approved terms of reference are made available on the Project Information Centre website.

3.4 Preparation of the Application

The proponent is responsible for preparing the application in accordance with the approved terms of reference (Step 5). This will involve conducting all the required studies and consultation measures. Once the application is prepared, the proponent submits it to the Environmental Assessment Office. The Environmental Assessment Office may only accept an application for review if it contains the required information, including any information related to public issues.

The Environmental Assessment Office may assess the pubic consultation measures undertaken and proposed by the proponent, and may identify any additional measures that are necessary to ensure adequate consultation with the public. Additional measures could pertain to consultation with the general public or with specified parties, and could be in relation to such things as provision of public notices and access to information. Either the proponent or the Environmental Assessment Office

may be required to carry out the additional consultation measures, and may be required to do so within a specified time period.

3.5 REVIEW OF THE APPLICATION AND ADDRESSING PUBLIC ISSUES

Once the Environmental Assessment Office accepts an application for review (Step 6), the public is notified, advised where the application can be viewed, and invited to provide comments. Both the Environmental Assessment Office and the proponent may be required to undertake notification. The intent of notification is to reach individuals who may want to participate in the review or may be affected in some way by the project, including but not limited to, residents of the community in which the project is located and residents of adjacent communities.

The length of the public comment period on the application is normally determined by the Environmental Assessment Office, taking into account anticipated public interest, extent of pre-application consultation and other factors. The start and end dates for the public comment period will be specified in the notices issued by the Environmental Assessment Office and/or the proponent.

Members of the public are encouraged to submit their comments on the application as early as possible during the comment period, so the issues can be considered and addressed early. However, all comments should be submitted in time to ensure they are received by the Environmental Assessment Office before the public comment period closes.

Public comments received by the Environmental Assessment Office during a public comment period are filed on the Project Information Centre website. For comments to be placed on the Project Information Centre, they must include the name of the submitter. All comments are posted as originally submitted, except where content must be severed in accordance with the *Freedom of Information and Protection of Privacy Act*. If the person submitting the comments advises that they do not wish to have their address made public, that information will be deleted from the comments posted on the website. The proponent will be provided an opportunity to respond to comments, and a time limit may be specified for the submission of such responses.

The Environmental Assessment Office will discuss with the parties involved in the review how to prevent, mitigate, or accommodate any potential adverse effects the project may have on public interests. Discussions will be based on information provided in the application and associated studies, comments received from the public and other parties, and other relevant information. The review may also include public participation opportunities, such as working on technical committees or participating in workshops examining specific issues.

The Environmental Assessment Office will keep track of issues raised by the public and other parties (e.g., by means of an issue identification document which may be posted on the Project Information Centre website). Issues that are recorded may originate from a variety of sources, including:

- discussions that are facilitated by the Environmental Assessment Office, and any ensuing correspondence;
- written comments submitted to the Environmental Assessment Office by the public, First Nations and government agencies during the comment periods;
- analysis and advice recorded by the Environmental Assessment Office during project-related meetings, and any follow-up communications where further attention is needed;
- comments recorded by the proponent or Environmental Assessment Office at public consultation sessions; and
- proponent responses to comments.

3.6 Assessment Report and Ministerial Decision

On completion of the application review, the Environmental Assessment Office prepares an assessment report, any recommendations to ministers and the reasons for the recommendations (Step 7). The assessment report identifies the comments and issues raised by the public and how they have been, or could be, addressed. All comments from review participants and responses from the proponent will be considered from the standpoint of their relevance to the assessment. If relevant, they will be taken into account in preparing the assessment report. In this way, ministers are apprised of the public's views on the project, and are able to consider those views in making their decision on whether to issue an environmental assessment certificate.

The application, assessment report, and any recommendations and reasons are referred to the ministers responsible for making the decision to issue/not issue an environmental assessment certificate. After receiving a referral, the ministers must make a decision within 45 days on whether to issue an environmental assessment certificate, refuse to issue a certificate, or require further assessment (Step 8). After ministers have made their decision, the Environmental Assessment Office will post the decision on the Project Information Centre website. The assessment report will also be made available through the Project Information Centre website, along with any related recommendations and reasons.

4. Advice on How to Participate in an Environmental Assessment

4.1 WHAT TYPE OF INPUT TO PROVIDE

The *Environmental Assessment Act* provides for the assessment of relevant environmental, economic¹, social, heritage and/or health effects of reviewable projects. Public input on any of these themes is considered by government and included in the assessment report.

Public comments should be focused on the proposed project and those components that are being reviewed in the assessment. Public input may include comment on issues such as:

- the methodology and scope of studies being undertaken as part of the environmental assessment review;
- substantive concerns about the impacts of the project; and
- the adequacy of the proponent's consultation program.

Comments about a proposal should be as clear and comprehensive as possible. When available, factual information should be provided to support any comments.

It should be remembered that environmental assessments are high-level reviews that determine the overall acceptability of a project. In many cases, specific details related to mitigation design are considered after the environmental assessment, when individual permit applications are reviewed.

4.2 TIPS FOR PARTICIPATING IN AN ENVIRONMENTAL ASSESSMENT

The following are some practical considerations that public participants should be aware of when providing input to an environmental assessment. Keep in mind that each assessment is unique, and that there may be issues and considerations raised that are not specifically addressed here.

Confirm that you are on the Environmental Assessment Office e-mail distribution list: while key interested members of the public or groups will already be known to the Environmental Assessment Office, you should confirm with the Project Information Centre that you are included on the project e-mail distribution list to ensure you receive notification once an environmental assessment commences and as project updates are published.

Contact the Environmental Assessment Office: as the neutral administrator of the environmental assessment process, the Environmental Assessment Office is a key source of expertise and experience regarding environmental assessments. As appropriate, the Environmental Assessment Office consults with technical experts and regional staff within provincial government ministries, federal government agencies, and local governments to obtain advice and information related to specific issues.

Offer suggestions on how to consult: proponents are often receptive to suggestions on how, when, and with whom to consult.

Request government representation at project open houses and public meetings: it is usually helpful to have government representatives who are involved in the assessment attend public meetings to provide technical expertise and hear public comments directly.

Explore the feasibility of a public workshop on issues associated with the assessment: you may wish to suggest a list of invitees and appropriate times and venues for a public workshop, that could include government representatives, the proponent, technical experts and interested members of the public.

Visit the Project Information Centre website regularly: information on the Project Information Centre website is updated on an ongoing basis throughout the assessment. Visit the website regularly to keep up-to-date on new information as it becomes available.

Ask where copies of environmental assessment documents can be accessed: if you are able to undertake a detailed review of a proposal but are not able to download large documents from the Project Information Centre website, ask the Environmental Assessment Office where you can access hard (paper) copies of the relevant review materials.

Learn about technical issues: try to become familiar with the technical language used in an assessment in order to understand the project proposal and how it proposes to mitigate impacts.

Increase public awareness: attend open houses or public meetings to discuss the proposal.

Establish contact with other interested parties: if a proposed project is significant enough to require an environmental assessment, there will likely be a number of different community interests who will want to participate or provide comments on the proposal. Find out who else may share your interest, or have similar interests, and meet with them. This may include community groups, ratepayers' organizations, environmental groups, residents of neighbouring municipalities, local First Nations, the Chamber of Commerce, or other business interests.

4.3 QUESTIONS TO ASK

While the specific issues relating to a proposed project will be unique in every case, the following questions may help you focus your efforts in participating in the environmental assessment. These questions are not exhaustive, and should be considered as a guide only.

What may be the impacts of the project on the environment or human health?

This could include impacts or improvements to air quality, water quality, soil quality, noise concerns, biodiversity, and habitat protection.

What social and economic impacts is the proposed project expected to have?

This could include issues such as whether the project will have an impact on the local economy, existing businesses, the labour market, and employment opportunities, and whether the local infrastructure, such as transportation and social support services, is adequate to support the proposal or will benefit from the proposal.

What will be the effects on heritage resources?

This could include impacts and opportunities related to local archaeological sites, historic sites, heritage buildings or sites, and landscape features.

What level of detail will be addressed during the assessment, and what will be dealt with during the permitting phase?

The environmental assessment focuses on the impacts and benefits of the overall design of the project and its components. Typically, permitting deals with specific standards for implementing and operating different components of the project.

What technical studies are being conducted for the application?

Consider whether these technical reports will provide you with adequate assurance that your interests are addressed and understood.

What are the views of various government agencies and stakeholders about key issues?

Is there consensus or debate about methods and findings? How are the areas of debate resolved?

What mitigation measures are recommended to address your interests?

Who will be responsible for their success? What resources are required to ensure their success?

Are there other projects or precedents that can be used for comparison with the proposed benefits and impacts?

Inquire whether there are people who could be contacted, either locally or elsewhere, to discuss their experience with similar projects.

4.4 WHERE TO GET INFORMATION

The Environmental Assessment Office manages a web-based Project Information Centre that contains extensive records about projects subject to environmental assessment (see Section 7 of the Guide for further information on the Project Information Centre). Terms of reference for project applications, project applications, public notices, orders public and government comments, assessment reports, ministers' certifications decisions and other documents relevant to environmental assessments are available on the Project Information Centre website.

Hard copies of some documents may also be available in the region of a proposed project where Internet access is still inadequate. In this case, documents will be housed in public locations such as libraries. To determine if documents are available in a specific region and at which locations, contact the Project Information Centre.

Project Information Centre

Website: www.eao.gov.bc.ca E-mail: eaoinfo@gems5.gov.bc.ca Phone: (250) 356-7441 (Victoria)

Toll-free calls through Enquiry BC at 1-800-663-7867 or

(604) 660-2421 (Vancouver) Fax: (250) 356-7440

APPENDIX 1: Public Consultation: Summary of Roles and Activities

The table in this appendix provides a summary of the roles and activities of the Environmental Assessment Office, the proponent, and the public related to consultation during an environmental assessment. The roles and activities are set out according to the steps in a typical environmental assessment described in section 5.1 of the Guide. The table begins at Step 3, "Determining How the Assessment will be Conducted", since Steps 1 and 2 ("Determining if the *Environmental Assessment Act* Applies" and "Determining the Review Path") do not normally involve consultation.

ENVIRONMENTAL	PROPONENT	PUBLIC
ASSESSMENT OFFICE		
Step	3: DETERMINING HOW THE ASSESSMENT WILL BE	CONDUCTED
Advise the proponent of additional public with potential interests Integrate consultation approach with other agencies Initiate discussion/consultation with public to: identify interests discuss the scope of issues to be assessed develop Environmental Assessment Office and proponent consultation requirements develop the assessment process Issue procedural order	Identify interested public Advise the Environmental Assessment Office of public with potential interests Provide project overview information (may include preliminary impact assessment, literature review) Initiate consultation (introductory information-sharing meetings, public forums)	Attend meetings and/or attend public forums such as open houses Identify interests and provide input on the scope of issues, consultation requirements and the assessment process
Step 4: Deve	loping and Approving Terms of Referenc	e for the Application
1. Advise the proponent of additional public with potential interests 2. Ensure consultation approach is integrated with other agencies 3. Continue discussion/consultation with public to: - identify interests - determine the effects to be assessed - determine Environmental Assessment Office and proponent consultation requirements - determine information to be provided by the proponent in the application 4. Consider asking the public to comment on the draft terms of reference for an application before finalizing 5. Approve terms of reference for the application 6. Make terms of reference available to the public through the Project Information Centre website	1. Continue identifying interested public Advise the Environmental Assessment Office of public with potential interests 2. Provide project information to interested public 3. Continue consultation to identify effects to be assessed, consultation requirements and public issues to be included in the terms of reference 4. Develop terms of reference for the application	Attend meetings or public forumsIdentify interests and provide input on the effects to be assessed and consultation requirements Respond to any invitations to comment on the draft terms of reference for the application
STEP 5: PREPARING AN	D SUBMITTING THE APPLICATION FOR AN ENVIRONM	ENTAL ASSESSMENT CERTIFICATE
Carry out consultation in accordance with the procedural order Determine if the application meets requirements and can be accepted for reviewIdentify any deficiencies in the application Assess the adequacy of the proponent's public information distribution and consultationIdentify any additional consultation measures required Accept the application once it meets requirements	1. Carry out consultation in accordance with the procedural order 2. Provide information on the project to the public 3. Request the public to identify interests in relation to the projectDevelop terms of reference for individual studies as required 4. Conduct studies 5. Consider any public comments Prepare the application, including: - report on consultation - consultation plan for application review - report on how public interests will to be addressed or adverse impacts prevented, mitigated, or compensated 6. Submit the application for review 7. Upgrade the application if required	Respond to consultation opportunities and to invitations to identify issues of concern related to the project

ENVIRONMENTAL ASSESSMENT OFFICE	PROPONENT	PUBLIC	
	STEP 6: REVIEWING THE APPLICATION		
1. Notify the public of acceptance of application 2. Conduct review in accordance with the procedural order 3. Notify the public of opportunities to comment on the applicationlnvolve the public in accordance with the procedural order 4. Make information available through the Project Information Centre website 5. Notify the public regarding the availability of information 6. Consider public comments and issuesif required, vary the scope of assessment and/or procedures, including the requirements for further consultations 7. Prepare the assessment report, including information on public interests and how they are to be addressed	Carry out consultation in accordance with the consultation plan Carry out any additional consultation measures required by the Environmental Assessment Office Respond to comments submitted on the application Propose additional measures to address outstanding issues	Respond to invitations to comment on the application and impacts on public interests Respond to opportunities to participate in the assessment process	
STEP 7: PREPARIN	IG THE ASSESSMENT REPORT AND REFERRING THE	Application to Ministers	
Prepare the assessment report, including information on public interests and how they are to be addressed Advise ministers of public issues and interests and how they have been/could be addressed			
Step 8: Ministers' Decision on Issue/Not Issue an Environmental Assessment Certificate			
Notify the public regarding the ministers' decision Make information on the assessment report, decision and any recommendations and reasons available through the Project Information Centre website	Continue any further information distribution, consultation or other measures that may be a condition of certification		

Environmental Management Act

ENVIRONMENTAL IMPACT ASSESSMENT REGULATION

[includes amendments up to B.C. Reg. 321/2004]

Definition

1 In this regulation, "assessment" means an environmental impact assessment required by the minister under section 78 of the *Environmental Management Act*.

[am. B.C. Reg. 321/2004, s. 9.]

Requirement for assessment

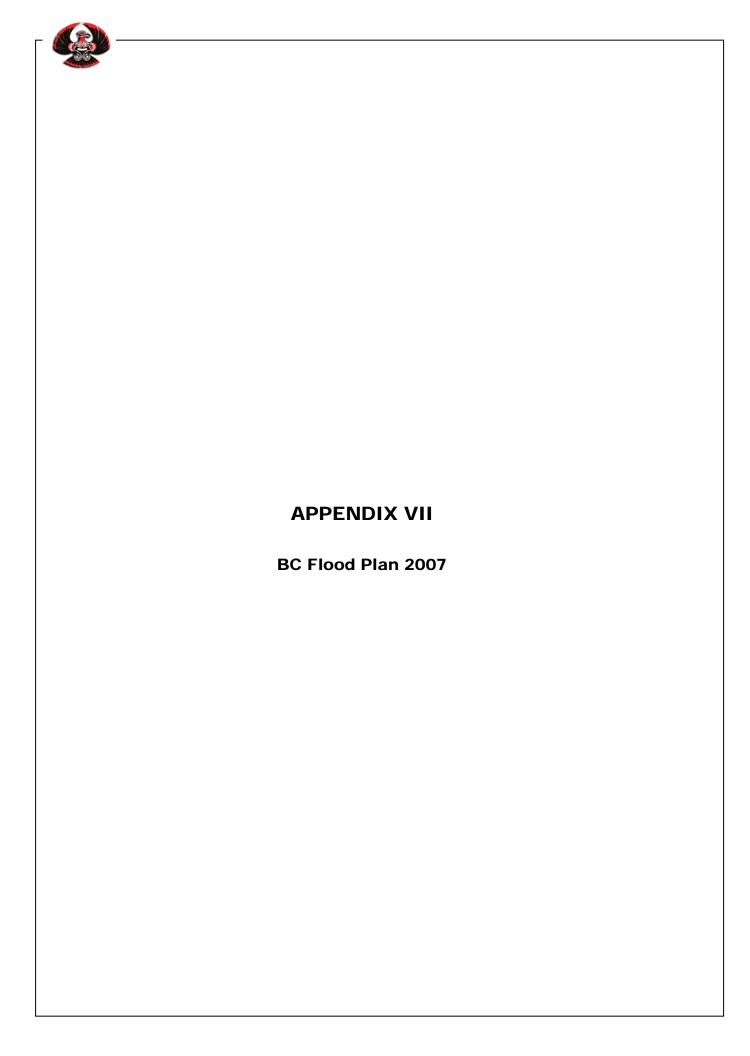
2 A person shall submit an assessment containing all matters relevant to the requirement of the minister including, but without limiting the generality, an assessment of the detrimental and beneficial impact upon the environment of all or any of

- (a) water quality,
- (b) air quality,
- (c) land use,
- (d) water use,
- (e) aquatic ecology, and
- (f) terrestrial ecology.

Content of assessment

3 The assessment, which must be in writing, shall contain, in addition to the matters referred to in section 2, the following:

- (a) the name, address and title of the person to whom the requirement is directed and of the person having responsibility for answering questions relating to it;
- (b) a description of the proposal, its purpose and an outline of the anticipated timetable for its implementation;
- (c) a description of the existing state of the environment in the vicinity of the location for the proposal;
- (d) identification of all anticipated environmental impacts attributable to the proposal and of measures to be implemented to mitigate or avoid adverse environmental impacts and maximize environmental benefits.





Consequence Management Series **BC Flood Plan**

2007 Edition

Library and Archives Canada Cataloguing in Publication Data British Columbia. Provincial Emergency Program.

BC flood plan. -- 2007 ed.

(Consequence management series)

ISBN 978-0-7726-5698-8

1. Flood damage prevention - British Columbia - Handbooks, manuals, etc. 2. Emergency management - British Columbia - Planning - Handbooks, manuals, etc. I. Title. II. Title: British Columbia flood plan.

III. Series.

HV609.B74 2007 363.34'935609711 C2007-960042-5

Foreword

Effective consequence management involves planning for, responding to and controlling an event to minimize risk and reduce the negative effects from that event.

In BC, lives, homes, businesses, property and infrastructure may be threatened by floods. Whether flooding occurs from a sudden onset event due to unpredictable rains and storms or slowly developing situations due to run-off from melting snows, being prepared to respond is critical.

This British Columbia Flood Plan (BC Flood Plan), describes the concept of operations for responding to and managing a flood hazard event and its consequences whether the flood is a single event or in conjunction with another event such as an earthquake. This plan specifically relates to flood hazard management although some of the same responses and actions may be used for various other emergency events. (See the PEP Web site for other hazard-specific plans.)

Enhanced readiness and response activities require the assistance of all partners in the BC Flood Plan. This plan is a living document that represents an agreement between various ministries and agencies of the provincial government.

The plan, originally developed in 1992, is reviewed and revised by the Provincial Emergency Program to meet changing needs and new technologies.

This document fits as a component to the British Columbia Emergency Response Management System (BCERMS) which is a comprehensive all-hazards emergency response management structure. BCERMS provides a framework for a standardized process for organizing and managing a coordinated and integrated response to emergencies and disasters in BC.

This plan is approved for use by the four ministries responsible and replaces all previous versions, including the BC Flood Plan 2006 Edition.

Cam Filmer

Executive Director – Provincial Emergency Program Ministry of Public Safety and Solicitor General

Jim Mattison

ADM Water Stewardship Division

Ministry of Environment

Dirk Nyland Chief Engineer

Ministry of Transportation

Andy Orr Executive Director Public Affairs Bureau

Date Signed: February 15, 2007

Copyright 2007 Ministry of Public Safety and Solicitor General Government of British Columbia, Victoria, BC, Canada

Table of Contents

PREAMBLE FO	R FLOOD HAZARD CONSEQUENCE MANAGEMENT	1
LEGISLATION		2
FLOOD MANAC	GEMENT PHASES	2
PHASE 2 – PRI PHASE 3 – RES Stage 1 – F Stage 2 – F Stage 3 – F	ANNING AND PRE-FLOOD PREPARATION EPAREDNESS (READINESS)	3 4 4
	COVERY/ DISASTER FINANCIAL ASSISTANCE	
	DPERATIONS	
Site Level In Emergency Ministry Op Provincial In Provincial In Provincial In Provincial Inventory Of Workshop Information	Response Structure Response Poperations Centre Regional Emergency Operations Centre Pordination Group Regional First Nations Reserves Protocols Protocols Protocols Protocols Protocols Presponse Poperations Response Poperations Protocols Presponse Protocols	
ADVISORIES A	ND WARNINGS FROM THE RIVER FORECAST CENTRE	15
SPECIALIZED I	EQUIPMENT	16
DECLARATION	OF AN EMERGENCY	16
APPENDIX A	ABBREVIATIONS/DEFINITIONS	
APPENDIX B	FLOOD OBSERVER/ASSESSOR CHECKLIST	
APPENDIX C	PRODUCING DIKE LOCATION MAPS	
	FLOODING COMMUNICATIONS ACTION PLAN AND MESSAGING	

Preamble for Flood Hazard Consequence Management

The Province of British Columbia may experience flooding throughout the entire year, due to natural or human-made conditions and geography. Some communities are more susceptible to fall flooding due to heavy rains or rain-on-snow events, while other communities are susceptible to spring freshet flooding from rapid snow melt. The province, in general, remains susceptible to flooding by intense precipitation which may occur at any time of the year. Ice jams, reservoir releases and mechanical failure of flood protection works may also cause flooding anywhere in the province.

Freshet is the period of time in the spring, typically from April to July, where rivers swell from snowmelt. Freshet flooding may occur where atmospheric conditions lead to rapid melt and stream channels become overwhelmed. Freshet flooding can generally be forecast using information related to snow packs, predicted weather and knowledge of stream channel capacities. These forecasts generally create a foundation for an enhanced level of readiness.

Less predictable are localized weather conditions such as rain-on-snow or intense rain events. Each situation demands specialized attention and unfortunately, neither provides adequate advance warning, making response reactionary.

Localized or regional weather may cause ice jams anywhere on a stream including large rivers. Ice jams may form in intense cold where ice forms on the stream bottom becoming anchor for further ice development or reducing the ability for other floating ice to pass downstream. Where conditions persist, the ice continues to grow and will eventually dam the river. Alternatively, ice runs formed by the release of developed ice sheets flow downstream and accumulate in river sections eventually choking the river. Generally, the resulting flood occurs upstream of the ice dam until the reservoir formed behind the dam breaks through or finds an alternative path around it. River level changes may be rapid or gradual.

Mechanical failure of flood protection works or human-made dams have potential for flooding and are generally not predictable. Also difficult to predict are sudden releases by natural reservoirs formed by beavers or landslides.

The BC Flood Plan describes the methodology the British Columbia Provincial Government (the Province) will utilize for coordinating activities to manage a flood event. This includes laying the foundation for describing a flood event, the structure to be utilized, and the general expectations for roles and responsibilities of other levels of government, provincial ministries and agencies and other stakeholder groups.

Local Authorities, as described under the *Emergency Program Act*, have a legislated duty to respond first to emergency situations within their jurisdictions and to have an emergency plan in place to keep citizens, infrastructure and the community as safe as possible.

The legislation outlined below provides details on the roles, responsibilities and authority of local authorities and the Province and what they need to have in place to be prepared for emergencies. In addition to the legislation, there are a number of tools to help local authorities be disaster ready. These tools include evacuation guidelines, a community recovery guide, a hazard, risk and vulnerability analysis tool kit, a community emergency program review and the BCERMS site support level guidelines. (See the reference section of this document for Web site locations of these tools.)

Legislation

Emergency Program Act, 1996, details roles and responsibilities of the Province, sets out local authority emergency organization, provides information declaring local or provincial emergencies and the extraordinary powers a declaration provides.

Emergency Program Management Regulation, 1994, details the responsibilities and authorities of provincial ministers, ministries, programs, and government corporations and agencies.

Local Authority Emergency Management Regulation, 1995, outlines what must be in a local emergency plan as well as the powers and responsibilities of a local authority.

Compensation and Disaster Financial Assistance Regulation, 1995, details eligibility requirements, payment limits, and payment processes for all DFA claims whether for an individual or a local authority.

Dike Maintenance Act, 1995, details the legislative basis for operation and maintenance of public dikes in British Columbia. Other legislation relative to diking authorities in British Columbia include the *Drainage, Ditch and Dike Act* and the *Local Government Act* which allows local governments to undertake diking and drainage through local bylaws and Improvement Districts.

British Columbia Dam Safety Regulation, 2000, provides guidance on the application process as well as reporting and inspection guidelines specific to dams.

Flood Management Phases

Flood management will be undertaken in four phases. These are:

- 1. Planning
- 2. Preparedness (Readiness)
- 3. Response
- 4. Recovery



Phase 1 – Planning and Pre-Flood Preparation

Phase 1 may be described as the normal day-to-day operations for the province to monitor river levels, provide oversight to dam and dike owners, continue efforts in planning and exercises, and provide for mitigation. The province may, from time to time, provide strategic recommendations to local authorities and engage in flood response training or exercises. The River Forecast Centre of the Ministry of Environment (MoE) provides flood forecasts and bulletins [per Schedule 2 EPM Reg] as necessary through the spring and fall flood windows.

To maximize resources and to ensure coordinated approach to potential flood events, local authorities, the Provincial Emergency Program (PEP) regional manager and representatives of MoE and the Ministry of Transportation (MoT) may begin work on an integrated Regional Flood Response Plan that details what jurisdictional activities are or will be undertaken for preparedness, response and recovery within the region by all agencies.

The Provincial Emergency Coordination Centre may activate to help coordinate planning and preparations. The Provincial Regional Emergency Operations Centres may follow suit to coordinate and integrate regional activities. The Central Coordination Group may meet to establish priorities.

In this phase, a local authority may consider identifying a flood observer/assessor to identify and monitor any sites at risk.

Phase 2 – Preparedness (Readiness)

Phase 2 occurs when flooding potential is possible. Special resources may be pre-positioned, advisories are prepared, the Central Coordination Group (CCG) meets and active communication between local authorities and the Province occurs regarding the potential for flooding.

The local authority should ensure their Emergency Operations Centres (EOCs) are ready and staff are contacted; in addition, all related plans, including recovery plans are reviewed. Local authorities should provide public information about the risks of flooding and what individual, families and businesses can do to be prepared.

Diking Authorities should actively monitor their flood protection works to ensure that such things as electrical connections are functional, and any gates or valves are operational and clear.

The PEP regional manager will ensure that Temporary Emergency Assignment Management System (TEAMS) staff and other agency representatives that will be incorporated into the structure are prepared to staff Provincial Regional Emergency Operations Centres (PREOCs) on short notice to support local authorities. PEP headquarters will also prepare to activate the Provincial Emergency Coordination Centre (PECC) to support all flood response efforts throughout the province.

The province may hold regional information meetings with local authorities to provide flood event information as possible and to ensure technical experts are available to answer questions.

Phase 3 - Response

Phase 3 is described as when flooding is imminent to occurring or when an emergency response is initiated. Generally, this will occur when river stage (water height) is expected to reach or exceed stream channel capacity resulting in water threatening or impacting any people, property, or infrastructure.

EOCs, PREOCs and the PECC will be activated commensurate to the level of response required. The response phase is broken down into stages and will generally depict the activation level required. Events may dictate a non-linear or circular path through the response stages and may move up or down as the conditions improve or deteriorate further. The response stages are defined as:

- 1. Flood Alert
- 2. Flood Order
- 3. All Clear

Stage 1 - Flood Alert

Stage 1 is reached when the emergency response is elevated to Phase 3, Response. Local Authorities and Diking Authorities should proactively patrol river banks on a priority basis and as conditions dictate. This should include all dikes or other flood protection works and should specifically observe for the appearance of instability or deficiencies. Dam owners should increase the monitoring of their structures and ensure that spillways are clear and the structure(s) are in working order. MoE staff may assist Local Authorities with river monitoring. MoT will provide the primary monitoring where highway infrastructure may be at risk.

EOCs, PREOCs and the PECC open and operate at minimum staffing levels with flexible operational hours (Activation Level 1) to monitor status of potential flooding and perform preresponse functions. EOCs, PREOCs and the PECC may reach Activation Level 2, that is, fully staffed for extended operation.

Public information on flood proofing homes, businesses and threatened infrastructure as well as public safety advisories will be issued by the EOCs, PREOCs or PECC. EOCs should create opportunities such as public meetings, local bulletin board postings or local newsprint articles to provide flood safety awareness to citizens and explain flood response plans.

Evacuation plans should be updated by the local authority, as necessary, for potentially affected areas or initiation of voluntary evacuation.

In the event of a sudden, local flood event it may be necessary to declare a local state of emergency to exercise local extraordinary powers esignated under the *Emergency Program Act*.

Stage 2 - Flood Order

Stage 2 occurs when there is a high probability of damage due to flooding. Full flood response or control programs are implemented due to severity of flooding. Mandatory evacuation is contemplated or ordered. The response structure moves to Activation Level 3 (fully staffed for 24/7 operation, where there may be a declaration of a provincial state of emergency or where large evacuations are imminent).

Stage 3 - All Clear

Stage 3 is realized when the threat of continued flooding has past and evacuees may return to the flood area on a permanent basis. Outstanding issues such as building occupancy due to electrical problems or drinking water contamination may persist; however, people may proceed with cleanup activities.

This stage may also be characterized by the implementation of demobilization plans and recovery activities. EOCs, PREOCs and the PECC may reduce their Activation Levels to support recovery activities.

Phase 4 - Recovery/ Disaster Financial Assistance

Phase 4 may be described as when the threat of flooding is over and the replacement and restoration of uninsured essential property to pre-event condition commences. This may include debris and gravel removal that has not occurred under response. Incremental costs for a local authority's Recovery Centre under Community Disaster Recovery are administered under Disaster Financial Assistance (DFA) programs.

Public information from EOCs, PREOCs and the PECC should be provided through public meetings, newspaper articles, web postings, etc. to residents of impacted areas about the health risks they may encounter, how to clean up flood impacted property and structures, how and where to go to access DFA information, and other sources to assist people in need.

Concept of Operations

The province is committed to supporting Local Authorities and effectively managing natural hazard events in the most efficient and appropriate manner. In order to achieve this goal, the province has created a concept of operations that utilizes the British Columbia Emergency Response Management System (BCERMS) as its core. BCERMS is an integrated response model with prevention, mitigation, response and recovery as its foundation to reduce risk to people and property throughout British Columbia. This system will be utilized for dealing with flood hazard management, as it is for other types of emergencies.

In responding to an event, the actions and decisions of the province for consequence management will be based on the BCERMS objectives:

- 1. provide for the safety and health of all responders
- 2. save lives
- 3. reduce suffering
- 4. protect public health
- 5. protect government infrastructure (roads, communications and utilities)
- 6. protect private property (buildings and livestock)
- 7. protect the environment, and
- 8. reduce economic and social losses.

Local Authorities have a duty to the people they represent and generally are in the best position for immediate response. BCERMS recognizes this fact and the *Emergency Program Act* indicates Local Authorities have the primary responsibility for protection and response within their boundaries. The province will support those efforts as deemed necessary.

The level of provincial support will be directly dependent upon the magnitude of the event and/or its potential for expanding and the need to support local activities. The BCERMS structure will be used at all levels of response.

Emergency Response Structure

BCERMS dictates that PEP regional boundaries will apply for the purposes of provincial emergency response management activities. The six PEP regions are shown in Figure 1.



Figure 1: Provincial Emergency Program Regions

BCERMS also sets forth the emergency response structure. It is comprised of the following:

- Site Level Response
- Emergency Operations Centre (EOC)
- Ministry Operations Centre (MOC)
- Provincial Mobile Emergency Operations Centre (PMEOC)
- Provincial Regional Emergency Operations Centre (PREOC)
- Provincial Emergency Coordination Centre (PECC), and
- Central Coordination Group (CCG).

Site Level Response

Any activities or measures taken or implemented at each incident site form the basis for meeting BCERMS objectives. This level of activity is undertaken by local authorities with assistance from provincial technical specialists, if required.

Emergency Operations Centre

Emergency Operation Centres (EOCs) are established by local authorities to provide support to the site level response activities. An EOC may also be established by a community group other than a local authority. For example, a search and rescue group may activate an EOC where conditions dictate. EOCs work directly with PREOCs which are opened by the Province to support local emergency response activities.

Ministry Operation Centres

A Ministry Operation Centre (MOC) or Ministry Regional Operation Centre (MROC) is an operations centre established and operated by a ministry to coordinate the ministry's emergency response in that region. The structure and function is similar to a PREOC and the MOC or MROC will report through the operations section of the PREOC.

Provincial Regional Emergency Operations Centre

A Provincial Regional Emergency Operations Centre (PREOC) will be activated to support any emergency response activities occurring by an EOC within a geographic area. It may also be activated to direct, control or coordinate any provincially-lead response measures.

Staffing and duties of the PREOC will be in accordance with BCERMS. Primary PREOC staffing will be provided by PEP staff and TEAMS members.

Provincial Emergency Coordination Centre

The Provincial Emergency Coordination Centre (PECC) directs and coordinates the overall emergency response, recovery and support activities of the provincial government.

The PECC will be activated in support of any activated PREOC. In addition, it will be activated during any major emergency/disaster. The PECC manages provincial level resources on behalf of the CCG in response to the emergency needs of the operational area(s). It manages and coordinates mutual aid between PREOCs and at the provincial central level, and serves as the coordination and communications link with the federal disaster support structure.

Integral to the PECC is the Emergency Coordination Centre (ECC), a 24/7 emergency operations unit within the Provincial Emergency Program. The ECC provides operational communications and tasking.

Staffing and duties of the PECC will be in accordance with BCERMS. Primary PECC staffing will be provided by PEP staff and TEAMS members.

Central Coordination Group

The Central Coordination Group (CCG) is composed of senior ministry/agency representatives and is responsible for directing the overall provincial government response province-wide. The CCG will in turn take direction from appropriate cabinet ministers and/or an ad hoc committee of Cabinet.

Responsibilities of Structural Organizational Components

A detailed description for each response level may be found in the BCERMS manual. In addition to that manual, flood specific concepts are described in Table 1.

Table 1 - Responsibility of Structural Organizational Components

Dhaac	
Phase	Establish an incident assessed uset
3	Establish an incident command post
3	Direct all resources at the incident
	Notify the EOC of situational awareness on a regular interval and in coordination with the EOC
3	Establish response parameters in consultation with the EOC
3	Implement emergency plans
3	Implement flood protection measures
3	Information officers will maintain media liaison; this is usually at the local level and should be in conjunction with the EOC
4	Provide post-flood information about health issues, cleanup, etc.
Emerge	ncy Operations Centre
Phase	
2	Identify and monitor any sites at risk
2	Make any preparations necessary, including completing outstanding mitigation work
2	Establish response parameters in consultation with the site and the PREOC
2-3	Create opportunities to provide the public with flood safety information and potential local response information
2-3	Activate emergency plans
2-3	Notify the PREOC of initiation and level of readiness
2-3	Prepare a situation report (SITREP) (EOC 501 form) and distribute to PREOC and other appropriate agencies or EOCs on a regular basis
2-3	Coordinate evacuation and care of displaced residents, in conjunction with Emergency Social Services (ESS), this may also include activating reciprocal evacuation agreements with other jurisdictions
2-3	Implement flood protection measures
2-3	At the onset of any flooding, a detailed log of damages, with photographs, should be initiated; this will help to validate and maximize any financial assistance claim submissions.
2-4	Update and/or activate recovery plan and begin restoration processes
3-4	Information officers will maintain media liaison. Local call centres for public inquiries are activated as necessary
4	Provide post-flood information about health issues, cleanup, etc.

Provinc	al Regional Emergency Operation Centres
Phase	
2	The PEP regional manager may coordinate a regional flood information meeting to provide Local Authorities with as much information as possible about potential regional flooding and to provide Local Authorities access to technical experts or specialized equipment
2-3	 The PREOC director will: Issue a PREOC flood directive reflecting the duties and responsibilities outlined in this plan and incorporate key elements of CCG flood directives that have been issued Notify the PECC/EOC/ of activation status Determine PREOC staffing requirements, including TEAMS members and any field operations; and Develop and maintain secondary staffing plan
2-3	Operational flood response supervisors, Risk Management Officer and team leaders must ensure proper safety measures are enforced
2-3	The planning chief will ensure a situation report (SITREP) (PREOC 601 form) is submitted to the PECC not later than 1700 hours daily each day using the EM2000 database system. Whenever possible, digital photographs of the impacted areas should be included in the report
2-4	Continue regular liaison with EOC, PECC, MoT and MoE, and others such as local utility representatives and stakeholder groups as necessary
3-4	Information officers will maintain media liaison, provide local media with flood safety public information. Call centres for public inquiries may be activated
3-4	Assist and support local recovery centre operations
4	Provide public information about health issues, cleanup, DFA and other resources available to help those who have been impacted and need additional assistance
Provinc	al Emergency Coordination Centre
Phase	
2-3	The PECC director will:
	 Notify PREOCs / CCG of PECC activation status
	 Determine PECC staffing requirements, including TEAMS members
	 Develop and maintain secondary staffing plan
	 Assess the flood situation throughout the province; and
	Liaise and request assistance with federal agencies, as necessary
2-3	The PECC director will authorize, assign and deploy all critical resources to and among
	the regions
2-3	The PECC director will authorize deployment of TEAMS members to other regions as necessary and request TEAMS information officers from the PAB to be assigned to PREOCs/PECC or, where needed to EOCs
2-3	The Planning Chief will prepare and distribute a provincial situation report daily
3-4	Information officers will maintain media liaison, provide provincial media with flood safety public information and maintain the PEP web site with up-to-date information on the province's flood events and of safety precautions
3-4	Implement DFA programs, providing local assistance and information as necessary, including onsite DFA information sessions, and DFA representative participation in local recovery centres or town meetings
4	Support flood recovery efforts as needed

Central	Central Coordination Group	
Phase		
2-3	The CCG, with representation from PEP, MoT, MoE and PAB, meets to begin advance preparation for a coordinated flood response; co-Chairs to include PEP Director and MoT representative	
2-3	Provide policy and direction to the PECC for distribution or re-positioning of critical resources between regions. This includes flood fighting response teams, aviation resources, sandbags and sandbag-filling machines	
2-4	Brief senior government officials on the flood threat, flood preparation, response and recovery activities on a regular basis	
2-4	Provide support through direction and advice to ensure a coordinated provincial flood response and recovery	

Response Involving First Nations Reserves

PEP/INAC Protocols

An agreement between the Province and the federal Indian and Northern Affairs Canada (INAC) exists which acknowledges certain legal requirements concerning emergency response and recovery operations on First Nations Land(s). The Provincial Emergency Program is specifically named as the provincial agency to be involved with any requirement to respond to flood conditions on (or involving) reserve lands. As a result, the PECC must be informed as soon as reasonably possible. A separate task number will be issued for the incident to facilitate cost recovery from the federal government.

PEP will support, assist or arrange for such required emergency measures as seen under existing protocol arrangements with INAC. This may include coordinating volunteer, municipal, provincial, federal and other agency support. PEP will notify INAC as soon as practicable.

In addition, the First Nations Emergency Services Society (FNESS) should be contacted for any emergency related conduit to First Nations throughout BC, this includes response activities. The society operates under the direction of a First Nations Board of Directors but maintains links to INAC.

Emergency Response

When immediate action is required to preserve life or property on First Nations Land(s), PEP will support, assist or arrange for such required emergency measures as depicted under the existing protocol arrangements with INAC. This may include coordinating volunteer, municipal, provincial, federal and other agency support. PEP will notify INAC as soon as practicable.

In less urgent situations, a request will be sought from INAC, and the concurrence of the local band council will be solicited. PEP will coordinate the provision of services and support for a response action or, as appropriate, assist INAC with the resolution of the event.

Recovery Operations

Recovery efforts will be arranged by PEP on written approval from INAC. None of the above conditions should be considered as factors which will delay or impede response or recovery. The intention is to provide the same service for First Nations as is provided to all other areas and citizens of British Columbia. The protocols described are needed to facilitate prompt cost recovery by the province from the federal government.

Finance and Administration

- PEP is the organization though which funding for provincial emergency response and recovery is managed. PEP is also responsible for the location and equipping of the PREOCs. Any additional costs incurred for the establishment and operation of a PREOC will be processed through PEP headquarters.
- Normal operating costs for EOCs, MROCs and MOCs are the responsibility of their respective organizations who activate them. Response costs such as overtime paid out, travel, etc. that are incremental to an EOC emergency activation and are above normal operating costs may be recoverable through the DFA program.
- Similarly, for provincial ministries/agencies offering assistance through operations or for MOCs and MROCs, costs above normal operating costs may be recoverable. Those expended costs should be sent to the Finance and Administration section of PEP HQ in Victoria, with proof of payment. PEP HQ will have the PREOC (or PEP regional office) verify that goods and services were received before payment is processed.

Expenditure Control

The following will be observed with respect to expenditure management:

- All expenditures must be pre-authorized by the PEP Director, PECC Director or PREOC Director. The CCG may, as required, designate other spending authorities as deemed necessary.
- The *Emergency Program Act* Statutory Account expenses must be authorized by senior PECC staff for all agencies outside of the activated PREOCs.
- Upon PREOC activation, an initial Phase 2 expenditure fund allocation will be provided to each PREOC director for use against the assigned task numbers.
- During Phase 3 response operations, PREOC directors or designated principal PREOC staff, may authorize expenditures for flood response or support activity for up to \$100,000 per flood response site or jurisdiction to protect life, private property or local or provincial government infrastructure. Any single expenditure exceeding \$100,000 must be pre-authorized by the PECC Director, or the CCG co-chairs.
- Ministries or agencies must ensure that all expenditures that will result in journal voucher action are authorized using an expenditure authorization form completed and signed by either the PECC or PREOC director. This also applies to MoT for works off right-of-way.
- The agency initiating the expenditure is provided a copy of the authorization form, a copy is retained by the PECC or PREOC and a copy passed to PEP headquarters in Victoria.
- All Emergency Social Services (ESS) expenditures must be accompanied by a completed ESS Referral Form.

INVOICES OR EXPENDITURES WILL NOT BE PROCESSED UNLESS ACCOMPANIED BY COMPLETED AND AUTHORIZED SUPPORTING DOCUMENTATION

Financial Assistance for Emergency Response and Recovery

- A guide has been developed to provide local authorities and First Nations with information on the procedures required to maximize claims for financial assistance with the costs of both response and recovery. The guide may be found on the internet at URL: http://www.pep.bc.ca/dfa_claims/dfa.html.
- The existing provincial ministry guidelines on Disaster Financial Assistance (DFA) are currently under review. Provincial ministry recovery projects may only submit DFA claims for reimbursement when the province negotiates federal cost-sharing.

Inventory Control

An inventory will be maintained to record all non-consumable¹ equipment and supplies purchased under a PEP task number. On demobilization, a copy of the inventory indicating current disposition will be forwarded to PEP headquarters as part of the PREOC post-operation report.

Workshop

A formal or informal financial management workshop or refresher course should be conducted for ALL designated finance and administration chiefs during Phase 2, Readiness.

Information Technology Services

Each PREOC and the PECC have a basic pre-established communications and computer systems network in place. Additional equipment and services may be required and will be provided by the appropriate supplier as required.

Emergency Accommodation for Evacuees

Municipal requirements and anticipated needs for Emergency Social Services are communicated from the local authority to the PREOC(s) and supported where necessary by other agencies as arranged by the PREOC(s).

Provincial Roles and Responsibilities

There are four primary ministries/agencies involved in the support and response. These are:

- Ministry of Public Safety and Solicitor General, Provincial Emergency Program (PEP) has
 the primary responsibility for coordinating the provincial emergency management
 structure. PEP will activate the PREOCs and the PECC to coordinate and direct the
 provincial response and provide support to local government evacuation efforts and their
 emergency social services. PEP will also support recovery efforts through the
 administration of the Disaster Financial Assistance (DFA) program. When required, PEP
 will activate the CCG and co-chair.
- Ministry of Environment (MoE) will provide their expertise and resources, as required.
 This may be in the form of flood forecasting, assessment, technical services and
 planning. In addition, ministry representatives may staff the PREOC, PECC or local
 EOC(s). MoE will participate as a member of the CCG.
- Ministry of Transportation (MoT) will provide expertise and resources, as required. MoT will also remain responsible for the safety and maintenance of road infrastructure within their jurisdiction. Ministry representatives may staff the PREOC, PECC or local EOC(s). MoT will co-chair the CCG.
- Public Affairs Bureau (PAB) has primary responsibility to implement the provincial communications strategy once the provincial emergency management structure is activated. PAB provides information officers to the PREOCs, the PECC and to local EOCs as needed to provide expertise in media relations and public information activities. PAB will participate as a member of the CCG.

Table 2 provides a partial list of roles and responsibilities for each agency and the anticipated timing (phase). A liaison officer will be arranged for each ministry or agency, as determined by the PECC or PREOC director, as required.

¹ Material, such as office equipment, blankets, generators and safety equipment, that is NOT consumed.

Table 2: Anticipated Requirements for Responding Agencies

Ministry o	f Environment (MoE)
Phase	Central
1-3	Conduct regular snow surveys through the River Forecast Centre (RFC).
1-3	Provide flood forecasts and bulletins (RFC).
1-3	Provide regular updates of snow conditions.
1-3	Liaise with Environment Canada regarding weather forecasts.
1-4	Liaise with dam owners and diking authorities.
1-4	Provide technical services.
2	Assign a senior representative to the CCG.
2	Provide representatives to the PECC.
	Regional
1-4	Provide technical services and recommend strategies to PREOC including drinking water source identification and protection.
2-3	Identify field level flood assessment service providers for the PREOC
2-3	Provide support services and staff on a 24-hour basis to PREOC, as requested.
3	Provide advice and recommend strategies to the Emergency Management Structure (Site, EOC, PREOC, and PECC) regarding orphan dikes in accordance with MoE policy
4	Provide recovery plans, as required.
Ministry o	f Transportation (MoT)
Phase	Central
1	Assign a senior representative to the CCG.
2	Provide representatives to the PECC.
2-3	Identify and supply equipment and other resources such as riprap within the region(s).
2-3	Forward additional equipment and resource requirement requests to the PECC.
3	Issue regional flood response tasking orders based upon directives issued by the CCG.
4	Provide recovery plans, as required.
	Regional
1-2	Participate in the development of the Regional Flood Response Plan, a process lead by local emergency coordinators.
3	Respond to floods impacting highway infrastructure.
3	 When requested by PREOC director or PECC director, supply: heavy equipment construction materials, and/or contract equipment and operators.

Ministry o	f Public Safety and Solicitor General (PSSG)
Phase	Provincial Emergency Program - Central
1	The PEP director will convene and co-chair the CCG.
1-4	Provide overall direction for finance at the PECC and PREOC level.
2	Establish and coordinate staffing and support services for the PECC.
2-3	The PECC director or PEP Operations Officer will activate the PECC.
2	Co-ordinate the preparation of provincial flood response directives.
2-3	PEP Director (or PECC Director) will approve interregional TEAMS deployments through the ECC.
2-3	In conjunction with PAB, issue public information advisories and warnings.
2-3	Provide provincial summary information to PREOC/PECC Information Officers.
	Provincial Emergency Program - Regional
1	Notify regional MoE Water Stewardship Division and MoT regional staff.
1	Notify potentially affected local authorities.
1	Update PEP ECC.
<u>·</u> 1	Compile site assessments and forecasts.
1-2	Liaise with local authorities, MoT and MoE representatives about potential flooding
	issues and support the preparation of a Regional Flood Response Plan.
1-4	Provide assistance to local authorities in the planning and operation of emergency
	social services.
2	Provide funding approval and obtain task number(s).
2	Provide regional summary information to PREOC/PECC Information Officers.
2	Approve tasking orders and public information advisories and warnings.
3	Coordinate response efforts at the regional level as required and verify/approve claims submissions.
3	Coordinate the provision of ESS, including the provision of food, clothing, lodging, family reunification services and other services necessary to support the immediate health and well-being of evacuees and emergency responders.
3	Track and coordinate volunteers, as required.
<u> </u>	Other
1-4	
3	Provide legal counsel to CCG. Provide coroner services.
3	Provide service to enforce law and order and security patrols in evacuated areas.
3	
3	Provide service to enforce law and order and control traffic. Manage applicant police personnel
3	Manage auxiliary police personnel.
3	Arrange resources to implement evacuation plans, as required.
	Arrange resources to conduct search and rescue for missing persons. If Finance (FIN)
Phase	Public Affairs Bureau
1-2	Prepare to implement the province's Crisis Communications Strategy for Major Provincial Emergencies and ensure readiness of TEAMS information officers.
1-4	Brief senior government officials on communications issues.
2	Assign a senior representative to the core CCG.
2-4	Assign TEAMS IOs to the PECC and each regional PREOC, as requested by the PECC, and where necessary, to EOCs.
3	Implement the BC Crisis Communications Strategy for Major Provincial Emergencies.

	Other
1-4	Provide risk management services (Risk Management Branch).
2-4	Provide personnel services and human resources when available.
Ministry of	Forests and Range (FOR)
3	Supply logistics support, including:
3	Supply fire crews for flood response activities when available for deployment.
Ministry of	Agriculture and Lands (MAL)
Phase	
2-3	Provide coordination of the evacuation of livestock and their care, including emergency feeding.
3-4	Provide advice on the protection of livestock and the coordination for disposal of livestock carcasses.
Ministry of	Health (MoH)/ Health Authorities
Phase	
1-4	Provide sewage disposal expertise.
1-4	Provide drinking water quality survey services.
3	Coordinate with the local authority to evacuate any identified vulnerable populations, including Home Care patients.
Ministry of	Community Services (MCS)
Phase	
1-2	Provide guidance and assistance to local governments regarding infrastructure.

Staffing

Specific staffing requirements will be sought as related to the BCERMS Overview, the EOC or PREOC Guidelines, and TEAMS staffing documents. Additional PECC authorized resources may be added as the situation dictates, but resources may be drawn from:

- TEAMS members
- other government employees
- contracted technical / engineering support
- contracted administrative support staff
- · contracted security services, and
- volunteers, as needed.

Staffing Page 14

Other staffing notes:

- 1. Costs associated with TEAMS, overtime and/or call-out of provincial staff may be authorized by the PECC/PREOC director and should be charged to the task number.
- 2. All personnel assigned to the CCG, PECC or a PREOC will be required to wear BCERMS identification vests in each operations centre.
- 3. The risk management officer is part of the management staff at the PECC, PREOCs and EOCs and has the responsibility of developing and recommending measures for assuring personnel safety and anticipating Workers' Compensation Board (WCB) hazardous and unsafe situations. The PECC/PREOC/ECC directors will correct any unsafe situations in accordance with WCB requirements.
- 4. Specialized staff will fulfill technical functions outlined in Schedule 2 of the *Emergency Program Regulations*.
- 5. Training is required for any staff involved in the response. This may include, but is not limited to training specific and commensurate to the level and skill required; for:
 - · sandbagging and/or the use of a sandbagging machine
 - river level monitoring
 - flood protection works monitoring
 - · dam monitoring
 - financial accountability, and/or
 - response software, etc.

Advisories and Warnings from the River Forecast Centre

The River Forecast Centre of the Ministry of Environment uses three levels of advisory or warning. They are:

- **High Streamflow Advisory** means that river levels are rising or expected to rise rapidly, but that no major flooding is expected. Minor flooding in low-lying areas is possible.
- Flood Watch means that river levels are rising and will approach or may exceed bankfull.
 Flooding of areas adjacent to affected rivers may occur.
- **Flood Warning** means that river levels have exceeded bankfull or will exceed bankfull imminently, and that flooding of areas adjacent to the rivers affected will result.

In general, for an "event", the warnings sequence through all three levels, beginning with a **High Streamflow Advisory**. On occasion, depending on the timing of the event and the reliability of weather and river level forecasts, the first notification for an event may be a **Flood Watch**. The timing of the warnings before an event can vary greatly, depending on the nature of the event, from a few hours to about 72 hours.

In addition to these event-specific warnings, the River Forecast Centre may release **Alerts** for spring flood potential for major river basins based on snow conditions. The first **Alert** is typically based on the Feb 1st snow survey, and is usually tied to a basin average snow water index of 120+ percent of normal. In years of unusually heavy snow, the first **Alert** may be based on the Jan 1st snow survey.

Specialized Equipment

Pre-flood Disposition of Sandbagging Machines

Region	Location	Number of Sandbagging Machines
South Coast	Chilliwack - Forestry Warehouse	2
Thompson-Okanagan	Kamloops - Argo Maintenance	1
	Osoyoos	1
	Prince George -	1
	Purchasing Commission Warehouse.	
Central-North East	Terrace - MoT	1

1. Sandbags: Sandbags have been distributed around the province to Local Authorities. Any requirements for additional sandbags should be directed towards the PEP Regional Office.

Number of Sandbags estimated for 30 metres (100 Lineal Feet) of dike

- 600-800 bags for 0.3 m (1 foot) high dike 10 m³ (12 cubic yards) sand
- 2,000 bags for 0.6 m (2 foot) high dike -25 m^3 (30 cubic yards) sand
- 3,400 bags for 1 m (3 foot) high dike 40 m³ (50 cubic yards) sand
- 10,000 bags for 2 m (6 foot) high dike 130 m³ (167 cubic yards) sand
- 2. Aqua Dams²:

http://www.armtec.com/ http://www.geomembranes.com/geo_con.cfm?branchID=3 http://www.aquadam.com/

- 3. Large volume siphon: Available through the Prince George MoE office.
- 4. Flex Mac Gabion Construction²:

Maccaferri Gabion of Canada Ltd. 736 Granville Street, Vancouver B.C. V6Z 1G3 -Tel (604) 683-4824 Fax (604) 683-7089

Declaration of an Emergency

Declarations of an emergency, whether local or provincial, are required when extraordinary powers are necessary to effectively respond to an emergency event. The most common reasons for an emergency declaration are:

- mandatory evacuation of people and livestock, and
- access to private property where public safety is an issue.

For more information on declaring a local emergency, refer to the Emergency Declaration Guidelines that include a sample declaration at URL:

http://www.pep.bc.ca/local_government/local_government.html

² The web sites given do not constitute a full market research. They are known providers that give general information about the product and may assist in logistics during any event.

Evacuations

Ordering an evacuation of all or part of an emergency area requires detailed planning and support from the entire emergency management structure. The local authority is responsible for creating evacuation plans and their implementation. This includes a component to identify vulnerable populations; coordination with the Health Authority is imperative to evacuate any Home Care patients.

The British Columbia Operational Guidelines for Evacuations found at URL: http://www.pep.bc.ca/management/Evacuation_Operational_Guidelines_2005-07.pdf provides further detail for creating evacuation plans.

Recovery

The ability to recover from the physical damage, injury, economic impairment and human suffering resulting from a disaster is a critical element of any emergency program and plan. It is essential to recognize that successful recovery planning and activities depend on the rapid start-up of a recovery task force and must begin during the emergency response phase.

Local authorities are the best equipped to provide leadership for integrated local recovery initiatives and to deal with both short- and long-term local recovery activities that may include:

- reconstruction of critical infrastructure
- re-establishment of services by local authorities (utility services, roads, buildings, dams and dikes)
- actions to limit losses, reduce suffering, and restore the psycho-social and economic viability of the community.

For more information on local community recovery, refer to the Community Disaster Recovery Guide at URL: http://www.pep.bc.ca/Community/community.html.

For more information on local infrastructure recovery, refer to the Financial Assistance Guide for Local Authorities and First Nations at URL: http://pep.ca/dfa claims/dfa.html.

Evacuations Page 17

References

1. Emergency Program Act, 1996

www.qp.gov.bc.ca/statreg/stat/E/96111_01.htm

2. A Guide to the Emergency Program Act, 2005

www.pep.bc.ca/management/Guide_to_New_Emergency_Program_Act_2005.pdf

3. Emergency Program Management **Regulation**, 1994

www.qp.gov.bc.ca/statreg/reg/E/EmergencyProgram/477 94.htm

- 4. British Columbia Emergency Response Management System (**BCERMS**) (2000) www.pep.bc.ca/bcerms/bcerms.html
- 5. British Columbia Emergency Response Management System: Site Support Level (**EOC**) Operational Guidelines (2001)

www.pep.bc.ca/bcerms/bcerms_EOC_Level_2_Operational_Guidelines_Manual_2 005-03.pdf

- 6. Provincial Regional Emergency Operations Centre (**PREOC**) Guidelines (2001) www.pep.bc.ca/bcerms/bcerms_preoc-manual.pdf
- Central Coordination Group (CCG)/ Provincial Emergency Coordination Centre (PECC) Standard Operating Procedures (Draft March 1999)

Hardcopy only, available from PEP headquarters

8. British Columbia Crisis Communications Strategy for Major Provincial Emergencies (2004)

Available from the Public Affairs Bureau

- 9. **TEAMS**: Temporary Emergency Assignment Management System www.pep.bc.ca/TEAMS/teams.html
- 10. Emergency Social Services (ESS) Information

http://www.ess.bc.ca/index.htm

11. Expenditure Authorization Form (EAF)

(http://www.pep.bc.ca/Community/LG_Response_Forms/Response_EOC_Form_530-Sep_05.doc)

12. Local Authority Emergency Management **Regulation**, 1995

http://www.qp.gov.bc.ca/statreg/reg/E/EmergencyProgram/380_95.htm

13. **Declaration** of a State of Local Emergency

www.pep.bc.ca/local_government/local_government.html

14. Community **Disaster Recovery** Guide

www.pep.bc.ca/local_government/local_government.html

- 15. Compensation and **Disaster Financial Assistance** Regulation, 1995 www.qp.gov.bc.ca/statreg/reg/E/EmergencyProgram/124 95.htm
- 16. Financial Assistance for Emergency Response and Recovery Costs: A Guide for BC Local Authorities and First Nations

www.pep.bc.ca/dfa claims.Financial Assistance Guide- 2005 09 01.pdf

17. British Columbia Operational Guidelines for **Evacuations**

www.pep.bc.ca/management/Evacuation_Operational_Guidelines_2005-07.pdf

18. Community Emergency Program Review (CEPR)

www.pep.bc.ca/hrva/hrva.html

19. Hazard, Risk and Vulnerability Analysis (HRVA)

www.pep.bc.ca/hrva/hrva.html

References Page 18

Appendix A Abbreviations/Definitions

Agency: An agency is a section of government with a specific function, or a non-governmental organization that offers a particular kind of assistance.

Alert: In addition to these event-specific warnings, the River Forecast Centre may release Alerts for spring flood potential for major river basins based on snow conditions. The first Alert is typically based on the Feb 1st snow survey, and is usually tied to a basin average snow water index of 120+ percent of normal. In years of unusually heavy snow, the first Alert may be based on the Jan 1st snow survey.

BC Crisis Communications Strategy: The BC Crisis Communications Strategy for Major Provincial Emergencies outlines current provincial emergency and disaster communications principals and protocols. It recognizes the importance of coordinating public communications in affected areas, and for linking up all engaged partners with the BC Emergency Management Response System.

BCERMS (British Columbia Emergency Response Management System): BCERMS is a comprehensive management scheme that ensures organized provincial response and recovery to all emergency incidents

CCG (Central Coordination Group): The CCG includes representatives from ministries with responsibility for response to certain types of emergency events, and is activated to provide overall direction to all provincial agencies and resources supporting or assisting with an emergency situation.

Diking Authority: A diking authority means (a) the commissioners of a district to which Part 2 of the Drainage, Ditch and Dike Act applies, (b) a person owning or controlling a dike other than a private dike, (c) a public authority designated by the minister as having any responsibility for maintenance of a dike other than a private dike, or (d) a regional district, a municipality or an improvement district;

ECC (Emergency Coordination Centre): The ECC is the foundation for receiving and disseminating information from multiple sources regarding emergency situations. The centre operates 24/7 and located within the Provincial Emergency Program in Victoria.

EOC (Emergency Operations Centre): A pre-designated facility established by a local government or jurisdiction to coordinate the overall agency or jurisdictional response and support to an emergency.

ESS (Emergency Social Services): ESS provides short term (generally 72 hours) emergency services help to preserve the emotional and physical well-being of evacuees and response workers in emergency situations. The ESS program resides within the Provincial Emergency Program.

Flood Warning means that river levels have exceeded bankfull or will exceed bankfull imminently, and that flooding of areas adjacent to the rivers affected will result.

Flood Watch means that river levels are rising and will approach or may exceed bankfull. Flooding of areas adjacent to affected rivers may occur.

Freshet: That period of each year where creeks and rivers swell as a result of snowmelt.

High Streamflow Advisory means that river levels are rising or expected to rise rapidly, but that no major flooding is expected. Minor flooding in low-lying areas is possible.

IO (Information Officer): A function within the BCERMS-based command staff that is responsible for interfacing with the public and media and other information officers.

Local Authority: A local authority means (a) for a municipality, the municipal council, (b) for an electoral area in a regional district, the board of the regional district, or (c) for a national park, the park superintendent or the park superintendent's delegate if an agreement has been entered into with the government of Canada under section 4(2)(e) in which it is agreed that the park superintendent is a local authority for the purposes of this Act

Liaison Officer: A function within the BCERMS-based command staff responsible for coordinating with representatives from cooperating and assisting agencies.

LAB (Ministry of Labour and Citizen's Services): One of the ministry's many responsibilities is the *Workers' Compensation Act* (WCA), which provides a framework for promoting safe and healthy workplaces and sets out the workers' compensation system for BC. The ministry also provides all government goods and services purchasing.

MAL (Ministry of Agriculture and Lands): Provides programs and services that ensure responsible approaches to the public interest concerning food safety/quality, the environment, pest and disease management, and appropriate farm practices.

MCS (Ministry of Community Services): Provides programs and services related to local governments, women's and seniors' and community issues, including legislative, policy and governance framework for local governments.

MOC (Ministry Operation Centre): A facility established and operated by a regional office of a British Columbia Ministry to help manage the coordination of emergency response efforts. (Also may be referred to as an MROC, see below.)

MOE (Ministry of Environment): The Ministry of Environment participates in flood response through such activities as water resource information collection and management, flood and drought forecasting, and dam and dike safety.

MOF (Ministry of Forests and Range): Provides leadership in the protection, management and use of BC's forest and rangelands.

MOT (Ministry of Transportation): Plans the province's transportation networks and provides transportation services by maintaining existing highways and managing inland ferry services.

MROC (Ministry Regional Operations Centre): A facility established and operated by a regional office of a British Columbia Ministry to help manage the coordination of emergency response efforts. (Also may be referred to as an MOC, see above.)

PAB (Public Affairs Bureau), Ministry of Finance: PAB is responsible for the provincial government's public information and media relations.

PECC (Provincial Emergency Coordination Centre): A facility established and operated at the provincial central coordination level to help coordinate emergency response efforts at a provincial level, provides support regional emergency centres, and interfaces with the CCG for policy decisions.

PEP (Provincial Emergency Program), Ministry of Public Safety and Solicitor General: PEP is responsible for coordinating emergency management, helping people to prepare for, respond to and recover from emergencies and disasters.

PREOC (Provincial Regional Emergency Operations Centre): A facility established and operated at the regional level by the province to support local emergency response and recovery efforts and to coordinate joint emergency efforts of government and non-government agencies.

Purchasing Services (Ministry of Labour and Citizen's Services): Buys goods and services from suppliers for government ministries and agencies.

RFC (River Forecast Centre), Ministry of Environment: The River Forecast Centre analyzes snow, meteorological and hydrometric data for event warning, preparation and post analysis

Risk Management Branch (Ministry of Finance): This branch advises government on risk management issues, reviews and approves indemnities given by government, and assists ministries in establishing their own comprehensive risk management programs. The branch is responsible for business continuity planning within government and advises and assists ministries in developing their plans.

Risk Management Officer: A function within the BCERMS-based command system that Identifies and analysizes loss exposures for personnel, property and liability and monitors the occupational health and safety personnel working in the emergency operations centre.

SITREP (Situation Report): A report used by emergency operation centres during emergency activation, to provide timely, up-to-date, accurate status information on a specific emergency situation.

TEAMS (Temporary Emergency Assignment Management System): A pool of employees from across government who have training and experience managing emergency operations and communications during disasters.

Technical Specialist: A technical specialist is a person with specific and detailed knowledge and experience about matters at hand who may be either a staff member, contracted or otherwise retained to provide focused services and or advice to an event or potential event.

Workplace Technology Services (WTS): Workplace Technology Services provides Information Technology infrastructure services for the BC government and the broader public sector.

WorkSafeBC (formerly the Workers' Compensation Board): The agency responsible for ensuring workers and workplaces are safe and secure from injury, illness, and disease.

Appendix B Flood Observer/Assessor Checklist

This checklist is for reference only. There was an attempt to reconcile against legislation or requirements at the time this edition was created. However, the legislation or requirements may change and demand attention to specialist equipment or personal supplies. Any worker's supervisor must take appropriate precautions for their employees.

A. Basic Personal Supplies

- 1. Hard Hat
- 2. Rain Gear coat and pants
- 3. High Visibility Reflective Vest
- 4. Rubber boots
- 5. Cell phone or other communication device
- 6. Personal first aid kit. See page 31 of the OHS Guidelines Part 3.

B. Specialized supplies and equipment

- 1. Buoyancy Equipment (WCB section G8.26, G8.27, G8.28). Section G8.27 (a), (c), or (d) requirements.
- 2. Hand Held GPS set to UTM (Albers).
- 3. Extendable rod (Roman Method) c/w string and weight
- 4. Bundle of wooden survey stakes
- 5. Keel (lumber crayon)
- 6. Survey Ribbon
- 7. 1 million to 15 million candle power portable light.
- 8. Digital camera
- 9. Several copies of the "Dike and River Assessment Form" found in Section 15 of the Flood Assessor Manual -preferably waterproofed.
- 10. Copies of pertinent maps such as Flood Plain Maps and GPS dike survey maps for each flood protection works.
- 11. At least two gauge plates c/w nails and hammer

C. Vehicle Equipment

- Vehicle first aid kit meeting WCB regulations.
- 2. Flashlight
- 3. 3 flares
- 4. Additional reflective vests for passengers (1 per person)
- 5. Blankets
- 6. Vehicle radio standards seem to vary with each region
- 7. Standard vehicle jack
- 8. Spare mounted and inflated tire.
- 9. 1 set of winter tire chains
- 10. 1 axe or sandvick

- 11. 2 traffic cones
- 12. 1 fire extinguisher
- 13. 1 floating life line rope
- 14. 1 reflective warning kit
- 15. 1 shovel
- 16. 1 tool bag c/w tools
- 17. 1 jack-all jack
- 18. 1 wheel wrench
- 19. 1 set jumper cables
- 20. 1 package of water proof matches
- 21. Candle (emergency heat source)

Appendix C Producing Dike Location Maps

HOW TO USE THE "WATER RESOURCES ATLAS" TO PRODUCE DIKE LOCATION MAPS

A. Detailed Listing

- 1. Visit the Website: http://www.env.gov.bc.ca/wat/flood/structural.html
- 2. Scroll down to:
 - Flood Protection Structures: By Diking Authority (PDF: 885 KB / 355 pages)
 - Flood Protection Structures: By Watercourse (PDF: 886 KB / 355 pages)
- 3. The location of most of these works is provided by the UTM coordinates in the database above and can be located on maps at the following links:
 - http://srmapps.gov.bc.ca/apps/wrbc/ for the whole province (flood protection layer); and
 - http://wlapwww.gov.bc.ca/wat/flood/maps.html for more detailed maps of the Lower Mainland.

B. By Using UTM Co-ordinates

1. Open the attachment or visit http://www.env.gov.bc.ca/wat/flood/maps.html



GPSsum5.xls (186 KB)

2. Find the dike you are interested in. They are listed by Ministry of Environment (MoE) region number:

Region 1 Vancouver Island Region 2 Lower Mainland

Region 3 Thompson - Okanagan

Region 4 Kootenay Region 5 Cariboo Region 6 Skeena

Region 7 Omenica - Peace

- 3. Note the UTM co-ordinates of the desired dike
- 4. Go to Google and type in "Water Resources Atlas" +BC then hit the search button BC Water Resources Atlas WEB Mapping Application should appear. OR: Type in http://srmapps.gov.bc.ca/apps/wrbc suggest adding this site to your bookmarks
- 5. Click on this site
- 6. Click "Start"
- 7. Choose "Find Location" in the banner menu across the top of the screen pick "UTM co-ordinate"
- 8. Type in desired "UTM co-ordinate numbers" in the appropriate box
- 9. Change "Zoom map width" to "1 km" or as desired
- 10. Click "OK"
- 11. Cross at centre of map is the UTM Position you asked for.
- 12. Now add desired "Layers"
- 13. Go to "Layers"

Choose:

- folder labelled: Flood Protection: both "appurtenant works" and "structural works"
- folder labelled: Base Maps: usually "Transportation" if you want roads on your map
- folder labelled: Imagery: if you want orthophotograph most of the Province is covered.

- 14. Refresh Map
- 15. Change scale to desired level
 - Press GO
- 16. Refresh Map
- 17. Go to and select Printer Icon Top left
- 18. Type in desired map title in the appropriate box.
 - Press OK
- 19. Click "Open Map"
- 20. Select Print icon second from left in the top banner menu
- 21. Choose your printer and desired properties
 - Press OK
- 22. The printer should be spewing forth your map now.

C. By Using Place Name

- 1. Go to: http://srmapps.gov.bc.ca/apps/wrbc
- 2. START
- 3. FIND LOCATION select PLACE NAME example: Duncan
- 4. Press OK
- 5. Choose from list in this case "Duncan City"
- 6. Change scale to 1:10,000 this allows most desirable "Layers" to be displayed
- 7. Go to "Layers" in the banner across the top of the screen
- 8. Choose same layers as indicated in step 13 above.
- 9. "Refresh" display
- 10. Use the "HAND" icon to drag the map to the desired location/position. The dikes appear as red lines.
- 11. Once you are in the desired location change the map scale to produce the desired coverage.
- 12. Press GO
- 13. Repeat steps 17 to 25 above.

Appendix D Flooding Communications Action Plan and Messaging

All Hazards Integrated Response Communications Action Plan FLOODING

Background

Local governments and regional districts are required to have an all-hazards emergency plan in place for their jurisdiction. This includes the ability to activate an emergency operations centre and issue evacuation orders under a declared State of Local Emergency within an all-hazards context (floods, interface fires, hazardous material spills etc.)

Local authorities will monitor weather conditions and lake and river levels and activate their local emergency plan to respond within their jurisdiction as the flood threat increases.

Under the B.C. Emergency Response Management System (BCERMS), the province supports local authorities as required, and provides additional help and leadership if local resources become overwhelmed during a large scale or serious event. The provincial role is detailed in the B.C. Flood Hazard Mitigation Plan (2006 edition).

During the response phase, the provincial emergency management structure is activated to support local government. Local authorities may request added support, in the way of provincial public information officers and/or emergency management staff in their emergency operations centres, in a command post or at site, acting on their behalf.

Evacuation Alerts, Orders, Rescinds

In an escalating emergency situation such as a flood, decisions about evacuations are generally made at the local community or incident level.

In the normal course of events, local governments and regional districts will activate a local emergency operations centre, declare a local state of emergency, and issue an evacuation alert or order based on degree of risk to the public.

RCMP and municipal police carry out evacuation orders, often with the support of Search and Rescue or other volunteers.

The evacuation process has **three key stages**. This approach is consistent for all types of emergencies throughout the province.

- Evacuation Alert: A warning is issued about an imminent threat to life and
 property, and people are asked to be ready to leave on short notice. When people
 choose to leave an area before or during the issue of an alert, this is referred to
 as a voluntary evacuation.
- Evacuation Order: When an evacuation order is issued, people must leave the area immediately due to serious public safety concerns. RCMP or municipal police carry out evacuations.
- Evacuation Rescind: An evacuation order or alert is rescinded when an area is determined to be safe. People under order may return. An evacuation order may be reinstated if the threat returns.

Information and Communications

In a flood event, local authorities are responsible to provide public safety information to their residents directly.

When the Provincial Regional Emergency Operations Centre (PREOC) is activated to a higher level in response to flooding threats, deployed provincial TEAMS information officers (IOs) will work in a coordinated manner with spokespeople and information officers in other involved agencies and levels of government to support their counterparts at the local authority level.

Information officers report to the information chief (or manager) of the unit, who is responsible to the PREOC Director. The section provides information and updates to the Provincial Emergency Coordination Centre (PECC) public information section.

The British Columbia Crisis Communications Strategy for Major Provincial Emergencies is used to guide the activities of provincial information officers. The strategy is an all-hazards approach which outlines procedures and best practices in activating public information units within the BCERMS structure.

Communications Objectives

Provincial information officers will ensure appropriate information is provided to the public and media during the response phase of a flooding event, including:

- Supporting the local authority by providing timely, accurate public safety information which could include such things as weather forecasts, stream conditions, provincial highway and road status.
- Informing the public, media, local governments and stakeholders as to what measures the Province has in place to assist communities.
- Communicating the roles and responsibilities of Emergency Social Services and its volunteers in the case of an evacuation.
- Informing on the status of any activated public information services including telephone access to the Central Registration and Inquiry Bureau (CRIB) supported by Emergency Social Services, which provides family reunification services.
- Helping the media understand the emergency management structure and operational protocols in emergency situations.

Communications Strategies and Tactics

- Coordinate all PREOC communications with local government EOCs and other ministries and provincial and federal agencies (usually through daily conference calls).
- Provide overview information (evacuation information, maps, photos) from site or local EOCs to PECC (for bulletins, web site updates etc.).
- Provide media, public and stakeholders with regular updates/overview on regional situation through appropriate spokesperson(s).
- Identify and develop recommendations/messaging to address emerging issues.
- Develop key messaging, brief spokespeople and support need for media availabilities and public meetings as required by local authorities.

- Support establishment of a media relations centre at ESS reception centres by the local team (as required.)
- Attend site or command post as directed to enhance flow of information through EOCs to PREOCs.
- Request activation of call centres for public information, as necessary. Provide messaging to call centres.
- Arrange media news conferences and VIP tours, as directed.

Key Messages:

- Local governments and regional districts are required to have an all-hazards emergency plan in place for their jurisdictions. Public safety is always the highest priority.
- Local government authorities will keep residents informed of developments in areas most likely to be affected by flooding. Regular advisories will recommend actions that people should take to limit or prevent disaster.
- When there is a potential threat to a community from flood water, the Province will
 monitor the situation and support local authorities in assessing the risk to the public and
 to local industry. Potential threats to government infrastructure, the environment, or to the
 provincial economy are also monitored.
- Provincial support may include providing resources for the care of evacuees, providing emergency management expertise, technical advice, public information management, equipment and supplies and the transportation of materials as requested by local authorities.
- The British Columbia Emergency Response Management System (BCERMS) is used to ensure coordinated effort when an emergency or disaster situation occurs in the province.
- Whenever a local authority activates an emergency operations centre (EOC), a Provincial Regional Emergency Operations Centre (PREOC) and the Provincial Emergency Coordination Centre (PECC) will also be activated.

Tools:

- Information bulletins and/or media releases
- PSAs
- Information-based advertising
- PEP web site
- Other government web sites
- News conferences and media availabilities
- Posters and handouts
- Town hall meetings
- One-on-one media interviews/voice clips
- Call centres
- Media information centres (reception centres/site etc.)

Post-Disaster and Recovery

As communities move into the recovery phase, the Province may again be asked by the local authority to provide support/guidance.

Local authorities may activate their Recovery Task Force or Recovery Organization, in accordance with their Community Disaster Recovery plan, to coordinate actions of multiple stakeholders to limit losses, reduce suffering, and restore the psycho-social and economic viability of the community.

Through the Provincial Integrated Recovery Council (PIRC), the province provides coordination for non-profit agencies such as The Salvation Army, Red Cross, Mennonite Disaster Services and other resources to ensure communities are best served, and that there are no gaps or duplication in efforts in the recovery process.

Disaster Financial Assistance for Impacted Residents

British Columbia has a program to help disaster victims cope with the cost of repairs and recovery from disaster-related "uninsurable" damage to property (as well as contents, personal effects, equipment etc.) The Ministry of Public Safety and Solicitor General administers the Disaster Financial Assistance program through PEP.

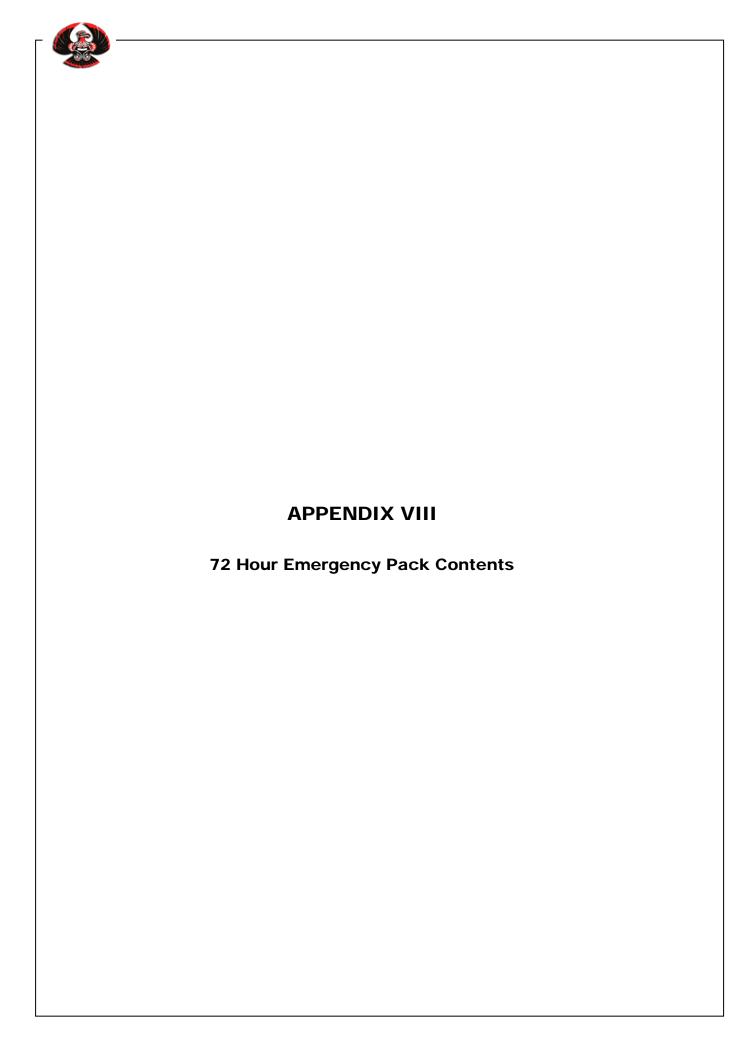
The impacted area has to be authorized as "eligible for DFA" before the individual application process can start.

Disaster Financial Assistance is available to help victims of a disaster with the cost of essential losses that cannot be covered by insurance or other programs.

Disaster victims will be advised through local announcements when DFA has been authorized in their area. Maximum payout for each qualified claim is \$300,000 for home owners, tenants, small businesses, farms or charitable organizations. Other items such as recreational or seasonal residences, luxury goods, recreational items, are not covered by the program.

Local government bodies are also eligible for DFA to replace essential materials, repair or restore essential infrastructures, and for incremental costs associated with the operation of their Recovery Organization or Recovery Centre to assist their community in recovering from a disaster.

Impacted residents and local authorities are notified about the program through DFA staff in the area, public meetings and advertising in local papers.



Your **Emergency Preparedness** GUIDE



Know the risks



Make a plan



Prepare a kit



72 hours Is your family prepared?

Your emergency preparedness guide

You should be prepared to take care of yourself and your family for a minimum of 72 hours. If a disaster happens in your community, it may take emergency workers some time to get to you as they help those in desperate need.

By taking a few simple steps today, you can become better prepared to face a range of emergencies – anytime, anywhere. Use this guide to create your own emergency plan. Use the checklists to build a 72-hour emergency kit. These basic steps will help you to take care of yourself and your loved ones during an emergency.

Our partners

This publication was developed in collaboration with:







of Fire Chiefs



Canadian Red Cross Croix-Rouge canadienne





This publication is also available in multiple formats (audio, Braille, large print and diskette). To order, please call:

1 800 O-Canada (1 800 622-6232) TTY: 1 800 926-9105

© Her Majesty the Queen in Right of Canada 2007

Cat. No.: PS4-26/1-1-2007E-PDF ISBN: 978-0-662-45388-8



Table of contents

STEP 1.	Know the risks Know your region	Page 2
STEP 2.	Make a plan	Page 3
	Household plan	Page 3
	Emergency contact information	Page 6
	Emergency instructions	Page 9
STEP 3.	Prepare a kit	Page 11
Resource		Page 14

STEP

1



Although the consequences of disasters can be similar, knowing the risks specific to your region can help you prepare yourself better. Across Canada we face a number of hazards, from earthquakes in British Columbia, to blizzards in Nunavut, to hurricanes in New Brunswick. In addition to natural disasters there are other types of risks, such as blackouts, industrial or transportation accidents, and the possibility of acts of terrorism on Canadian soil.

The following list contains natural risks and other hazards. Check off the risks that are most likely in your community.

- O Blackout
- O Blizzard
- O Drought
- O Earthquake
- O Flood
- O Hazardous materials and spills
- O Hurricane
- O Industrial accident
- O Infectious disease outbreak

- O Landslide or avalanche
- O Storm
- O Terrorism
- Tornado
- Transportation accident
- O Tsunami or storm surge
- Wildfire
- O Severe Weather (heat/cold)
- O Other

To learn more about emergency preparedness, or to order self-help publications on planning for earthquakes, storms, power outages and other risks, call:

1 800 O-Canada (1 800 622-6232)

TTY: 1 800 926-9105

Monday to Friday, 8 a.m. to 8 p.m. local time

Or visit: www.GetPrepared.ca

STEP



Make a plan

Every Canadian household needs an emergency plan. It will help you and your family know what to do in case of an emergency.

Remember, your family may not be together when a disaster occurs. Plan how to meet or contact one another and discuss what you would do in different situations.

Use the following pages to create your plan. Most of this information can be filled out on your own. You may need to get some information from your municipality.

Keep this document in an easy-to-find, easy-to-remember place (for example, with your emergency kit). You might also want to make a photocopy of this plan and keep it in your car and/or at work.

Safe idea: Learn about first aid. You could save a life.

Along with making emergency plans and preparing an emergency kit, knowing first aid could save a life. Contact your local Canadian Red Cross or St. John Ambulance to find out about first aid courses offered in your area.

Household plan

Escape routes

Plan emergency exits from each room of your home. Try to think of two possibilities for each room. If you live in an apartment, do not plan to use the elevators. Also, identify an escape route from your neighbourhood in case you are ordered to evacuate.

Emergency exits from home:

Escape route from neighbourhood:

Tip: Make sure that everyone in your home knows how to get out quickly. Practice at least once a year with everyone.

Meeting places

Identify safe places where everyone should meet if they have to leave home during an emergency.

Safe meeting place near home:

Safe meeting place outside immediate neighbourhood:

Tip: The meeting place near your home should be on the same side of the street as your house. This way you don't need to cross the street into traffic or in front of fire trucks or ambulances during an emergency.

Safe idea: Make copies of important documents

Make copies of birth and marriage certificates, passports, licences, wills, land deeds and insurance. Keep them in a safe place inside your home. As well, keep copies in a safe place outside your home. You might want to put them in a safety deposit box or give them to friends and family who live out of town.

Children

Ask your children's school or daycare about their emergency policies. Find out how they will communicate with families during an emergency.

Find out what type of authorization the school or daycare requires to release your children to a designated person if you can't pick them up yourself.

Make sure the school or daycare has updated contact information for parents, caregivers and designated persons.

Designated person 1:	Phone:
Designated person 2:	Phone:

People with special health needs

Establish a personal support network of friends, relatives, health-care providers, co-workers and neighbours who understand your special needs.

Write down details about your medical conditions, allergies, surgeries, family medical history, medications, health screenings, recent vaccinations, emergency contacts and insurance information.

Talk to your doctor about preparing a grab-and-go bag with a two-week supply of medications and medical supplies, if possible. Include prescriptions and medical documents. Remember that pharmacies may be closed for some time, even after an emergency is over.

Health information:	
Medications and medical equipment:	
Grab-and-go bag location:	

Plan for pets

Remember that pets are not allowed in some public shelters or hotels because of certain health regulations. Also, some people might be allergic to and/or frightened by your pets. Plan to take your pets with you to a relative or friend's home, or identify a "pet-friendly" hotel or pet boarding facilities in advance.

Location:		

Tip: Don't forget to put pet food and water in your emergency kit.

Plan for specific risks

instructions for the risks that are most likely to occur in your region.
What should you do in case of an earthquake? Flood? Blackout? Write down instructions for the risks that are most likely to occur in your region.

The Government of Canada provides a series of self-help publications on specific emergencies. They can be downloaded at **www.GetPrepared.ca** or ordered free of charge by phoning **1 800 O-Canada (1 800 622-6232) TTY: 1 800 926-9105**.

Neighbourhood safety plan

Work with your neighbours to make sure everyone is taken care of in your neighbourhood. Identify people who might need extra help during an emergency. Assign "block buddies" to take care of each other.

Emergency contact information

Photocopy this list. Put a copy close to your telephone. If possible, program these phone numbers into your home phone and cell phone.

Local emergency numbers

Fire, police, ambulance: 9-1-1 (where available)	
Other:	

Non-emergency numbers

Police:	
Fire:	
Other Contact Humbers.	
Out-of-town contact	
Name:	
Home phone:	
Work phone:	
Cell phone:	
E-mail:	
Home address:	
he or she will probably not be If you are new to Canada or do	ent of an emergency. It who lives far enough away that affected by the same event. It is a sociations affected an out-of-town contact arough friends, cultural associations
Family	Friend/Neighbour
Name:	Name:
Home phone:	Home phone:
Work phone:	Work phone:
Cell phone:	Cell phone:
E-mail:	E-mail:
Home address:	Home address:

Family doctors

Patient's name:	
Doctor's name:	Phone:
Patient's name:	
Doctor's name:	Phone:
Insurance agent/comp	any
Agent's/company's name:	
Phone:	
Safe home instr	ructions
•	n monoxide detector, smoke detector apartment or are staying in a hotel, know
Everyone in your home should know All capable adults and older children	_
Older children and adults should kno electricity and gas. Make large, easy-as well as for the breaker panel or fus	to-see signs for water and gas shut-offs
	9-1-1. Teach children how to call the your children know where the emergency
Fire extinguisher Location:	
Water valve Location:	
Shut-off instructions:	
Utility company phone number:	
Electrical box Location:	
Litility company phone number:	

Gas valve Location:
Shut-off instructions (only shut off gas when authorities tell you to do so):
Jtility company phone number:
Floor drain
_ocation:
always ensure it is clear of boxes, clothes or furniture, in case there is a flood)

Emergency instructions When to call 9-1-1 (where available)

Report a fire. Report a crime. Save a life.

For non-emergency calls, use the seven-digit numbers listed in your local phone book for police, fire and paramedic services.

In case of a major emergency

Follow your emergency plan.

Get your emergency kit.

Make sure you are safe before assisting others.

Listen to the radio or television for information from authorities. Local officials may advise you to stay where you are. Follow their instructions.

Stay put until all is safe or until you are ordered to evacuate.

Evacuation orders

Authorities will not ask you to leave your home unless they have reason to believe you are in danger.

If you are ordered to evacuate, take your emergency kit, essential medications, copies of prescriptions, personal identification of each family member, copies of essential family documentation and a cellular phone with you, if you have one.

Use travel routes specified by local authorities.

If you have time, call or e-mail your out-of-town contact. Tell them where you are going and when you expect to arrive. Once you are safe, let them know. Tell them if any family members have become separated.

If you have time, leave a note telling others when you left and where you are.

Shut off water and electricity if officials tell you to.

Leave natural gas service 'on' unless officials tell you to turn it off. (If you turn off the gas, the gas company has to reconnect it. In a major emergency, it could take weeks for a professional to respond. You would be without gas for heating and cooking.)

Take pets with you.

Lock your home.

STEP





Prepare a kit

In an emergency you will need some basic supplies. You may need to get by without power or tap water. Be prepared to be self-sufficient for at least 72 hours.

You may have some of the items already, such as a flashlight, battery-operated radio, food, water and blankets. The key is to make sure they are organized and easy to find. Would you be able to find your flashlight in the dark?

Make sure your kit is easy to carry. Keep it in a backpack, duffel bag or suitcase with wheels, in an easy-to-reach, accessible place, such as your front hall closet. Make sure everyone in the household knows where the emergency kit is.

Basic emergency kit

- Water at least two litres of water per person per day. Include small bottles that can be carried easily in case of an evacuation order
- Food that won't spoil, such as canned food, energy bars and dried foods (remember to replace the food and water once a year)
- Manual can-opener
- Flashlight and batteries
- Candles and matches or lighter (remember to place candles in sturdy containers and to put them out before going to sleep)
- Battery-powered or wind-up radio (and extra batteries)
- First aid kit
- Special items such as prescription medications, infant formula and equipment for people with disabilities
- Extra keys for your car and house
- Some cash in smaller bills, such as \$10 bills (travellers cheques are also useful) and change for payphones
- A copy of your emergency plan and contact information

Recommended additional items

- · A change of clothing and footwear for each household member
- Sleeping bag or warm blanket for each household member
- A whistle (in case you need to attract attention)
- Garbage bags for personal sanitation
- Toilet paper and other personal care supplies
- Safety gloves
- Basic tools (hammer, pliers, wrench, screwdrivers, fasteners, work gloves)
- Small fuel-driven stove and fuel (follow manufacturer's directions and store properly)
- Two litres of water per person per day for cooking and cleaning.





Pre-packaged kits:

Canadian Red Cross kits are available at www.redcross.ca.

St. John Ambulance and Salvation Army kits can be purchased from the following retailers:

Zellers Save-On-Foods Value Drug Mart Home Outfitters IGA Apple Drugs

Rexall MarketPlace IGA Rxellence Professional Dispensary

Pharma Plus Thrifty Foods Quality Foods
Canadian Tire Buy-Low Foods TSC Stores
London Drugs Nesters Market Jean Coutu

Overwaitea Foods G&H Shop 'N Save

Tip: Automated bank machines and their networks may not work during an emergency or blackout. You may have difficulty using debit or credit cards.

1 800 O-Canada

Basic car kit

If you have a car, prepare a small kit and keep it in the vehicle

The basic kit should include:

- Food that won't spoil (such as energy bars)
- Water
- Blanket
- Extra clothing and shoes
- Candle in a deep can and matches
- First aid kit with seatbelt cutter
- Warning light or road flares
- Small shovel, scraper and snowbrush
- List of contact numbers

Recommended additional items to keep in your car

- Sand, salt or cat litter (non clumping)
- Antifreeze, windshield washer fluid
- Tow rope and jumper cables
- Fire extinguisher
- Roadmaps, whistle and flashlight

Prepare now

Don't wait for an emergency to happen. There are simple things you can do now to prepare yourself and your loved ones. By simply reading this guide, you are well on your way.

Complete this guide one evening this week or during the weekend.

Make your plan and prepare your kit.

Write yourself a reminder to update your emergency plan one year from now. On this date next year, review your contact information, practice your emergency evacuation plans, change the batteries in your smoke detector and carbon monoxide detector and restock the contents of your kit.

National resources

To learn more about emergency preparedness: www.GetPrepared.ca

To order additional copies of this publication, or publications on planning for earthquakes, storms, power outages and other risks, call:

1 800 O-Canada (1 800 622-6232) TTY: 1 800 926-9105

Monday to Friday, 8 a.m. to 8 p.m. local time

Environment Canada Weather Office

www.weatheroffice.ec.gc.ca

Check the blue pages in your local phone book under Weather for weather reports and forecasting available by phone.

Safe Canada

www.safecanada.ca

Comprehensive federal, provincial, territorial and municipal safety information for all citizens.

Canadian Red Cross

www.redcross.ca

Prepare for Life. Learn how to prepare and plan from a world leader in Disaster Management and First Aid. The Canadian Red Cross is part of the largest humanitarian organisation that aims to help the most vulnerable in neighbourhoods in Canada and around the world.

St. John Ambulance

www.sja.ca

Saving Lives – At work, home and play. As Canada's standard for excellence in first aid and CPR services, St. John Ambulance offers innovative programs and products, ensuring Canadians can be prepared.

Salvation Army

www.SalvationArmy.ca

The Salvation Army brings relief to people around the world through its emergency and disaster services. Ready to deploy its resources at very short notice, our disaster units immediately work to reduce physical harm and help victims regain control of their lives.