VOISEY'S BAY NICKEL COMPANY LIMITED
ARGENTIA HYDROMETALLURGICAL DEMONSTRATION PLANT

ENVIRONMENTAL PROTECTION PLAN
CONSTRUCTION PHASE

VOISEY'S BAY NICKEL COMPANY LIMITED

A subsidiary of Inco Limited

Argentia Hydrometallurgical Demonstration Plant
Environmental Protection Plan
Construction Phase

Prepared For:
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VOISEY'S BAY NICKEL COMPANY LIMITED

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TABLE OF CONCORDANCE

COMMENT #	COMMENTS PROVIDED BY THE MINISTER	RESPONSE
Department of Labour #1 Section 3.8, Dust Control	The Department seeks clarification as to whether workers exposed to excessive dust will wear appropriate respiratory protection. (Also looking for a cross reference in the health and safety program).	The Health and Safety Plan will be prepared after all the issues associated with the EPP have been addressed. The Plan will include areas where Personal Protective Equipment (PPE) is required and will address PPE requirements for dusty environments. Section 3.8 has been revised to reflect PPE requirements for dusty environments.
Department of Labour #2 Section 3.14, Solid Waste Disposal	The Department seeks clarification as to why there is no reference to asbestos.	There is no asbestos to be used on the project and for the Project, Solid Waste Disposal refers to waste generated by the Construction Activities. Should asbestos be discovered during demolition activities it would appropriately be dealt with under Section 4.5, Discovery of Contaminated or Hazardous Waste Materials. Asbestos is not specifically discussed under Section 4.5 because this section refers to all hazardous or potentially hazardous materials of which asbestos is covered.
Department of Labour #3 Section 3.20 Trenching	The Department seeks to have a reference to the Occupational Health and Safety Regulations.	Section 3.20, Trenching has been updated to include the concerns related to health and safety and the noted reference has been added.
Department of Labour #4 Section 4.2, Fuel or Hazardous Material Spills	The Department seeks to have the Response Actions address human health and safety.	Section 4.2, Fuel or Hazardous Material Spills has been divided into two sections. The first section refers only to fuel spills. The second section covers procedures for use in the case of hazardous or suspected hazardous material spill.
Department of Labour #5 Section 4.5, Discovery of Contaminated or Hazardous Material	The Department seeks to have the Response Actions address human health and safety.	More detailed instructions will be included in the Health and Safety Plan.
Department of Labour #6 Section 5.2, Legislation, Permits & Authorizations	The Department notes that the Department of Youth Services and Post Secondary Education issue the Blaster's Safety Certificate.	Section 5.2, Legislation, Permits & Authorizations, has been updated to reflect this change.

COMMENT #	COMMENTS PROVIDED BY THE MINISTER	RESPONSE
Department of Labour #7 Section 6.1, Emergency Numbers	The Department seeks to add the contact information for the Occupational Health and Safety Division to the list of emergency numbers.	Section 6.1, Emergency Numbers has been updated to reflect this addition.
Department of Municipal and Provincial Affairs #1 Section 5.1, Legislation	The Department identified that the Urban and Rural Planning Act is administered by the Department of Municipal and Provincial Affairs	Section 5.1, Legislation has been updated to reflect this change.
Department of Municipal and Provincial Affairs #2 Section 5.2, Permits & Authorizations	The Department seeks to add the permits issued by the Town of Placentia.	Section 5.2, Permits & Authorizations has been updated to reflect this change.
Environment Canada #1 Section 4.2, Fuel or Hazardous Material Spills	Environment Canada notes that there is no response equipment listed in section 4.2, Fuel or Hazardous Material Spills.	A list of response equipment will be included in the Emergency Response Plan.
Environment Canada #2 Section 4.2, Fuel or Hazardous Material Spills	Environment Canada notes that there is no mention of training in section 4.2, Fuel or Hazardous Material Spills.	Training of OSC is noted in Section 4.2 and worker orientations are referenced in Section 1.4.
Fisheries and Oceans #1 Section 6.2, Advisory and Other Contact Numbers	Fisheries and Oceans advise that the fax number for the Area Habitat Biologist is 772-2659.	Section 6.2, Advisory and Other Contact Numbers has been updated to reflect this change.
Department of Environment #1 Section 3.2, Storage, Transportation and Handling of Fuel and Other Hazardous Material	The Department questioned if the Fuel and Material Handling Plan and the Spill Contingency Plan have been developed and circulated.	The Fuel and Material Handling Plan and the Spill Contingency Plan will be prepared after issues related to the Environmental Protection Plan have been addressed.

COMMENT #	COMMENTS PROVIDED BY THE MINISTER	RESPONSE
Department of Environment #2 Section 3.2, Storage, Transportation and Handling of Fuel and Other Hazardous Material	The Department seeks clarification as to what is meant by the instruction that all storage container outlets except the outlet currently in use will be sealed when refueling equipment.	Section 3.2 has been revised to clarify this item.
Department of Environment #3 Section 3.2, Storage, Transportation and Handling of Fuel and Other Hazardous Material	The Department seeks clarification on where check valves will be installed to prevent spillage.	Section 3.2 has been revised to clarify this item.
Department of Environment #4 Section 3.2, Transportation and Handling of Fuel and Other Hazardous Material	The Department notes that clarification is required of the statement in Section 3.2 discussing vehicle and equipment refueling and maintenance activities.	Section 3.2 has been revised to clarify this item.
Department of Environment #5 Section 3.3, Petroleum Product Transfer	The Department notes that Section 3.2, Storage, Transportation and Handling of Fuel and Other Hazardous Material, and Section 3.17, Pumps and Generators, should be referenced in this section.	Reference to Section 3.3 has been added in Section 3.17. Last paragraph of this Section has been edited to reference all fuel transfer activities.
Department of Environment #6 Section 3.5, Equipment Use and Maintenance	The Department notes that section 3.17, Pumps and Generators should be referenced in Section 3.5 as it is applicable to fueling and routine maintenance operations.	Reference to Section 3.5 has been added in Section 3.17.
Department of Environment #7 Section 3.17, Pumps and Generators	The Department seeks clarification in Section 3.17 of the reference to designated sites for refueling.	Reference to Section 3.2, Section 3.3 and Section 3.5 has been added in Section 3.17.
Department of Environment #8 Section 4.5, Discovery of Contaminated or Hazardous Material	The Department seeks clarification of what activities are included through which hazardous materials may be discovered.	Section 4.5 will remain unedited. Section 3.18, General Clearing, Grubbing, and Removal of Related Debris, Section 3.19, General Cutting and Filling and Section 3.20, Trenching have been edited to address the possibility of encountering hazardous materials.

COMMENT #	COMMENTS PROVIDED BY THE MINISTER	RESPONSE
Department of Environment #9 Section 4.5, Discovery of Contaminated or Hazardous Material	The Department requests rewording of response action a) in section 4.5, Discovery of Contaminated or Hazardous Material. Reference should read "suspected emission".	Section 4.5 has been edited to reflect this change.
Department of Environment #10 Section 5.2, Permits & Authorizations	The Department requests clarification of the Department of Environment Permit to show clearly the industrial processing works approval and the water rights authorization.	Section 5.2 has been edited to reflect this change.

PREFACE

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Maintenance of the Environmental Protection Plan (EPP)

The EPP is a directive document, which gives detailed steps to avoid or minimize negative impacts on the environment for all the work elements involved in the construction of the Project. The responsibilities and procedures presented herein are designed to ensure the effectiveness of the plan and to provide for ongoing improvement to the plan to address any deficiencies, inadequacies or potential improvements that may become apparent from time to time.

Responsibilities

The Manager, Environmental Health and Safety, Voisey's Bay Nickel Company (VBNC), or the designated representative(s) shall:

- Monitor the effectiveness of the EPP;
- Review and approve revision requests;
- Conduct a review of the EPP on an as needed basis;
- Ensure that revisions are distributed to EPP holders;
- Maintain Document Control;
- Ensure that EPP holders and their staff are familiar with the EPP and its procedures;
- Ensure compliance with all permits, approvals and authorizations; and
- Ensure that a designated On-Site Coordinator is resident on site during all construction activities.

The On-Site Coordinator (OSC) will be a representative of VBNC or the Contractor. During construction operations, this individual shall:

- Be familiar with all aspects of the EPP;
- Ensure that all activities are conducted in accordance with the EPP;
- Distribute revisions to EPP holders on site;
- Report on the effectiveness of the EPP;
- Identify any deficiencies or gaps in the plan and propose changes to address these deficiencies;
- Direct appropriate contingency actions and enact external notification procedures in the event of an incident; and
- Ensure that in his or her absence, an alternate OSC is appointed.

EPP Holders shall:

- Keep copy current and ensure that all revisions are entered on the revision control record;
- Familiarize themselves and their personnel with the EPP and any revisions; and

- Initiate changes to improve the quality of the plan.

Personnel shall:

- Become familiar with the EPP; and
- Become knowledgeable of reporting procedures.

Initiating Revisions

EPP holders and readers may initiate proposed revisions by forwarding recommended revisions to the On-Site Coordinator on the Revision Request Initiation Form.

Revision Procedures

The Manager of Environmental Health and Safety or the designated representative must approve the revision request. When the On-Site Coordinator obtains the approved Revision, it will be issued to all EPP Holders.

Each revision will be accompanied by a Control Sheet that:

- Provides the revision instructions; and
- Lists the sections being superseded.

An updated table of contents will be included with each revision. This table of contents will indicate current status of each section contained in the plan.

When the EPP Holders receive a revision within two working days they will:

- Read the text of the revision;
- Check the Control Sheet to ensure that all the listed pages have been received;
- Remove and destroy the superseded pages;
- Insert the revised pages in the proper place;
- Page check the plan, using the updated table of contents to ensure the plan is complete and current;
- Enter the revision number and date on the Revision Control Record;
- Incorporate the revision into the area of responsibility, as appropriate; and
- Ensure that their personnel are familiar with the revisions.

Revision Control Record

EPP Section	Revision Date	EPP Holder's Signature

ENVIRONMENTAL PROTECTION PLAN MAINTENANCE

Revision Request Initiation Form

SECTION TO BE REVISED:

NATURE OF REVISION:

RATIONALE FOR REVISION:
(i.e. environment/worker safety, etc.)

SUBMISSION:

Please submit request to the On-Site Coordinator directly or the Manager, Environment, Health & Safety, Voisey's Bay Nickel Company.

SECTION 1 - INTRODUCTION

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1.1 Purpose of the EPP

An Environmental Protection Plan (EPP) is an important component of overall project planning and implementation. EPPs provide a practical way for project proponents to demonstrate their understanding of environmental regulations, practices and procedures required for minimizing or eliminating potential environmental impacts.

EPPs are working documents, which give detailed steps to avoid or minimize negative impacts through all phases of the Project. This EPP addresses detailed procedures to prevent or reduce potential impacts on Valued Ecosystem Components (VECs) for the construction phase. Project personnel in the field and at the corporate level will use the EPP to ensure that commitments made in policy statements are implemented and monitored.

1.2 Owner's Policy

Voisey's Bay Nickel Company (VBNC) endorses the principle of sustainable development. It is recognized that sustainable development includes commitments to health, safety and the environment through a balanced approach to economic, technical and social issues.

VBNC will assess, plan, construct, operate and decommission all projects and facilities in compliance with all applicable legislation. We will seek not only to meet but also where possible, surpass standards set by applicable legislation through the diligent application of technically proven and economically feasible protective measures.

1.3 Organization of the EPP

An EPP provides instructions to ensure that project personnel understand and implement environmental protection procedures for both routine activities and unplanned events associated with the construction of the Hydrometallurgical Demonstration Plant Complex.

This EPP includes the following sections.

a) The Preface provides for distributing the EPP document, as well as EPP maintenance and revision control procedures.

b) Section 1 provides an introduction to the EPP, including an overview of the EPP's purpose, Owner's policy, Owner's and Contractor's Responsibilities, Contractor's and Subcontractor's Personnel, EPP organization, environmental orientation and a brief project description.

c) Section 2 describes environmental concerns associated with the construction phase of the project.

d) Section 3 contains the Environmental Protection Procedures to be implemented during the construction phase. It provides summaries of the various construction activities, identifies potential environmental concerns and proposes appropriate mitigative measures to prevent or minimize environmental impacts.

e) Section 4 contains contingency plans in the event of spills of petroleum products or other hazardous material, wildlife encounters, fires, vessel accidents or the discovery of historic resources.

f) Section 5 outlines the required permits for all aspects of the construction phase.

g) Section 6 provides a list of contact names and numbers for use in implementing the EPP.

1.4 Environmental Orientation

Voisey's Bay Nickel Company Limited is committed to developing and implementing an environmental orientation and awareness program that will be ongoing throughout the construction of the Hydrometallurgical Demonstration Plant Complex.

In support of this commitment, it will be mandatory for all workers to receive environmental orientation sessions prior to their employment for the construction of the Complex. These sessions will serve as a mechanism to heighten awareness of environmental issues related to the project.

1.5 Project Description

A Hydrometallurgical Demonstration Plant Complex will be built to evaluate the viability of hydrometallurgical processes for processing nickel concentrate and to test certain technical aspects of the technology. It will be built on a 25 hectare site located on the Argentia Peninsula, generally referred to as the north side of the former US Navy base at Argentia, Newfoundland.

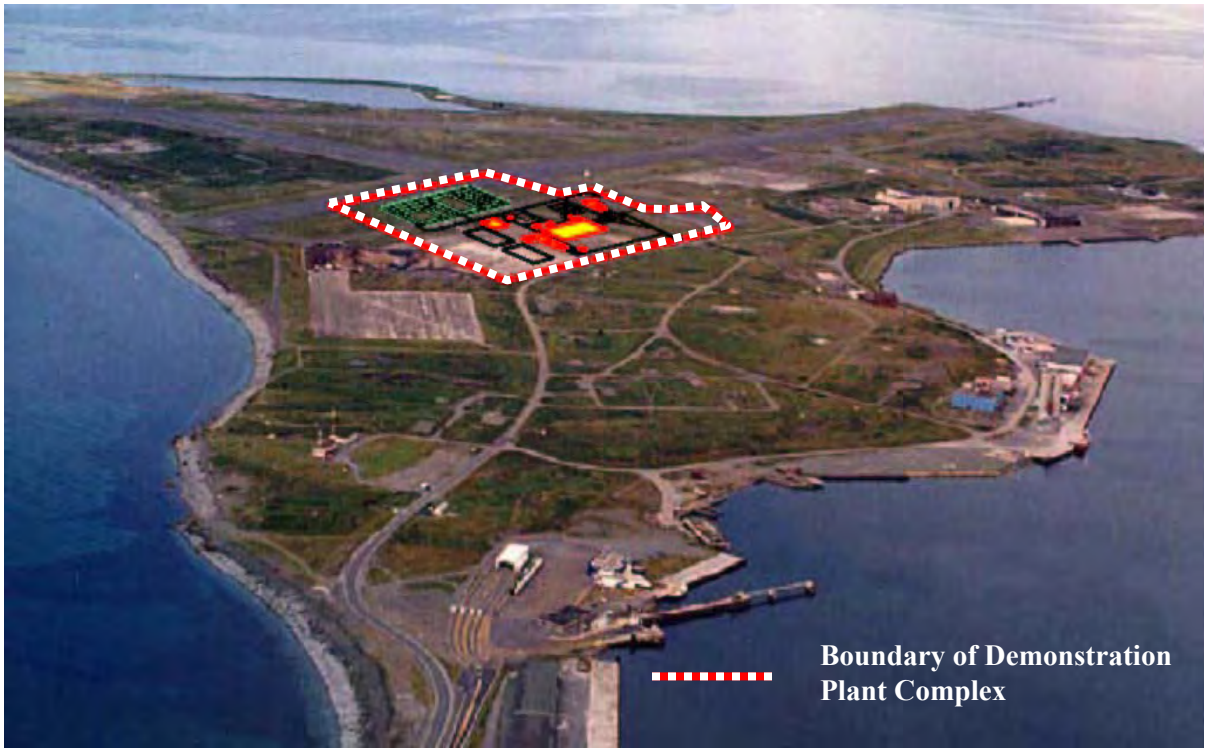

Figure 1: Argentia Peninsula

In general terms, the project includes the following features:

- Demonstration Plant Building;
- Feed Preparation Building;
- Change House for Plant Workers;
- Reagent and Acid Storage Facilities;
- Storage Areas for Full and Empty Concentrate Shipping Containers;
- Curbs and Berms to contain site runoff;
- Catch basins, culverts and lined ditches to direct site runoff to the runoff capture containment pond;

- Containment Ponds for:
  - Residue Test,
  - Residue,
  - Primary Settling and Treatment,
  - Polishing,
  - Runoff Capture;
- Roadways and Parking Areas;
- Water Supply and Distribution;
- Sewage Treatment;
- Power Supply, Electrical Substation and Distribution; and
- Site Fencing.

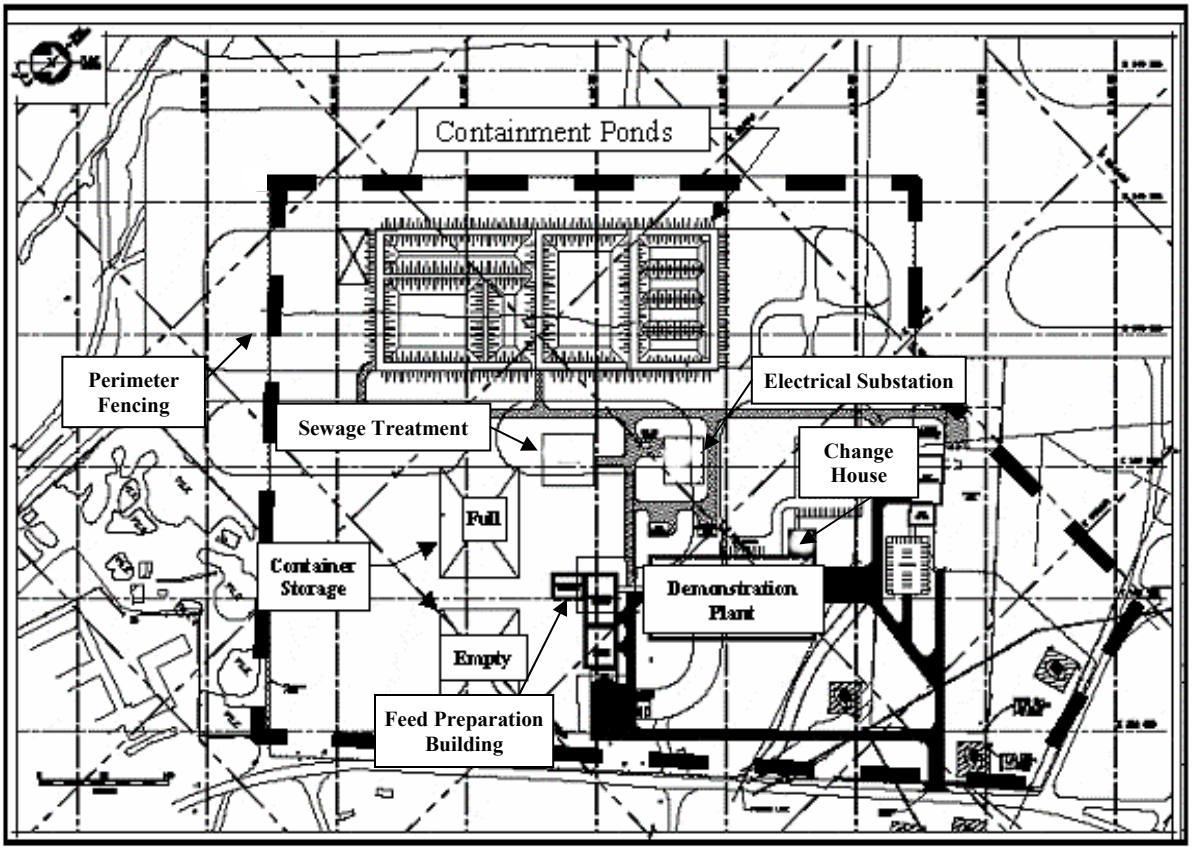

Figure 2: Demonstration Plant Complex – Site Plan

Construction activities will involve:

- Removal of vegetation and organic material from the construction site and stockpiling for future landscaping;
- Removal and disposal of existing foundations and structures from site;
- Site grading, excavation and backfilling;
- Ditching;
- Connection to existing water supply and installation of watermains for potable, process and fire water;
- Installation of sewer mains and sewage treatment plant;
- Installation of effluent discharge line and diffuser in Argentia Harbour;
- Installation of concrete foundations for buildings and site structures;
- Construction of site buildings consisting of:
    - Demonstration plant building,
    - Concentrate handling and unloading,
    - Change house,
    - Reagent Storage;
- Installation of interior finishes, mechanical and electrical equipment, fittings and fixtures;
- Installation of primary electrical supply, electrical sub-station and electrical distribution system;
- Installation of miscellaneous site facilities including:
    - Contained area for storage of full and empty concentrate containers,
    - Contained area for acid storage,
    - Ponds for residue testing, residue storage, primary settling and treatment, polishing and runoff capture,
    - Cooling water tower;
- Installation of granular material and asphalt for roadways and parking areas;
- Landscaping; and
- Installation of perimeter fencing.

SECTION 2 – ENVIRONMENTAL CONCERNS

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2.1 Construction Activity Environmental Concerns

Construction activities have the potential to result in a physical loss of habitat as well as a negative impact upon surrounding terrestrial and marine environments. Activities involved in the construction of the hydrometallurgical facilities will disturb the local soil and vegetation on-site but this is not considered to be an environmental effect because the area is a "brownfield" site and intended for industrial use.

Contaminated soil has been an issue at some sites at Argentia due to past activities. The former base has undergone considerable testing and remediation by Public Works and Government Services Canada (PWGSC). VBNC has chosen the location for the Complex based on existing information that indicates there should be no unacceptable risks to the environment or human health from a construction project on this site.

The Project will not interact with freshwater fish habitat or any special or unique areas.

No blasting or quarry operations are anticipated on site.

Particular concerns relating to the construction phase of the project are:

- Construction equipment may emit CO, NO_x, unburned hydrocarbons and particulates;
- Construction activities will generate dust;
- Potential for spills of hydrocarbons and other hazardous materials that are used during construction;
- Physical disturbance of the terrestrial environment outside the construction site during vehicle or equipment movements;
- Contaminated material may be encountered during excavation and trenching operations;
- Noise associated with construction activities may have negative effects on wildlife resources;
- The potential impact upon the marine ecosystem during grading, excavation and filling operations, dewatering and other construction activities include:
    - siltation,
    - erosion,
    - introduction of hydrocarbons or hazardous materials,
    - release of wood preservatives;
- Domestic waste and sewage will be generated by construction crews;
- The destruction of historic artifacts that may be uncovered during construction; and
- Activities related to construction could cause fires.

SECTION 3 – ENVIRONMENTAL PROTECTION PROCEDURES

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3.1 Introduction

This section provides general environmental protection procedures for anticipated activities associated with the construction phase of the Hydrometallurgical Demonstration Plant Complex. These guidelines will aid in the elimination or mitigation of potential impacts resulting from activities associated with the construction phase of the project. The development of these guidelines is ongoing; as new unforeseen situations arise these guidelines will be revised to address these future requirements.

Each anticipated activity - which could potentially impact upon the environment - is outlined, and mitigative measures suggested. Where possible in the development of the mitigative measures, relevant federal and provincial regulations were used.

Reference Material

Government of Canada

- *Canadian Environmental Assessment Act*
- *Canadian Environmental Protection Act, 1999*
- *Fisheries Act*
- *Navigable Waters Protection Act*
- *Transportation of Dangerous Goods Act, 1992*

Government of Newfoundland and Labrador

- *Environmental Protection Act*
- *Water Resources Act*
- *Occupational Health and Safety Act*
- *Radiation Health and Safety Act*
- *Forestry Act*
- *Wild Life Act*
- *Buildings Accessibility Act*
- *Food and Drug Act*
- *Lands Act*
- *Public Safety Act*
- *Dangerous Goods Transportation Act*
- *Smoke Free Environment Act*
- *Quarry Materials Act*
- *Mineral Act*
- *Health and Community Services Act*
- *Urban and Rural Planning Act, 2000*
- *Municipalities Act*

- *Historic Resources (Amendment) Act*

Potentially applicable legislation, permits and authorizations are contained in Section 5.

3.2 Storage, Transportation and Handling of Fuel and Other Hazardous Material

Environmental Concerns

There will be fuels, lubricants and other hazardous materials associated with equipment operation and construction activities. The major concern regarding the use of these hazardous substances is their uncontrolled release into the environment through spillage and subsequent adverse effects on the terrestrial and marine habitat and species, soil, groundwater quality, human health and safety.

Environmental Protection Measures

A copy of Voisey's Bay Nickel Company's plans respecting the handling of fuels and other hazardous materials as well as contingency plans for handling spills will be present at receiving, storage and disposal areas.

All contractors will observe strict compliance with requirements of Workplace Hazardous Materials Information System Regulations regarding employee training, use, handling, storage, and disposal of hazardous materials and regarding labelling and provision of Material Safety Data Sheets as required by WHMIS legislation.

Material Safety Data Sheets will be submitted on delivery of materials.

Transportation, storage and use of fuels and other hazardous materials will be conducted in compliance with government laws and regulations.

Hazardous materials are to be packaged and shipped in strict compliance with the requirements of the regulations.

Contracted fuel suppliers will, before transporting or positioning fuel at the project site, provide a copy of their fuel and hazardous materials spills contingency plan. This plan must be acceptable to Voisey's Bay Nickel Company.

Contractors shall insure that fuel and other hazardous materials are only handled by persons who are trained and qualified in handling these materials in accordance with government laws and regulations.

When refueling equipment, operators will:

- Use leak-free containers and reinforced rip and puncture-proof hoses and nozzles;
- Use hoses that have a design pressure rating of at least 150% of the maximum head of the system;
- Be in attendance for the duration of the operation; and

- Lock out all tank nozzle valves except the valve currently in use.

Smoking will be permitted in designated areas only within the project area and not within 10 meters of fuel or hazardous material. This policy will be strictly enforced.

Fuel unloading facilities will be equipped with drip pans to collect hose drainage and drips. Hoses or pipes used for fuel transfer will be equipped with properly functioning and approved check valves, spaced to prevent backflow of fuel in the case of failures.

Tanks for fuels and other hazardous materials will be self-dyked or will be positioned over an impervious mat, surrounded by an impervious dyke. They will be located in areas where spills, should they occur, are least likely to flow towards water courses, water bodies, feeder streams, ditches or the ocean.

Drums of fuel oil, hydraulic fluids and other chemicals (e.g. concrete additives) will be tightly sealed to prevent corrosion and rust. Quantities on-site during construction will be limited to that required for the current activity and minor equipment maintenance.

Fuels and other hazardous materials storage areas and transfer lines will be clearly marked or barricaded to ensure that they are not damaged by moving vehicles.

All storage facilities will be located away from construction activity and inspected on a regular basis in compliance with government laws and regulations.

Drainage control devices such as sediment traps and settling ponds will be equipped with underflow baffles to retain any floating oil for recovery and disposal.

Mounted dispensing equipment will include:

- Placing meters on steel brackets so that the meter and hose are isolated from the system by a steel valve;
- Dispensers are bolted to the deck or frame; and
- Hoses are placed on proper reels and hanging brackets.

Refueling and routine maintenance activities for vehicle and mobile equipment will be restricted to areas of level terrain.

Hazardous materials will be disposed of in accordance with government laws and regulations.

Any soil contaminated by small leaks of oil or grease from equipment will be cleaned up and disposed of in accordance with the applicable regulations.

If required, a hazardous waste storage area will be constructed.

3.3 Petroleum Product Transfer

Environmental Concerns

Petroleum products could potentially be released into the environment during product transfer.

Environmental Protection Procedures

Transportation and handling of petroleum products will be carried out in strict conformance with Section 3.2, Storage, Transportation and Handling of Fuel and Other Hazardous Material.

All vehicles entering the site will be inspected at the gate to ensure that the appropriate placards are in place and the security of the product is assured. All drivers must show proof of certification that they are trained in the transportation of dangerous goods as required under the Act.

All fuel will be delivered to the site in conventional fuel tanker trucks, operated by licensed oil distributors.

In all cases, transfer of fuel will be attended by a qualified person for the duration of the operation. Hoses or pipes used for fuel transfer will be equipped with properly functioning and approved check valves, spaced to prevent backflow of fuel in the case of failures.

3.4 Site Access

Environmental Concerns

Environmental concerns relating to site access include:

- Vehicles and equipment traveling to and from the site may impact the terrestrial ecosystem outside the work site; and
- Traffic hazards may result from increased vehicle movements.

Environmental Protection Procedures

Vehicles and equipment shall follow established routes when traveling to or from the site.

All entrances and exits from the Complex will be designed so that incoming and outgoing vehicles may merge safely with other traffic.

3.5 Equipment Use and Maintenance

Environmental Concerns

Site preparation will involve the use of heavy construction equipment.

Emissions from construction equipment include CO, NO_x, unburned hydrocarbons, and particulates. There is also the potential for petroleum products to leak into the terrestrial or marine environment.

Direct physical disturbances as a result of equipment movements can adversely affect terrestrial and marine environments.

Environmental Protection Procedures

Construction equipment will be delivered to the worksite in good operating conditions, free of leaks and with all appropriate emission filters.

Equipment will be routinely inspected for leaks or mechanical conditions, which might result in spills of fuel, lubricating oils or hazardous materials.

Fueling and routine maintenance operations will be conducted in accordance with appropriate standards and guidelines as described in Section 3.3, Petroleum Product Transfer and Section 3.6, Marshalling Yards.

Equipment maintenance, other than routine maintenance, will be carried out at a designated location.

Equipment usage will be limited to the worksite or to established transportation routes.

3.6 Marshalling Yards

Environmental Concerns

Environmental concerns relating to marshalling yards include:

- The danger of spillage of hydrocarbons or other hazardous products during equipment assembly or repair; and
- The physical disturbance of the terrestrial environment during vehicle movements or equipment assembly.

Environmental Protection Procedures

Equipment and material storage shall be located at least 30 m from the marine environment or from any storm sewer inlet.

Vehicles and equipment being moved shall follow established routes to the marshalling area.

The site for equipment marshalling shall be located in a previously disturbed area or in an area that is to be graded as part of the construction process. In the case of the latter, organic material will be stripped and stockpiled for future use.

The site for equipment marshalling shall be located to minimize potential traffic hazards. Incoming and outgoing vehicles will be able to merge safely with other traffic.

During assembly, disassembly, servicing or maintenance of equipment in marshalling yards, drip pans shall be used to collect seepage or leakage of fuels or lubricants at connection points or other points of potential leakage.

3.7 Noise Control

Environmental Concerns

Construction activities have the potential to create a wide variety of noise from the use of equipment and from the transport, handling and erection of various construction materials.

The noises associated with heavy construction activity can cause negative effects on wildlife distribution and abundance and to human health.

Environmental Protection Procedures

Adherence to all permits and approvals.

All vehicles and generators will have exhaust systems regularly inspected and mufflers will be operating properly.

Materials will be securely stored in designated laydown areas and will be handled using properly placed slings to minimize the noise generated during handling and erection of the various materials.

Where excessive noise cannot be avoided, workers will use appropriate hearing protection.

3.8 Dust Control

Environmental Concerns

The environmental concerns related to dust include human health effects and potential impacts on marine ecosystems and vegetation.

Environmental Protection Procedures

Dry material must be moisture conditioned or covered to prevent blowing dust. Dust control is to be provided for temporary roads.

Dust from construction activities will be controlled by using water. Waste oil will not be used for dust control, but other agents such as calcium chloride may be used with the approval of regulatory agencies.

All dust control agents shall be stored in areas where they cannot enter water bodies.

All workers having the potential to be exposed to dust, which could affect human health, will be required to wear appropriate Personal Protective Equipment.

3.9 Protection of Marine Environment

Environmental Concerns

Environmental concerns during construction are related to the protection of fish and fish habitat.

These concerns involve the potential for spills of hydrocarbons or hazardous materials as well as the potential for discharge of highly silted material.

Environmental Protection Procedures

Storage, transportation, handling and transfer of fuels and hazardous materials are to be carried out in strict accordance with Sections 3.2, Storage, Transportation and Handling of Fuel and Other Hazardous Material, and 3.3, Petroleum Product Transfer, of this Environmental Protection Plan.

There will be strict adherence to the measures specified in Sections 3.18, General Clearing, Grubbing, and Removal of Related Debris, 3.19, General Cutting and Filling, and 3.20, Trenching, to minimize the release of sediment-laden water.

In the event of a spill, the contingency measures specified in Section 4.2, Fuel or Hazardous Material Spills, of this Environmental Protection Plan will be immediately implemented.

3.10 Buffer Zones

Environmental Concerns

The potential for erosion and resulting damage to fish habitat during construction of the Complex has been identified as a concern. During construction, potential impacts to marine resources include spills of fuel and hazardous materials. Dust may be generated from construction and traffic movement. Noise levels will increase during the construction phase. Wildlife may be subjected to habitat loss and disturbance during construction of the Complex. Unanticipated archaeological sites may be encountered during construction.

A standard environmental protection procedure to eliminate or minimize potential environmental effects resulting from construction of the Complex is to provide a buffer zone around protected areas.

Environmental Protection Procedures

Buffer zones will be established and flagged prior to any disturbance activities.

Natural vegetation is to be left in place wherever possible.

Drainage from areas of exposed fill will be controlled by grade or ditching and directed away from any watercourses, wherever possible.

Surface water will be directed away from work areas by ditching. Runoff from these areas will have silt removed by filtration or other suitable methods.

The requirements for ditch blocks/check dams or sediment traps to intercept runoff will be determined in the field by the On-Site Coordinator.

Check dams will be used as required to reduce runoff velocity from work areas where there is exposed soil.

In areas where natural vegetation must be removed, the vegetation layer will be stored for use as erosion control material on exposed slopes.

The On-Site Coordinator will be available to inspect all work areas and provide advice on environmental protection procedures.

The On-Site Coordinator will also act as a liaison with the regulators to ensure all prescribed buffer zones are implemented and adhered to.

3.11 Erosion Prevention

Environmental Concerns

Vehicular movement and shoreline construction activity have the potential to cause surface soil erosion, which could ultimately result in the deposition of fines into the marine environment.

Environmental Protection Procedures

Vehicle and equipment movement will be restricted on the project site to approved roadways.

The Contractor will implement appropriate drainage and erosion control techniques.

All work will be performed in such a manner as to ensure that deleterious substances including, but not limited to, materials such as sediment, fuel, and oil do not enter water bodies adjacent to the development site.

Where terrain stabilization measures are required to protect marine habitat from sedimentation, the Contractor shall be responsible for implementing appropriate erosion control techniques to mitigate the problem and ensure siltation control. These may include, but are not limited to:

- Spreading a thin layer of brush or slash over disturbed areas;
- The installation of sediment control devices equipped with underflow Baffles at appropriate intervals within the area of disturbance, which would hold back any floating oil, for recovery and disposal;
- The installation of drainage collections across disturbed areas to channel drainage into vegetated areas;
- The re-routing of drainage around the disturbance and redirecting it into its natural course; and
- The stabilization of exposed soils with appropriate rip-rap, filter fabric, or any other erosion technique deemed appropriate.

For any work with the potential to affect fish habitat, the Contractor will complete a Request for Project Review and submit it to the Area Habitat Biologist.

The Contractor shall submit plans for sediment control to VBNC for approval in advance of the need to proceed.

3.12 Water Supply

Environmental Protection Procedures

It is anticipated that water will be supplied to the Argentia Peninsula via the existing municipal water supply system. The condition, capacity, and viability of obtaining the water required from this source will be evaluated. The additional water-related items associated with this project include:

- Distribution systems for potable, process and fire water; and
- Reactivated underground water storage tanks to supply peak requirements for process and fire water.

VBNC will ensure that potable water meets all the Guidelines for Canadian Drinking Water Quality.

3.13 Water Quality Monitoring

Environmental Concerns

Construction and rehabilitation activities have the potential to introduce hydrocarbons, hazardous materials, sediment, and sewage into marine ecosystems, which may lead to changes in water quality. Measures to mitigate these releases shall include the containment and treatment of effluent and drainage from the Complex. It is normal to monitor these releases to ensure parameters meet relevant quality guidelines, project specific limits, or existing regulations. These programs shall be initiated and conducted as required by the terms of permits and approvals.

Environmental Protection Procedures

In addition to those stipulations outlined in the regulatory permits and approvals granted, the following mitigative measures will be taken in order to minimize impacts.

a) No wastewater runoff will be discharged during construction activities. All septic waste will be disposed of through a licensed waste disposal operator.

b) Compliance monitoring will be conducted as required for any regulated discharges.

3.14 Solid Waste Disposal

Environmental Concerns

Solid waste (eg. domestic waste, paper, cardboard, wood), if not properly controlled and disposed of, will be unsightly and may cause human safety and health concerns and could result in a conflict with wildlife.

Environmental Protection Procedures

All domestic solid waste will be collected, properly stored, removed and disposed of in an appropriate landfill site in a neighbouring community. The site and working area will be kept clean of all debris and garbage.

Materials such as paper, cardboard, wood, scrap steel and metal, and tires will be collected and offered for recycling. All materials not able to be recycled will be disposed of in an approved facility, with permission of the facility operator.

Waste accumulated on-site prior to disposal shall be placed in a secured location, so as to not pose a threat or concern to human health and safety.

Construction and demolition debris is to be covered to prevent blowing dust and debris.

3.15 Sewage Disposal

Environmental Concerns

The release of untreated sewage is a concern to human health, drinking water quality, and marine ecosystems. No sewage will be discharged during the construction activities.

Environmental Protection Procedures

Facilities for water and sewer services are to be provided for all workers on-site during construction.

All temporary sewage disposal systems used during construction of the Complex shall comply with all health and safety regulations.

All septic waste will be transported off-site and disposed of through a licensed waste disposal operator.

3.16 Surveying

Environmental Concerns

Any required site surveying activities for construction of the Complex shall be conducted primarily on disturbed land. The surveying activities that may be required include:

- Vegetation removal;
- Traversing; and
- Establishing permanent benchmarks.

Surveying activities may disturb wildlife species, vegetation and historic resources.

Environmental Protection Measures

a) Vegetation Removal

Width of survey lines shall be limited to that which is absolutely necessary for line of sight and unobstructed passage.

No attempt to disturb or harass wildlife shall be made by any person.

Vehicles shall yield the right-of-way to wildlife.

Archaeological sites and features shall not be disturbed during survey work. Any discovered sites shall be reported to the Historic Resources Division, in accordance with Section 4.4 of the Environmental Protection Plan.

b) Traversing

No attempt to disturb or harass wildlife shall be made by any person.

c) Establishing Permanent Benchmarks

A driven T-bar, well embedded to readily identify each benchmark location shall be used.

No attempt to disturb or harass wildlife shall be made by any person.

Standard iron bars and sledgehammers are to be used to establish benchmarks.

3.17 Pumps and Generators

Environmental Concerns

A variety of equipment such as water pumps, hoses and generators will be used on the site as well as in the accompanying support and supply facilities. Environmental concerns associated with the operation and use of such equipment include accidental spills of the fuel or lubricating oil and chronic leaks, which may contaminate local water bodies and surface soils.

Environmental Protection Procedures

Fuel shall not be stored near generators or located adjacent to water bodies.

Drip pans shall be placed underneath pumps and generators located near water bodies.

Hoses and connections on all equipment, especially equipment located near water bodies, shall be inspected routinely for leaks and drips.

All leaks shall be reported immediately to the On-Site Coordinator.

Refueling and routine maintenance activities will be carried out in accordance with Section 3.2, Storage, Transportation and Handling of Fuel and Other Hazardous Material, Section 3.3, Petroleum Product Transfer and Section 3.5, Equipment Use and Maintenance.

3.18 General Clearing, Grubbing and Removal of Related Debris

Environmental Concerns

The principal concerns associated with grubbing and disposal of related debris are the potential impacts upon marine water quality through siltation or erosion. These concerns relate to the migration of sediment-laden water through direct runoff or by entering the existing site storm sewer system.

Another concern is the generation of dust during clearing and grubbing operations.

Contaminated or hazardous material may be encountered during clearing, grubbing and removal of related debris.

Environmental Protection Procedures

All grubbing and disposal of related materials will adhere to all relevant regulatory requirements.

Grubbing of the organic vegetation mat and/or the upper soil horizons will be minimized.

A survey of soil stability and erodibility will be conducted to determine any unstable areas and to help develop appropriate erosion control measures. Grubbing of unstable or erodible soil will be limited to that necessary to satisfy the project engineering requirements. Where construction can be completed without grubbing, no grubbing shall be done. Erosion control techniques and devices will be used to stabilize easily eroded areas.

Runoff of sediment-laden water during grubbing will be minimized by using such measures as settling ponds, ditch blocks, interception ditches and filter fabrics. Erosion control measures such as rip rap, filter fabrics, drainage channels and gravel or wood chip mulches will be implemented in areas prone to soil loss.

Grubbed materials and debris will not be pushed into areas that are to be left undisturbed.

Grubbed materials will be stockpiled and used for reclamation and revegetation elsewhere in the project area.

Dust control is to be provided during clearing and grubbing operations as outlined in Section 3.8, Dust Control.

Should hazardous or contaminated material be encountered or suspected during clearing, grubbing and removal of related debris, follow the Environmental Protection Procedures outlined in Section 4.5, Discovery of Hazardous or Contaminated Material.

3.19 General Cutting and Filling

Environmental Concerns

Environmental concerns associated with cutting and filling activities are the potential impacts on marine ecosystems and water quality through siltation or erosion. These concerns relate to the migration of sediment-laden water through direct runoff or by entering the existing site storm sewer system.

Another concern is generation of dust during cutting and filling operations.

Contaminated or hazardous material may be encountered during general cutting and filling operations.

Environmental Protection Procedures

Cutting and filling will be done only upon completion of grubbing as outlined in Section 3.18, General Clearing, Grubbing and Removal of Related Debris.

A survey of soil stability and erodibility will be conducted to determine any unstable areas and to help develop appropriate erosion control measures. Erosion control measures such as rip rap, filter fabrics, drainage channels and gravel or wood chip mulches will be implemented to stabilize easily eroded areas.

Runoff of sediment-laden water during cutting and filling operations will be minimized by using such measures as settling ponds, ditch blocks, interception ditches and filter fabrics.

Dust control is to be provided during cutting and filling operations as outlined in Section 3.8, Dust Control.

Should hazardous or contaminated material be encountered or suspected during general cutting and filling operations, follow the Environmental Protection Procedures outlined in Section 4.5, Discovery of Hazardous or Contaminated Material.

3.20 Trenching

Environmental Concerns

Where excavation for the construction of water lines or any other infrastructure is undertaken, potential runoff of sediment-laden water could result in effects on marine habitat and water quality.

Contaminated or hazardous material may be encountered during trenching operations.

A slope failure in trenches could have serious consequences to human health and safety.

Environmental Protection Procedures

Topsoil and excavated overburden will be stored in separate stockpiles for later use during rehabilitation.

Any unsuitable material will be disposed of in a disposal area approved by the On-Site Coordinator.

Dewatering of trenches will make use of measures to minimize and control the release of sediment-laden water through the use of filtration, erosion control devices, wetting ponds, straw bales, geotexiles or other devices.

Should hazardous or contaminated material be encountered or suspected during trenching operations, follow the Environmental Protection Procedures outlined in Section 4.5, Discovery of Contaminated or Hazardous Material.

Trenching work will be monitored to ensure all the requirements of the Occupational Health and Safety Regulations are adhered to.

3.21 Installation of Effluent Pipe

Environmental Concerns

There are specific concerns related to the installation of an effluent discharge pipe and diffuser from the Demonstration Plant Facility.

These concerns involve the potential of construction activities to affect fish and fish habitat by physical disturbance and sedimentation.

Environmental Protective Procedures

The effluent pipe will be located on the harbour side rather than the more erodible ocean side. Also, during construction phase, the shoreline will be stabilized.

Any special conditions outlined by government permits will be implemented prior to the installation of the pipe.

If there is any danger of the pipe being disturbed by ship or boat anchors, the pipe may be armoured and a notice to mariners posted.

3.22 Marine Traffic

Environmental Concerns

Equipment, supplies, materials and plant components may be delivered to Argentia by marine transport.

Marine traffic has the potential to disturb fish habitat through physical presence, noise, prop wash and discharges. There is also the potential for interaction with other vessels operating in Placentia Bay.

Environmental Protection Procedures

It will be a requirement that all ships utilized for project related shipping be subject to Canadian shipping regulations.

Voisey's Bay Nickel Company will require strict compliance with all environmental legislation

All vessels are to operate in strict compliance with the Placentia Bay Routing System (PBRS) with respect to the routes taken to traverse Placentia Bay.

3.23 Supply of Fill and Aggregates

Environmental Concerns

The environmental concerns associated with the supply of fill and aggregates are the potential impacts on marine ecosystems and water quality and the loss of terrestrial habitat and land use.

Environmental Protection Procedures

It is anticipated that fill and aggregates will be provided from already established quarries located off-site.

Aggregate removal will adhere to all federal, provincial and municipal laws, regulations, and permits.

Transportation of fill and aggregates will be done in accordance with Section 3.4, Site Access

Fill and aggregates will be stored and handled in strict compliance with Section 3.8, Dust Control.

Aggregates containing sand sized and smaller fractions shall be stored in such a way as to prevent their erosion.

3.24 Concrete

Environmental Concerns

Substantial quantities of concrete will be required for the construction of the Complex. Cement, concrete additives, agents and aggregates will be used in the production of concrete.

Possible environmental effects include releases of dust to the air and possible spills to the marine ecosystem.

Environmental Protection Procedures:

It is anticipated that there will be no concrete production on-site and that concrete will be delivered from local ready-mix plants. In that event, the primary measure to minimize potential hazards and environmental impacts will be strict adherence to Section 3.4, Site Access, and Section 3.8, Dust Control.

In the event that a contractor chooses to establish a temporary ready-mix concrete plant on site, the following measures will be implemented to minimize potential hazards and environmental impacts:

- All chemical additives, agents and other potential hazardous materials will be transported, stored and handled in strict accordance with Section 3.2, Storage, Transportation and Handling of Fuels and Other Hazardous Material;
- The Contractor will adhere to dust control measures specified in Section 3.8, Dust Control, with respect to the stockpiling and storage of aggregates and the handling of cement; and
- All equipment will be equipped with the required dust and emission control filters as specified in Section 3.5, Equipment Use and Maintenance.

3.25 Reclamation of Land

Environmental Concerns

Activities during construction could potentially destroy wildlife habitat, destabilize erodible soils, and reduce the aesthetic appeal of the area. Therefore, an active program of re-vegetation and reclamation of lands will be undertaken by VBNC after construction has ceased. This will be performed in order to mitigate impacts in those areas, which might have been affected by construction activities, but will not be affected during the operational phase of the project.

Environmental Protection Procedures

As soon as possible following construction activities, the On-Site Coordinator will identify areas requiring planting or seeding for re-vegetation purposes. These will include:

- Areas adjacent to watercourses where erodible soil has been exposed and where mechanical stabilization techniques are not judged to be sufficient to guarantee stability or prevent uncontrolled introduction of sediment into watercourses;
- Areas adjacent to existing roads where erodible soil has been exposed; and
- Any other areas judged by the On-Site Coordinator to require quick re-vegetation.

Seeding and planting requirements for each site identified will be determined based upon soil analysis of each site. The amount of fertilization, liming, and the seed mixture or seedling requirements will be decided on a site-specific basis.

Reclamation of lands disturbed during construction will commence as soon as possible after construction activity has ceased. Although seasonal weather conditions may delay seeding, it should be commenced as soon as conditions permit.

The areas subject to reclamation activities will be visually inspected by the On-Site Coordinator periodically to ensure adequate results. Additional reclamation activities will be performed as deemed appropriate by the On-Site Coordinator.

3.26 Decommissioning the Work Area

Environmental Protection Procedures

In order to ensure that terrestrial and marine habitats are protected against project activities, decommissioning and site reclamation issues are addressed during the planning stages of the project. By coordinating and incorporating final decommissioning and site reclamation objectives with the initial planning phase of the environmental protection plan, the developer has the opportunity to integrate construction and operational considerations in accordance with these objectives:

- Establishing a self-sustaining vegetative cover to stabilize disturbed soils;
- Reclaiming the land to a habitat which is consistent with pre-construction vegetative patterns and hydrology; and
- Reconstituting the land and water to a productivity at least comparable to the pre-construction condition.

The work area will be decommissioned at the end of the construction phase according to government regulations and thus any effects should be within acceptable limits.

SECTION 4 – CONTINGENCY PLANS

Table of Contents

4.1 Introduction

Contingency plans are developed to deal with accidents and unplanned situations that could possibly occur during the construction phase of the project. The main objectives of these plans are to minimize the following:

- Danger to persons;
- Pollution to watercourses;
- Area affected by an incident;
- Degree of disturbance to the area and watercourses during clean-up; and
- Degree of disturbance to wildlife.

Not withstanding contingency plans, Voisey's Bay Nickel Company will adopt a policy to implement preventative measures as the first line of defense against the possibility of accidents.

Contingency plans have been developed for the following accidental and unplanned events:

- Fuel or Hazardous Material Spill;
- Wildlife Encounters;
- Discovery of Historic Resources;
- Discovery of Contaminated or Hazardous Material; and
- Fires.

4.2 Fuel or Hazardous Material Spills

Environmental Concerns

Fuel and hazardous materials can be damaging to vegetation, soil, surface water, ground water, wildlife, marine organisms, historic resources and human health and safety.

Response Actions

In the event of a fuel spill, the following procedures will apply.

a) The individual who discovers the leak or spill will make a reasonable attempt to immediately stop the leakage and contain the flow.

b) Spill location, type of fuel, volume and terrain condition at the spill site will be determined and reported immediately to the On-Site Coordinator (OSC), who will report it immediately to the Coast Guard.

c) Any spill or leak of fuel, in the marine environment or, 70 L or more on land will be reported immediately to the Canadian Coast Guard spill report number (709) 772-2083. Required pertinent information includes:
    - Name of reporter and phone number;
    - Time of spill or leak;
    - Time of detection of spill or leak;
    - Type of product spilled or leaked;
    - Amount of product spilled or leaked;
    - Location of spill or leak;
    - Source of spill or leak;
    - Type or accident-collision, rupture, overflow, other;
    - Owner of product and phone number;
    - If the spill or leak is still occurring;
    - If the spill or leaked product is contained, and if not, where it is flowing;
    - Wind velocity and direction;
    - Temperature;
    - Proximity to water bodies, water intakes, and facilities; and
    - Snow cover and depth, terrain, and soil conditions.

d) The OSC will act as the “On-Scene-Commander” for the purposes of cleaning up a fuel spill. The OSC has been trained in spill clean-up procedures and how to mobilize the clean-up equipment. The overall responsibility of coordinating a clean-up and maintaining this contingency plan current and up-to-date will be the responsibility of the OSC. The On-Scene-Commander has full authority to take necessary and appropriate action without unnecessary delay.

e) In reaching decisions on containment and clean-up procedures, the following criteria will be applied:
   - Minimize danger to persons;
   - Protect water supplies;
   - Minimize pollution of watercourses;
   - Minimize area affected by spill; and
   - Minimize the degree of disturbance to the area and watercourses during clean-up.

f) The On-Scene-Commander will act in consultation with the regulating authorities to:
   - Assess site conditions and environmental impacts of various cleanup procedures;
   - Assess potential for fuel recovery versus burning;
   - Deploy on-site staff to mobilize pumps and empty 215 L drums or other appropriate storage containers to the spill site;
   - Deploy on-site staff to build containment dykes and commence pumping containment into drums;
   - Apply absorbent as necessary;
   - Dispose of all contaminated debris; cleaning materials and absorbent by burning, if appropriate, or by placing it in an approved land-fill site; and
   - Take all necessary precautions to ensure that the incident does not recur.

g) The OSC will be responsible for the preparation of a written report which will be sent (as soon as possible and no later than 30 days after the spill) to the Manager, Environmental Health and Safety, Voisey's Bay Nickel Company, who will forward it to the appropriate agencies or departments.

In the event of a spill of hazardous or suspected hazardous material, the following procedures will apply.

a) All personnel will immediately cease work in the area of the spill and evacuate to an area upwind of the spill.

b) The On-Site-Commander will be immediately notified.

c) The On-Site-Commander will be responsible for all subsequent actions and will arrange for action by the appropriate authorities.

d) Personnel will not be allowed to approach the spill area without appropriate Personal Protective Equipment until the appropriate authority has cleared the area.

4.3 Wildlife Encounters

Environmental Concerns

Wildlife encounters pose a risk for stress or injury to both the wildlife and site personnel. Control measures and environmental protection procedures have been put in place to minimize this risk to wildlife and humans.

Response Actions

All project personnel will abide by the following rules in cases of wildlife encounters.

a) No attempt to chase, catch, divert, follow or otherwise harass wildlife by vehicle or on foot will be made by any person at the project site.

b) Equipment and vehicles will yield the right-of-way to wildlife.

c) No personal pets, domestic or wild, will be allowed on the site.

d) All personnel should be aware of any potential for encounters with animals prevalent in the area and will be instructed to immediately report all sightings to the On-Site Coordinator. At the discretion of the coordinator a representative of the Wildlife Division will be notified.

e) When animals are identified in the area, the On-Site Coordinator will be responsible for all subsequent actions.

f) There will be no hunting, fishing or trapping of wildlife on the Argentia Peninsula by Project personnel. In addition, firearms will be prohibited on-site.

4.4 Discovery of Historic Resources

Environmental Concerns

The primary concern is that historic resources may be damaged, lost or destroyed if uncovered during construction.

Response Actions

As the area proposed for the Hydrometallurgical Demonstration Plant has been previously impacted by the construction of the US Navy base, it is highly unlikely that historic resources will be encountered. However, the following response procedures are included as a precautionary measure should such resources be encountered.

All project personnel shall abide by the following rules in the event of the discovery of artifacts or any material that could potentially be of historic origin.

a) Immediately cease all work in the vicinity of the discovery.

b) Report the discovery to the On-Site Coordinator who will be responsible for all subsequent actions.

c) The On-Site Coordinator will:
   - Secure the site to the greatest extent possible;
   - Contact the Historic Resources Division, Department of Culture, Tourism and Recreation indicating:
     - The identity of the person making the discovery,
     - Description of the site location, including topography, landmarks etc.,
     - The nature of the activity resulting in the discovery,
     - Description of the archaeological site, including size, features or visible details, supplemented, if possible, by sketches or photographs,
     - Actions currently being taken to protect the archaeological features,
     - Any extenuating circumstances; and
   - Ensure that all personnel are informed of and comply with the directions provided by that Department.

d) Do not resume activities in the vicinity of the find until confirmation and direction has been received from appropriate authorities.

4.5 Discovery of Contaminated or Hazardous Material

Environmental Concerns

Discovery of contaminated or hazardous material could pose a danger to human health and the terrestrial or marine environments.

Response Actions

All project personnel shall abide by the following rules in the event of the discovery of potentially contaminated or hazardous material.

a) Should any member of the project personnel collapse as a result of the suspected emission of contaminated or hazardous vapours, do not approach the person or area without Personal Protective Equipment (PPE). Immediately notify the On-Site-Coordinator, the Placentia Health Centre, the Placentia Fire Department and the RCMP.

b) Immediately cease work in the area of the discovery and evacuate to an area upwind of the discovery.

c) Do not open or otherwise investigate any sealed or opened containers.

d) The On-Site Coordinator will be responsible for all subsequent actions and will arrange for an investigation and, if necessary, disposal of the suspect material by appropriate personnel.

e) Do not approach the suspected area without appropriate Personal Protective Equipment until the area has been cleared by the applicable authority.

4.6 Fires

Environmental Concerns

Activities related to the construction of the Complex could cause a fire, which could spread to the surrounding area.

Response Actions

The fire prevention and fire-fighting procedures described below will be followed.

Voisey's Bay Nickel Company (VBNC) and its Contractors will take all precautions necessary to prevent fire hazards when working at the site. These include but are not limited to:

- Disposal of all flammable waste on a regular basis;
- Making available, in proper operating condition, sufficient fire fighting equipment to suit its labour force and fire hazards. Such equipment will comply with, and be maintained to the manufacturer's standards;
- Ensuring that its personnel are trained in the use of such equipment; and
- The On-Site-Coordinator will act as the On-Scene-Commander for the purpose of fighting any fires.

All project personnel shall abide by the following rules in the event of a fire.

a) VBNC or the Contractor will take immediate steps to contain or extinguish the fire.

b) Fires will be reported immediately to the On-Site Coordinator, the Placentia Fire Department and the nearest Forest Management Unit office. The following information will be provided:
    - Name of the reporter and phone number;
    - Time of detection of the fire;
    - Size of the fire; and
    - Location of the fire.

c) The RCMP will also be notified immediately.

SECTION 5 – LEGISLATION, PERMITS & AUTHORIZATIONS

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5.1 Legislation

Government of Newfoundland and Labrador	
Administering Department	**Legislation**
Environment	*Environmental Protection Act* *Water Resources Act*
Labour	*Occupational Health and Safety Act* *Radiation Health and Safety Act*
Forest Resources and Agrifoods	*Forestry Act* *Wild Life Act*
Government Services and Lands	*Public Safety Act* *Buildings Accessibility Act* *Dangerous Goods Transportation Act* *Food and Drug Act* *Lands Act* *Health and Community Services Act* *Smoke Free Environment Act*
Mines and Energy	*Quarry Materials Act* *Mineral Act*
Municipal and Provincial Affairs	*Municipalities Act* *Urban and Rural Planning Act, 2000*
Tourism, Culture and Recreation	*Historic Resources (Admendment) Act*

Government of Canada	
Administering Department	**Legislation**
Environment Canada	*Canadian Environmental Assessment Act* *Canadian Environmental Protection Act, 1999*
Fisheries and Oceans Canada	*Fisheries Act* *Navigable Waters Protection Act*
Transport Canada	*Transportation of Dangerous Goods Act, 1992*

5.2 Permits & Authorizations

Newfoundland Department of Government Services and Lands		
Permit, Approval or Authorization	**Activity**	**Administrator**
Asphalt Plant Operation and Asphalt Plant Certificate of Approval	Paving of Roads On-Site	Operations Division
Boiler, Pressure Vessel: Contractor's specifications for Registration of Pressure Piping Systems	 Piping	 Engineering Services
Contractor's License to perform work on pressure piping systems	Piping	Engineering Services
Certificate of Inspection	Piping	Mechanical/Building Inspections
Install or Alter a Pressure Piping System (Permit)	Piping	Engineering Services
Boiler Pressure Vessel Fittings Fabricated in Newfoundland Statutory Declaration for Registration	Piping	Engineering Services
Building Plans Commercial – Approval under the National Building/Fire/Life Safety Code	Site Buildings	Engineering Services
Building Accessibility Design Registration – Public Buildings (Approval)	Site Buildings	Engineering Services/Operations Division
Building Accessibility – Exemption Registration	Site Building	Engineering Services/Operations Division
Permit to Transport Dangerous Goods	Transport of Dangerous Goods as may be required.	Manager of Regulation Enforcement
Food Establishment License: Temporary Facility Permit is required for any individual or group proposing to operate/establish a temporary food operation	Cafeteria or Camp (If Required)	Operations Division

Newfoundland Department of Government Services and Lands		
Permit, Approval or Authorization	**Activity**	**Administrator**
Fuel Storage and Handling: (GAP) Regulations – A Certificate of Approval is required for the storage and handling of gasoline and associated products (underground or above ground)	On site storage (If Required)	Operations Division
A permit is required for flammable and combustible liquid Storage and for dispensing (above or below ground) and for bulk storage (above ground only) under the Fire Prevention Act	Flammable liquids as required for construction or commissioning	Operations Division
Sewage Treatment System Commercial – Certificate of Approval for systems > 4,500 L per day – in an un-serviced area not covered under a Municipality	Plant Treatment System	Engineering Services

Newfoundland Department of Environment		
Permit, Approval or Authorization	**Activity**	**Administrator**
Construction (Site Drainage) Certificate of Approval	Site Work	Water Resources Division
Culvert Installation, Certificate of Approval	Site Work	Water Resources Division
Industrial Processing Works Approval	Processing Facility	Pollution Prevention Division
Water Rights Authorization	Process Water	Water Resources Division

Newfoundland Department of Labour		
Permit, Approval or Authorization	**Activity**	**Administrator**
Smoking in the work place	All work	Occupational Health and Safety Division

Newfoundland Department of Labour		
Permit, Approval or Authorization	**Activity**	**Administrator**
Blaster's Safety Certificate	Blasting for Borrow (If Required)	Department of Youth Services and Post Secondary Education

Fisheries and Oceans Canada		
Permit, Approval or Authorization	**Activity**	**Administrator**
Application for Project Review	Installation of effluent outfall and diffuser.	Area Habitat Biologist or Navigable Waters Officer

Other Federal Departments		
Permit, Approval or Authorization	**Activity**	**Administrator**
Approval for Vessel Admission	Marine Transport of Components from Outside Canadian Waters	Canada Customs and National Revenue
Magazine License, Temporary	Blasting Operations (If Required)	Mines and Energy Canada, Regional Explosives Inspector

Town of Placentia		
Permit, Approval or Authorization	**Activity**	**Administrator**
Development Permit	All Development within the Town's Planning Area	Town of Placentia
Building Permits	All Construction	Town of Placentia

SECTION 6 – CONTACT LIST

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6.1 Emergency Numbers

- **SPILLS**

  Canadian Coast Guard, Traffic Centre
  Oil and Chemical Spills and Fish Kills
  24 Hour Pollution Line
  Tel: 1-800-563-9089
  Fax: (709) 772-5369

- **FIRE**

  Placentia Fire Department
  Tel: (709) 227-3200

- **FOREST FIRE**

  Department of Forest Resources and Agrifoods Fire Patrol
  Tel: 1-800-898-4528 (24 Hour Forest Fire Emergency Line)

- **MEDICAL EMERGENCY**

  Placentia Health Centre
  Placentia, NL
  Tel: (709) 227-2013

  RCMP
  Placentia Detachment
  Tel: (709) 227-2000

- **WILDLIFE ENCOUNTERS**

  Animals and Non-Migratory Birds

  During regular office hours:
  Department of Forest Resources and Agrifoods
  On duty Conservation Officer - Whitbourne
  Tel: (709) 759-2933 or (709) 759-2712

  Outside Regular Office Hours:
  RCMP
  Placentia Detachment
  Tel: (709) 227-2000

  Migratory Birds

  Canadian Wildlife Service
  Holly Hogan or Martha Robertson
  Environmental Assessment Biologists
  Tel: (709) 772-2194

• **DISCOVERY OF CONTAMINATED OR HAZARDOUS MATERIAL**	**Government Services and Lands** Tara Smith Environmental Protection Office Government Service Centre, St. John's Tel: (709) 729-2550 Fax: (709) 729-7400
• **DISCOVERY OF HISTORIC RESOURCES OR ARTIFACTS**	**Department of Tourism, Culture and Recreation** Martha Drake Provincial Archaeologist Historic Resources Division Tel: (709) 729-2462 Fax: (709) 729-0870
• **SERIOUS WORKPLACE ACCIDENT**	**Department of Labour** Workplace Health, Safety & Inspections Division 24 Hour Accident Reporting Line Tel: (709) 729-4444

6.2 Advisory and Other Contact Numbers

- **VOISEY'S BAY NICKEL COMPANY**

Manager, Environment, Health and Safety
Mr. Earl Dwyer
Tel: (709) 758-8807
Fax: (709) 758-8813
Cell: (709) 685-0218

- **PROCEDURES FOR SPILL RESPONSE AND/OR POLLUTION PREVENTION**

Fisheries and Oceans Canada
Wayne Halley, Superintendent
Rescue and Environment Response
Tel: (709) 772-2118
Fax: (709) 772-4066

Environment Canada
Graham Thomas
District Environmental Emergencies Coordinator
Tel: (709) 772-4285
Fax: (709) 772-5097

Government Services and Lands
Hazen Scarth
Manager Operations Division
Government Service Centre, St. John's
Tel: (709) 729-2008
Fax: (709) 7292071

Department of the Environment
Derrick Maddocks
Director Pollution Prevention Division
4th Floor, West Block, Confederation Bldg.
Tel: (709) 729- 5782
Fax: (709) 729-6969

- **ISSUES INVOLVING WATER QUALITY OR PERMITS FOR WORK IN AND AROUND WATER BODIES**

Department of Environment
Robert Picco
Water Resources Division
4th Floor, West Block, Confederation Bldg.
Tel: (709) 729-5713
Fax: (709) 729-0320

- **MIGRATORY BIRDS**

Canadian Wildlife Service
Bruce Turner
Acting Manager
Environmental Conservation Branch
Tel: (709) 772-3278
Fax: (709) 772-6309

- **FISH HABITAT**

Fisheries and Oceans Canada
John O'Rourke
Area Habitat Biologist - Southern
Tel: (709) 772-7345
Fax : (709) 772-2659