Environmental Assessment Registration

Stephenville Paper Mill Site Decommissioning

Submitted to:

Department of Environment and Conservation
Environmental Assessment Division

July 28, 2006

ABITIBI CONSOLIDATED

ENVIRONMENTAL ASSESSMENT REGISTRATION

STEPHENVILLE PAPER MILL SITE DECOMMISSIONING

Prepared for:
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Environmental Assessment Division
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1.0 NAME OF THE UNDERTAKING

Stephenville Paper Mill Site Decommissioning

2.0 PROPONENT

2.1 Name of Corporate Body

Abitibi-Consolidated Company of Canada

2.2 Address

Head Office
1155 Metcalfe Street, Suite 800
Montreal, Quebec H3B 5H2

Postal Address
P. O. Box 69, Station A
Montreal, Quebec H3C 2R5

2.3 Corporate Contact

Name:	Jim Gartshore, P. Eng.
Official Title:	VP Energy and Engineering
Address:	As above
Telephone:	514-392-3254

2.4 Principle Contact Person

Name:	Gerald Smith (Acting) / Mel Dean
Official Title:	On-Site Coordinator
Address:	1 Abitibi Road Stephenville, NL A2N 2Y8
Telephone:	709-643-7587

3.0 THE UNDERTAKING

3.1 Nature of the Undertaking

On December 14th, 2005, Abitibi-Consolidated Company of Canada (ACCC) permanently closed the Stephenville Division (the Site) in the Province of Newfoundland and Labrador. This registration is to satisfy the requirement to register the permanent decommissioning (the Undertaking) of the site as per the Environmental Protection Act, 2002 and Environmental Assessment Regulations.

3.2 Purpose of the Undertaking

The purpose of the Undertaking is to provide a framework to decommission the Site. The following steps include:

- Conduct pre-decommissioning activities to secure ACCC properties, and to ensure there is no environmental degradation.
- Finalize the Phase I Environmental Site Assessment (ESA) report including the identification of actual and potential site contamination
- Conduct a Phase II ESA to confirm the presence of contamination and characterize the substances of concern
- Evaluate soil contamination criteria and risk based corrective action (RBCA) options to manage contamination of the Site. Once evaluation has been completed, a Remedial Action Plan (RAP) will be developed. The RAP will be submitted to the Department of Environment and Conservation (DOEC) for approval prior to implementation. The RAP will describe the following:
    - The rational for the selection of remedial criteria
    - The remedial criteria
    - The methodology of the remedial action to achieve the remedial criteria and / or the method of risk management.
- Conduct the necessary remedial actions to address substances of concern and site contamination as stated in the RAP
- Demolish various infrastructures that do not have alternative uses within a reasonable length of time. After demolition, the site will be re-vegetated to industrial standards.

ACCC will address and manage the environmental contaminants that are present on the Site due to the occupation of Abitibi-Price Inc. or Labrador Linerboard Ltd. ACCC is not responsible for the management of environmental contaminants that were present on the Site (1) prior to the occupation of Labrador Linerboard Ltd, or (2) areas believed to be owned and controlled by the Newfoundland and Labrador Housing Corporation (NLHC).

4.0 DESCRIPTION OF THE UNDERTAKING

4.1 Location

ACCC - Stephenville Division is located east of the Town of Stephenville, Newfoundland, on the North Shore of Bay St. George in the Gulf of St. Lawrence (Appendix A). The attached location plan (Appendix B) identifies the geographical location of the Undertaking on the Canadian Topographic Map (12 B/9 – Edition 3).

4.2 Physical Features

4.2.1 Existing Infrastructure and Physical Features

The Site, as shown in Appendix C, includes the following infrastructure and physical features;

- The main mill building that houses the pulp mill, paper mill, finishing room, steam plant, maintenance shops and administration offices
- The paper storage shed, A-frame storage building, wood room, and shipping personnel building
- Effluent treatment facilities and associated pipelines including two aerated stabilization basins (ASB), two settling ponds, two ash ponds and one primary clarifier
- Wood yard and chip pad
- Industrial landfill waste management systems located on ACCC property and on the east side of Route 490
- Three hydrocarbon bulk fuel storage facilities and associated pipelines including the following tanks: #8 (80,000 bbls), #5 (80,000 bbls), and #4 (120,000 bbls)
- Above ground fuel storage tanks including gasoline, diesel and propane storage tanks
- Process storage tanks including pulp and chip storage tanks
- Raw and domestic water systems
- Sewage systems including septic tanks and septic fields
- Transformers and other electrical equipment

The forest access roads (the roads) associated with former Stephenville Timber Licenses will be handled in the same manner as the established practice throughout the forest industry in Newfoundland. The roads will continue to be utilized to access stands of timber for Crown operators and saw-millers to supply their sawmills with saw logs. In addition, the roads will have a significant amount of use by other resource users, who will continue to use the roads including: mining exploration companies, cabin owners, outfitters, recreational users, etc.

4.2.2 Physical and Biological Environment

Remedial work done during the Undertaking will be conducted to ensure compatibility with the existing physical and biological environment located at the Site. Unless further industrial activities are identified for the Site, rehabilitation of the Site will commence, once the decommissioning phase has been completed. As a result, rehabilitation will be completed in a manner to optimize integration into the surrounding environment.

4.3 The Scope

4.3.1 Pre-decommissioning Activities

ACCC has taken a pro-active approach to ensure due-diligence by conducting pre-decommissioning activities. These activities were conducted with promptness and in an attentive manner in order to prevent any accidental release or spill into the environment and to minimize environmental impacts due to the closure of the Site. Such pre-decommissioning activities include:

- Removal of chemical and petroleum products, nuclear sources, ozone depleting substances (ODS), and hazardous waste.
- Clean-up of the effluent treatment system including partial dredging of the Aeration Stabilization Basins (ASB) and Ash Ponds
- Re-organization of non-process effluent discharge and associated monitoring
- Clean-up of process tanks and the primary clarifier
- Clean-up of wood waste located in the wood yard
- Reduction of all sources of fresh water consumption

As part of the pre-decommissioning process, ACCC is removing and transferring equipment, that does not have a significant environmental effect, in preparation for the demolition of infrastructure. In addition, ACCC continues to conduct other pre-decommissioning activities to ensure continued compliance with applicable legislation and to minimize impacts to the environment. Such activities include the removal of raw material off the Site to eliminate the source of potential leachate, and the removal of Bunker-C from the bulk storage tanks as required by the Storage and Handling of Gasoline and Associated Products Regulations (2003).

4.3.2 Environmental Site Assessment and Remedial Action Plan (RAP)

An independent environmental consultant was hired by ACCC to conduct a Phase I and Phase II ESA in accordance with the applicable Canadian Standards Association (CSA) standards Z768-01 and Z769-00. Consequently, the Phase I ESA was conducted to ensure that ample information would be available for review during the Registration Process. A summary of the ESA Phase I results is located in Appendix E of the Registration Document. The Phase I ESA included a review of historical activities on the site that may have resulted in soil contamination. Where potential soil contamination is identified, the soil and groundwater will be characterized for relevant contaminants associated with pulp

and paper mill operations. During the ESA, a designated substance inventory (e.x. asbestos) will also be conducted and will be taken into account during the demolition phase. Based on Phases I and II ESA findings, an RAP will be developed as per DOEC's Policy Directive PPD05-01 – Management of Impacted Sites. The RAP will take into account the demolition schedule.

4.3.3 Infrastructure Demolition

At the time of submitting the registration document, it is ACCC intention to remove all above ground infrastructure. Nevertheless, buildings that have potential for attracting other industry to the area will be available for sale during a certain period of time (until the demolition process is started). An example of a building with resale potential is the paper storage shed, as it is a large area located on the water and has overhead cranes. The buildings that do not sell in a reasonable length of time will be demolished.

4.3.4 Site Rehabilitation

The details of the site RAP are unknown at the time of registration since it will be based on the findings of the Phase I and II ESA. Following the completion of the Phase II ESA, a comprehensive RAP will be developed and submitted to DOEC.

4.4 Decommissioning Activities

4.4.1 Timeframe

The decommissioning of the Site is scheduled to commence in 2006 and is tentatively scheduled for completion by 2008. Ultimately, the timeframe for conducting the Undertaking will be influenced, by the registration process, the ESA process, and the time of year.

4.4.2 Schedule

Refer to Appendix D for the schedule of the Undertaking.

4.4.3 Sources of Pollutants

For the purpose of the present document, the sources of pollutants are grouped under two categories: pollutants associated to historical activities of the mill, which will be extensively covered by the Phase I and II ESA, and the pollutants associated with the decommissioning activities themselves

The main source of "pollutants" resulting from the decommissioning of the site consist of demolition materials (asphalt, concrete, bricks, etc.). It should be noted that all residual metal resulting from the demolition of the infrastructure will be recovered and recycled. Other significant wastes resulting from the decommissioning phase will include domestic

garbage, and solids accumulation in the effluent treatment system (i.e. secondary sludge). The wastes resulting from the mill process, such as the secondary sludge, will be eliminated in the approved landfill sites on the mill property.

Other less significant sources of "pollutants" associated to the decommissioning activities may consist of:

- Air emissions generated from vehicles and heavy equipment (i.e. ventilation exhaust
- Sanitary sewage during the decommissioning work
- Waste oil including fuel, lubricant, hydraulic fluid and Bunker C/Used Oil resulting from the drainage of equipment/piping.
- Asbestos waste
- Noise production that travels beyond facility boundaries during demolition activities
- Odor that may impact surrounding areas mainly associated to the ASB decommissioning
- Particulate matter from road dust and demolishing infrastructure
- Hazardous waste such as solvents, paint, fluorescent tubes, mercury lamps , waste chemicals

The Undertaking will be conducted in accordance with applicable legislation including remedial measures to minimize sources of pollutants.

4.4.4 Occupations

A general breakdown of positions based on the National Occupation Classifications System is outlined in Table 2, however the actual numbers and specific breakdown of positions for each phase of the Undertaking cannot be confirmed at this time. Where practical, it is ACCC's intent to utilize local contractors during the Undertaking.

Table 1: Positions required for the Undertaking

National Occupational Classifications (NOC)		
Applicable Classification for the Decommissioning of the Stephenville Division		
Based on NOC 2001		
NOC Unit Group Occupational Title Code	Number of Anticipated Positions	Description
0211		Engineering Managers
6651		Security Guards and Related Occupations
7213		Contractors and Supervisors, Pipefitting Trades
7216		Contractors and Supervisors, Mechanic Trades
7242		Industrial Electricians
7421		Heavy Equipment Operators
7611		Construction Trades Helpers and Laborers
8612		Landscaping and Grounds Maintenance Laborers

4.4.5 Socio-economics

The main socio-economic benefits resulting from the undertaking are potentially as follows:

- Employment during all phases of the undertaking, including pre-decommissioning activities, demolition of infrastructure, ESA and rehabilitation work;
- Re-use of infrastructure on site by other industrial users that may result in job creation depending on the project.

5.0 APPROVAL OF THE UNDERTAKING

The permits, approvals, and authorizations that may be necessary for the Undertaking include:

Table 3: Permits, approvals and authorizations for the Undertaking

Permit, Approval or Authorization	Issuing Agency
Approval for the Undertaking	DOEC
Cancellation of Certificate of Approval AA04-085431	DOEC
Approval for the RAP	DOEC
Certificate of Approval for an Industrial Landfill Waste Management System (WMS02-1257C & WMS02-12030 A)	DOEC AND Department of Government Services

6.0 FUNDING

The funding for the Undertaking will be provided by ACCC. At this time, it is not possible to provide an estimate of the capital costs required for the undertaking until the Phase II ESA has been completed, the RAP prepared and demolition bids obtained.

Signed Copy on File **July 28, 2006**
Jim Gartshore Date
VP Energy and
Engineering

APPENDIX A

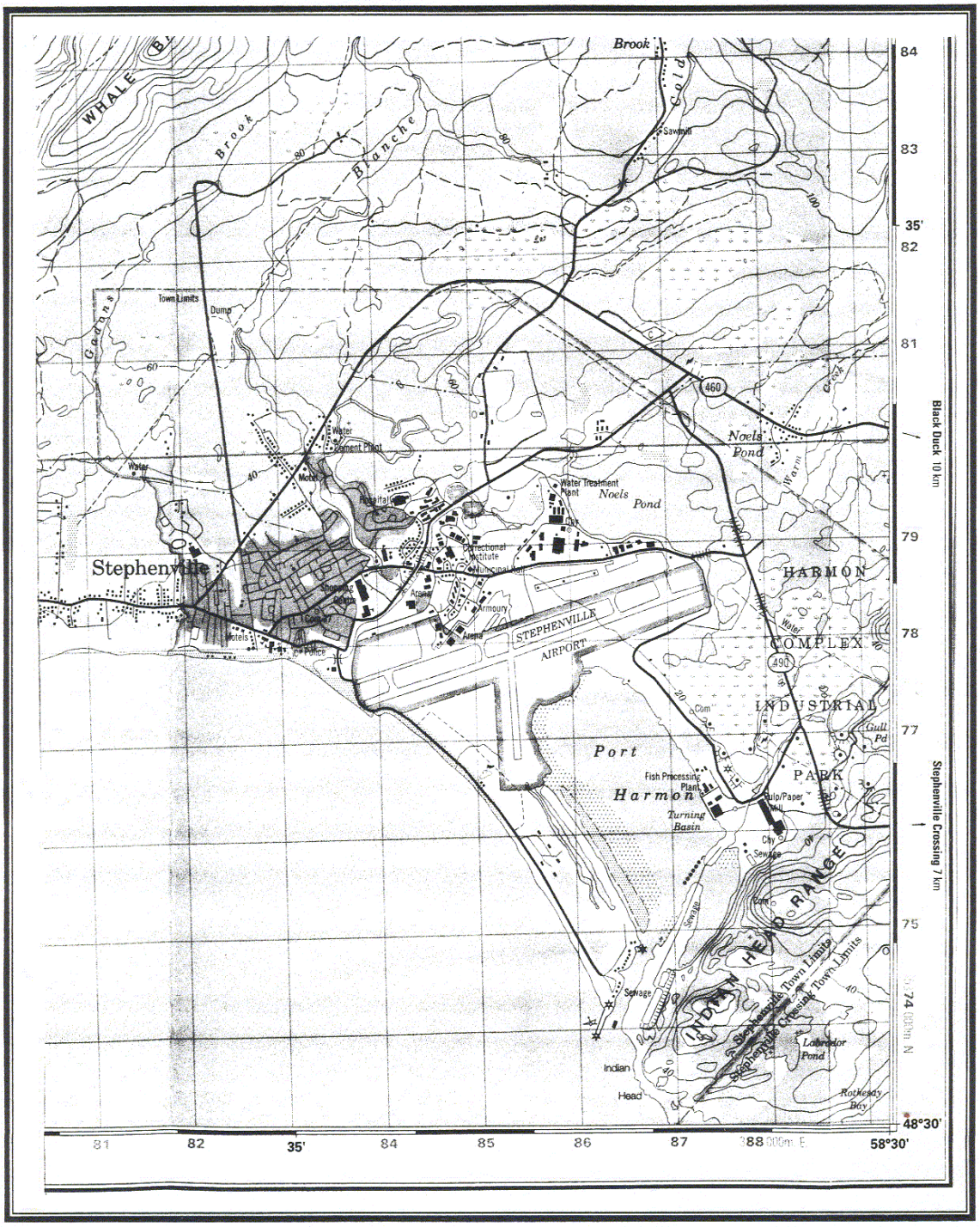
Figure 1: Location of the Stephenville Division

APPENDIX B

Abitibi-Consolidated Company of Canada – Stephenville Division

SITE LOCATION

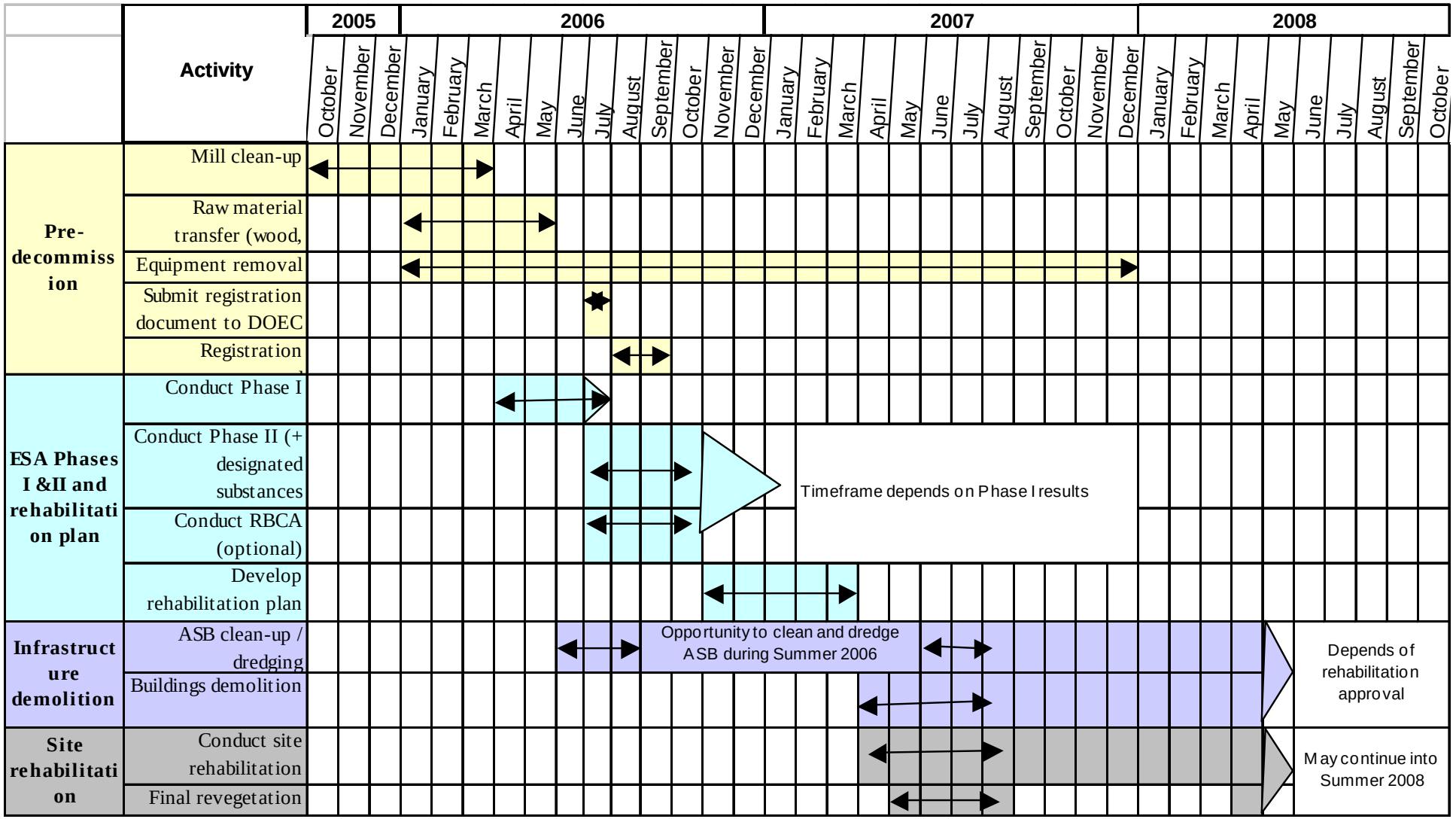
Canadian Topographic Map: 12 B/10 – Edition 7
Scale 1:50,000



APPENDIX C

APPENDIX D

Table 2: Schedule of the Undertaking



APPENDIX E

Summary of ESA Phase I

This summary outlines ACCC's commitment to address and manage the environmental contaminants that are present on the Site due to the occupation of ACCC, Abitibi-Price Inc. or Labrador Linerboard Ltd. As a result, ACCC assumes the responsibility for remedial actions, associated with pulp and paper mill operations and identified during the Environmental Site Assessment (ESA) process to ensure proper management of such environmental contaminants.

It is apparent from the Phase I ESA that the Labrador Linerboard Ltd., Abitibi-Price Inc., and ACCC-Stephenville have endeavoured to maintain compliance with the regulations of the day. However, it should be noted that Abitibi-Price / ACCC-Stephenville has inherited some liabilities from the Labrador Linerboard Ltd. operations.

A number of important environmental issues have been addressed to the point where the scope of the follow-up Phase 2 ESA can be better defined.

- ACCC is not responsible for any impacts that are identified to pre-date the construction of the mill in 1970, or any impacts associated with the remaining infrastructure that is believed to be owned and controlled by NLHC, namely the tank farm (excluding Tanks 4, 5, and 8) and the connecting pipelines.

- The transfer of the DOT (Maintenance) Building and land beneath the Paper Storage Building, from Transport Canada to Abitibi-Price Inc., involved a comprehensive and phased environmental assessment, site remediation and confirmatory sampling of soil and groundwater between 1997 and 2000. No significant investigations should be required in that area, however, if the existing building is demolished a local area will need to be investigated for petroleum hydrocarbon contamination.

- The transfer of Port Harmon from Transport Canada to the Port Harmon Authority Limited was completed only after a detailed environmental assessment of the port had been completed. It appears that no further investigations or remedial work will be required in any areas in the inner harbour or channel that are adjacent to its property. Some work may be required to ensure the berthing dolphins do not pose a future hazard for harbour navigation.

- Environmental Effects Monitoring at the outfall over the past 10 years have identified some minor impacts to the marine life, extending up to 500 m away from the effluent pipe. Now that the mill is permanently closed, the minor impacts associated with discharge of effluent are expected to dissipate.

- The Provincial Archaeology Office of the Department of Tourism and Culture, confirmed that an archaeological assessment of the mill site will not be required

prior to decommissioning because of the considerable development and disturbances at the site and the absence of virgin land.

- Baseline environmental conditions and/or reference benchmarks and future monitoring points have been identified that will help to better define the scope of the Phase 2 ESA. The information obtained will help better define the scope of drilling in that area in Phase 2.

Despite the best efforts of ACCC to minimize environmental impacts, some impacts could not be avoided given the size and nature of its industrial operations and considering the environmental liabilities inherited from previous activities at the site over a 35-year period. Areas of Management have been identified during the Phase 1 ESA that will require further investigation in Phase 2 ESA.

Each Area of Management will require various types of monitoring regimes including boreholes, monitoring wells, test pits, and in some cases, specialized analysis. Details for managing each area will be provided in the Phase II ESA and will include confirmation of the presence of contamination and characterize the substances of concern.

Each Area of Management is listed below.

- **Steam Plant Day Tank** - Evaluate the extent of the impacts to soil and possibly groundwater.

- **Paper Mill Building** - Soil and groundwater quality below the floor slab needs to be evaluated at a number of locations including

    a) Recaust Room

    b) Basement area below the paper machine

    c) Lubricating oil storage tanks

    d) Parts of the Mill not used by Abitibi Price/ACCC-Stephenville and used by Labrador Linerboard Limited during kraft operations.

- **Stream Bed Near Main Security Gate** - Soil quality needs to be evaluated at the local area for appropriate parameters.

- **Fire Training Area** – Determine the extent of the impacts to soil and possibly groundwater.

- **Tank Farm (#4, #5, #8)** - Soil contamination has been confirmed during previous borehole investigations at Tank 4, Tank 5 and Tank 8; performed when Abitibi-Price bought these facilities from NLHC. Assess the potential impacts to groundwater, and directions of groundwater flow.

- **Settling Ponds and Aeration Stabilization Basins (ASB)** – Determine sludge quality in the settling ponds and ASBs and potential impacts on the surrounding soil and groundwater.

- **Sludge Disposal Sites** – Evaluate sludge quality, as well as the potential chemical impact on the surrounding soil and groundwater.

- **Ash Ponds** - Determine if potential contaminants have entered the ash ponds through (1) the process effluent stream or (2) contaminated ground waters from USAF/NLHC operations as well as possibly from Abitibi-Price/ACCC-Stephenville.

- **Fuel Storage Areas Outside of the Tank Farm** - A total of eight former USTs and twelve existing ASTs have been identified on ACCC-Stephenville property. Analyze soil and groundwater samples to evaluate any potential chemical impacts.

- **Septic Disposal Fields** – Determine potential impacts on soil and groundwater.

- **Push-Off Area East of Paper Mill Building** - Delineate full extent of the debris field. Asses soil, surface water and groundwater quality.

- **Mine Pond Landfill** – Assess soil and groundwater for a suite of organic, inorganic, and microbiological contaminants. A magnetometer/GPR survey will be required to locate the UST that was associated with operation of the former USAF boiler room in the munitions building. The adjacent streams should also be sampled during base flow conditions to determine potential impacts.

- **Tank 20 Landfill** - Constructed by Labrador Linerboard Limited and closed by Abitibi-Price in 1983. Soil and groundwater sampling for a suite of organic and inorganic contaminants should be performed. The wells at the Tank 20 Landfill site will also help identify any residual impacts from the 1992 diesel oil spill that occurred at Tank 20, liability for which may extend back to NLHC.

- **'Active' Landfill Site** - Evaluate potential soil and groundwater impacts. The adjacent stream should also be sampled during base flow conditions to determine potential impacts.

- **Electrical Substations and Transformers** - Soil and groundwater around these transformers should be analyzed for appropriate parameters.

- **Dry Ash Storage Area** - The soil in these areas should be sampled for the appropriate chemical parameters.

- **Old Bark Pile** - The quality of the bark materials in that pile and the underlying soil should be evaluated by sampling and chemical characterization.

- **Wood and Chip Pads** - The soils immediately surrounding the wood and chip pads should be evaluated for possible chemical impacts from the storage of wood bark and chips on those pads.

- **Hazardous Building Materials** - Determine if hazardous materials were used in the construction of the various buildings and associated infrastructure at the mill site. Determine and develop a management program for handling such materials.