

**APPENDIX D**  
**ENVIRONMENTAL SCREENING**

---



---

TN-2009-07

# Environmental Assessment Screening Report Form

Construction of Salt Storage Unit  
Terra Nova National Park of Canada

*Date: April 11, 2009*

*Location: Terra Nova National Park of Canada, Newfoundland*

*Author: Jeffrey A. St-Pierre*



Parks Canada  
Parcs Canada

Canada

*Parks Canada Agency Environmental Assessment Report*

<b>1. PROJECT TITLE</b>			
<b>2. EA START DATE</b>	4 APR 2009	<b>3. DATE OF CEARIS REGISTRATION</b>	26 MAR 2009
<b>4. CEARIS NUMBER</b>	09-01-46375	<b>5. INTERNAL PROJECT FILE NUMBER</b>	TN-2009-07

<b>6. AUTHORITY</b>	<input checked="" type="checkbox"/>	EA prepared under CEEA	
	<input type="checkbox"/>	EA prepared under Management Directive 2.4.2	
<b>7. NATURE OF PROJECT</b>	<input checked="" type="checkbox"/>	Physical work not on the Exclusion List Regulations	
	<input type="checkbox"/>	Physical activity not in relation to a physical work on the Inclusion List Regulations Inclusion List paragraph number:	
<b>8. TRIGGER</b>	<input type="checkbox"/>	Law List	<input type="checkbox"/> Funding
	<input checked="" type="checkbox"/>	Proponent	<input type="checkbox"/> Disposal of an interest in land

<b>9. LOCATION OF PROJECT</b>	Terra Nova National Park of Canada, Glovertown, NL, A0G 2L0
<b>10. PROPONENT CONTACT INFORMATION</b>	Stephen Burbridge, Asset Manager, Terra Nova National Park of Canada, 709 533-3182

<b>11. FEDERAL COORDINATION</b>	
<b>FEAC</b>	
<b>RESPONSIBLE AUTHORITIES</b>	
<b>2<sup>nd</sup> Responsible Authority</b>	
Department/Agency	
Contact Information	
Trigger	
Date of Referral	
SARA Notification	
Outcome of Notification	
<b>3<sup>rd</sup> Responsible Authority</b>	
Department/Agency	
Contact Information	
Trigger	
Date of Referral	
SARA Notification	
Outcome of Notification	

<b>12. FEDERAL COORDINATION continued</b>	
<b>FEDERAL AUTHORITIES</b>	
<b>2<sup>nd</sup> Federal Authority</b>	
Department/Agency	
Reason for Referral	
Date of Referral	
Outcome of Referral	
Contact Information	
<b>3<sup>rd</sup> Federal Authority</b>	
Department/Agency	
Reason for Referral	
Date of Referral	
Outcome of Referral	
Contact Information	

<b>13. OTHER EXPERTS CONSULTATED</b>		
Department/Agency and Name & Title	Nature of Consultation	Response (include date)

<b>14. EA COORDINATOR CONTACT INFORMATION</b>		
<b>EA COORDINATOR</b>	Name:	Jeffrey St-Pierre
	Title:	Resource Management and Public Safety Specialist
	Phone:	(709) 533-3120
<b>EA AUTHOR</b>	Name:	Jeffrey St-Pierre
	Title:	Resource Management and Public Safety Specialist
	Phone:	(709) 533-3120

<b>15. PROJECT DESCRIPTION</b>
Terra Nova National Park proposes to install a new salt storage unit within the maintenance compound area. The unit will be a Titan Series 2 Cover-all measuring 15x20 meters. Construction activities include: removal of existing lumber storage building; re-route existing water line; cast-in-place concrete footing wall installation; placement of asphalt floor; re-grading of area around the structure; installation of steel and fabric cover; installation of electrical services. This unit is scheduled to be in operation by August 2009.

<b>16. PROJECT RATIONALE</b>	
A new salt storage shed, at the Administration Compound, in Terra Nova National Park, is required to provide additional salt storage capacity. The existing salt storage shed has a capacity of approximately 1600 Tons and an additional 900 Tons is required to provide the complete amount of salt for a winter season. Purchasing an additional load of salt mid-winter is more expensive than purchasing the whole winter supply in the fall.	
<b>17. POSSIBLE ALTERNATIVES</b>	
No new construction and continue to have salt delivered twice per winter. However, this is costly and inconvenient, complicating winter road clearing operations. Construction of completely new salt storage facility at Big Brook pit, but this incurs a much higher cost.	
<b>18. COMPATIBILITY WITH MANAGEMENT PLAN</b>	
<input checked="" type="checkbox"/>	The project has been reviewed and found to be compatible with the park or site management plan
<input type="checkbox"/>	The project is not compatible with the park or site management plan (provide explanation of the conflict in the space below)
<b>19. SCOPE OF ENVIRONMENTAL ASSESSMENT</b>	
<b>SCOPE OF PROJECT</b>	
As outlined in Appendix 1: Environmental Effects Grid	
<b>SCOPE OF FACTORS TO BE CONSIDERED</b>	
As outlined in Appendix 1: Environmental Effects Grid	

**20. DESCRIPTION OF ENVIRONMENT****Physical Environment**

Terra Nova NPC protects an area of 402 km<sup>2</sup> of insular eastern Newfoundland and Labrador. The national park extends from the junction of provincial Highway 331 and the Trans Canada Highway at the western end of the park, includes a portion of the Eastport peninsula, encompasses a substantial area west of the Trans Canada Highway, surrounds the enclave community of Charlottetown and extends south-east to the community of Port Blandford. The national park includes several offshore islands, although the waters below the mean low tide mark are excluded, and the park's coastline follows Newman Sound and a portion of Clode Sound. This area supports rich intertidal and estuarine ecosystems.

Part of the Appalachian Mountain System, the national park is characterized by low relief and a series of rounded hills rising to 200 m above sea level. Arms, sounds, coves and inlets indent the coast and the rocky headlands feature sea arches and caves. Pleistocene epoch glaciation is evident in the irregular coastline, bogs, freshwater lakes and deposits of glacial till. The climate has a marked maritime influence especially due to the Labrador Current, and is characterized by brief cool summers and moderate winters.

Terra Nova NPC boasts a strong relationship with the marine environment given its 238 km of marine coastline and that no point in the park is further than 5 km from the ocean. The park contains 134 ponds, 86 brooks and rivers and extensive wetland habitat in the form of bogs, fens, marshes and swamps.

The site of this particular project is within the Park General Works compound. It has been a developed area for over 50 years with over 12 man-made structures inside the fence line, 5 more just outside the fence and extensive asphalt and class A graded surfaces.

**Biological Environment**

Located at the eastern edge of the Boreal Shield Ecozone, the park contains two ecodistricts (as defined by the Canadian Forest Service and the Forest Service of Newfoundland and Labrador): Central Newfoundland Forest; and, North Shore Forest. Drumlinoid hills and boreal forests, bogs and fens characterize the western glaciated part of the park. The eastern part along the coast is sparsely vegetated rocky terrain, with deeper ponds and a rugged shoreline. Seventy-percent of the park is forested, with Black spruce (*Picea mariana*) being the dominant tree species, and smaller areas covered in Balsam fir (*Abies balsamea*) and hardwoods including white birch, red maple and trembling aspen. Seven percent of park is characterized as barren land, including rock barrens, *Kalmia* barrens and transition barrens. Including trees, 523 species of vascular plants are present in the park. Of these, 427 are indigenous, 89 are introduced, 29 are rare and seven are hybrid in nature.

The national park has a relatively limited number of animal species. Of the 21 species of terrestrial mammals found in the park only twelve are native to insular Newfoundland and Labrador. The Newfoundland marten (*Martes americanus*), listed as an endangered species on the List of Wildlife Species at Risk set out under the *Species at Risk Act* and extirpated from the park in the late 1970s, is being reintroduced. Non-native mammals present in the park include moose (*Alces alces*), snowshoe hare (*Lepus americanus*) and red squirrel (*Sciurus hudsonicus*). Of approximately 169 bird species found in the park, 63 use the park as breeding grounds. Seven freshwater or anadromous fish species, including native trout, salmon and arctic char, are found within freshwater ponds and brooks of the park.

There is very little natural environment to be disturbed at the exact site of this project, as it exists within the park compound. That said, construction operations could effect the natural environment outside the compound if they are not performed in a diligent manner. Additionally, the operation of this facility after construction could have a significant effect on the surrounding environment from salt runoff in surface water.

**Human Environment**

Terra Nova NPC has a rich history of human use, traceable to the past 5000 years. The earliest peoples, Maritime Archaic, Dorset Eskimo and Beothuk were coastal dwellers, living throughout Bonavista Bay. Five prehistoric Aboriginal sites have been identified in the park, and archaeological evidence supports the occupation of both Maritime Archaic and Dorset Eskimo in the park. Although the presence of Beothuk occupation in the park is not confirmed, there is substantial evidence of a Beothuk presence at the nearby Beaches Site in Burnside. Little is known generally about the historic or modern Aboriginal presence and use of the park.

*Parks Canada Agency Environmental Assessment Report*

During the 1670s, the European settlement frontier began to extend into Bonavista Bay. In addition to fishing, these early settlers also exploited the area's forests in order to build boats, stages and living quarters, and they trapped fur-bearing animals like beaver and otter as a means of supplementing their earnings from the fishery. By the end of the 19<sup>th</sup> century, there were settlements in Glovertown, Traytown, Rosedale, Sandy Cove, Happy Adventure, Eastport, Port Blandford, Charlottetown and Terra Nova. Fishing and forestry were the mainstays of the local economy. Although there were numerous sawmills by the 1920s, especially in Clode and Newman Sounds, most of these had closed by mid-century. Between 1920 and 1950, mills were operational in what is now park land. These included Minchin's Cove, Salton's Brook and Big Brook, the latter still in operation when the park was established in 1957.

Terra Nova National Park now receives approximately 200 000 visitors per year, including drive-through traffic. The two campgrounds (Newman Sound and Malady Head) and primitive campsites combined attract approximately 14 600 camper nights per year (2005 figures). The visitors to the park are primarily from in-province and largely from the Avalon Peninsula and the eastern part of the Island of Newfoundland. Visitation occurs primarily in the summer months, and camping is the most popular activity. The park is divided by a stretch of 43 km of the Trans Canada Highway running north-south through the park, and by other local roadways. Park administration and operations are primarily located at Newman Sound.

The General Works Compound is the primary worksite for a majority of park employees year round. Contained within the compound are administrative offices, salt and gravel storage, trade shops, a heavy equipment garage, construction supply storage, dining facility as well as several other storage buildings and garages. It also provides a secure area for the storage of boats, both for Parks Canada and other agencies that train and work here. There is constant traffic of all types of employees, to include many unfamiliar with construction site or heavy equipment safety protocols.

**21. METHODOLOGY (optional)**

**22. ENVIRONMENTAL EFFECTS**

As per Environmental Effects Grid located in Appendix 1

## 23. MITIGATING MEASURES

### General

- The onus is on the contractor to obtain all federal and provincial permits related to this project and to submit copies to the Environmental Protection Officer (EPO) upon request.
- The contractor is not to limit his/her environmental responsibilities to this screening report and will be responsible to adhere to Provincial, Federal and Municipal regulations.
- The mitigation measures presented in this screening report are subject to additions or alterations prior to and during project implementation.
- The contractor will be responsible for the activities of any sub-contractors employed by him/her and their compliance to these mitigation measures.
- All work is restricted to within the established construction perimeter unless otherwise approved by the EPO.
- Equipment maintenance and storage will be restricted to existing hard surface areas such as compound area, trails or parking lots.
- The EPO is to have access granted at all times to anywhere on the construction site.

### Design

- The design of this facility must provide for prevention of salt contamination of the surrounding environment through grading and containment measures as necessary.

### General Construction Works

- Any pouring of cement is to be contained at the intended site(s) and the operator will not be permitted to rinse down, wash or otherwise dispose of any mixer residue within the park.
- The contractor will immediately remove any materials, including rock and soil, deposited by the contractor in a location other than an approved disposal site.
- When removing aggregate materials or importing new materials, care must be taken to avoid any spillage of material.
- Any wildlife dwelling is not to be disturbed. The EPO will be informed of any wildlife dwelling immediately.
- Wildlife is not to be fed or harassed in any way.
- The National Parks Act and Regulations must be strictly adhered to.
- There will be no blasting in the construction area without prior notice to and authorization from the Field Unit Superintendent.
- Care will be taken not to allow silt or other runoff from the construction site. Erosion barriers will be established if necessary.

### Cultural Artifacts

- In the event artifacts or other cultural resource items are uncovered or encountered, all aspects of the project (i.e. excavation) affecting the immediate artifact site will cease until an archaeologist or his/her representative has reviewed the finding(s).
- All artifacts and other cultural resource items remain the property of Parks Canada.
- Archaeology may impose further restrictions on this project pending findings revealed during the project

### Petroleum Products/ Hazardous Products Spill

- Refueling is not to take place less than 100 meters from a watercourse.
- All equipment and vehicles must be kept in good operating condition and leak free. A fuel spill kit (absorbent materials i.e. granular, absorbent pads, etc.) will be on hand to assist with spill containment and clean up.
- Only double walled fuel trucks will be permitted on site for refueling.
- Fire extinguishers are to be maintained in or on each piece of heavy equipment.
- The contractor must comply with the requirements of the Workplace Hazardous Materials Information System (WHMIS) regarding use, handling, storage and disposal of hazardous materials.
- If any hazardous materials are to be used or kept on site, a complete list of materials and Material Safety Data Sheets are to be supplied to the EPO.
- Spill recovery equipment is maintained by Parks Canada and may be used in the event of a major spill. The contractor will promptly replace all used materials at their expense.



Parks Canada Agency Environmental Assessment Report

- In the event of a spill, the contractor is obligated to report, contain, recover and clean up all spilled materials in a timely fashion. If the EPO deems the contractor is not taking appropriate steps within a reasonable time frame, Parks Canada will clean up the spill and bill the contractor for its services.

**Disposal of waste**

- All garbage from project construction or contractor employees and sub-contractors is to be gathered daily and disposed of in a bear proof garbage disposal bin. Once full, garbage is to be disposed of in an approved landfill site.
- Absolutely no burning of garbage will be permitted on site.
- excess concrete and others projects wastes shall be disposed of at an approved site.
- CCA wood contains arsenic and should be disposed of at an approved location.
- Sewage/grey water will be disposed of at an approved location

**Removal of Vegetation (if necessary)**

- Any wildlife dwelling is not to be disturbed. Park staff will contact the EPO upon discovery of a wildlife dwelling for further instruction.
- Wildlife are not to be fed or harassed in any way
- When trimming branches, at least 4cm of the branch node should remain on the tree to prevent damage to bark and the onset of disease.

**Disposal of surplus vegetation**

- Excess vegetation will be disposed of at Big Brook Pit. Vegetation may be burned at Big Brook Pit under low spring or fall FWI indices. All burning will be subject to Park Canada's Standard Operating Procedure(SOP) for burning of brush piles.
- Burning of excess vegetation on site is prohibited
- In order to avoid potentially increasing wildfire risk, surplus vegetation will not be chipped on site

**Operations**

- The apron on this facility is not to be used as a working apron for loading operations.
- Plowing of the apron in front of this facility will be conducted in a manner that directs excess salt towards the center of the compound.

**Maintenance**

- any future maintenance will be subject to the mitigations outlined in this report.

**24. RESIDUAL EFFECTS**

Not likely if mitigation and monitoring measures are followed.

**25. CUMULATIVE EFFECTS**

Not likely if mitigation and monitoring measures are followed.

**26. PUBLIC CONSULTATION/PARTICIPATION**

<input type="checkbox"/>	Public participation was sought
<input checked="" type="checkbox"/>	Public participation was not sought
State why public participation was or was not sought in the space below, referring to the criteria in the Ministerial Guideline	
Does not meet criteria set out in Section 5 of the Ministerial Guideline on Assessing the Need for and Level of Public Participation in Screenings under the <i>Canadian Environmental Assessment Act</i> : Minor project, no indication of public interest.	

<b>Public Participation Process</b>
<b>Public Comments</b>

<b>27. SIGNIFICANCE OF IMPACT</b>
Not likely significant
<b>28. IMPACT ON ECOLOGICAL AND/OR COMMEMORATIVE INTEGRITY</b>
Not likely significant

<b>29. SURVEILLANCE</b>
<input type="checkbox"/> Surveillance monitoring is not required
<input checked="" type="checkbox"/> Surveillance monitoring is required (provide surveillance contact and surveillance details below)
Daily surveillance by Environmental Protection Officer (EPO) : Jeffrey St-Pierre, RMPSS 709-533-3120

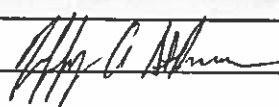
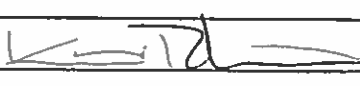
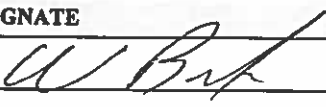
<b>30. FOLLOW-UP</b>
<input type="checkbox"/> A follow-up program will not be conducted
<input checked="" type="checkbox"/> A follow-up program will be conducted (state the reason(s) for the follow-up program in the space below)
As part of the Federal Contaminated Sites assessment funding received by Terra Nova National Park of Canada, water quality wells will be established in several areas around and inside the General Works Compound. If excessive levels of salt contamination are found in the surrounding environment, additional mitigation measures will be imposed.

<b>31. SPECIES AT RISK MONITORING</b>
<input checked="" type="checkbox"/> Species at risk monitoring is not required
<input type="checkbox"/> Species at risk monitoring is required and is compatible with the applicable recovery strategy or action plan

Parks Canada Agency Environmental Assessment Report

32. EA DETERMINATION	
<input checked="" type="checkbox"/>	Taking into account the implementation of any mitigation measures that the responsible authority considers appropriate, the project is not likely to cause significant adverse environmental effects. The responsible authority may exercise any power or perform any duty or function that would permit the project to be carried out in whole or in part.
<input type="checkbox"/>	Taking into account the implementation of any mitigation measures that the responsible authority considers appropriate, the project is likely to cause significant adverse environmental effects that cannot be justified in the circumstances. The responsible authority shall not exercise any power or perform any duty or function conferred on it by or under any Act of Parliament that would permit the project to be carried out in whole or in part.
<input type="checkbox"/>	Refer the project to the minister for a referral to a mediator or a review panel where <ul style="list-style-type: none"> <li>➤ it is uncertain whether the project, taking into account the implementation of any mitigation measures that the responsible authority considers appropriate, is likely to cause significant adverse environmental effects;</li> <li>➤ the project, taking into account the implementation of any mitigation measures that the responsible authority considers appropriate, is likely to cause significant adverse environmental effects and paragraph (b) does not apply; or</li> <li>➤ public concerns warrant a reference to a mediator or a review panel.</li> </ul>

33. REFERENCES
Anonymous, 2007. <u>Terra Nova National Park of Canada Management Plan</u> . Parks Canada Publication

34. SIGNATURES		
<b>EA AUTHOR</b>		
Signature: 		
Jeffrey St-Pierre	Resource Management Specialist	17 APR 2009
Name	Title	Date
<b>OTHER:</b>		
Signature: 		
Kevin Robinson	Manager, Resource Conservation	APR 17 2009
Name	Title	Date
<b>SUPERINTENDENT OR DESIGNATE</b>		
Signature: 		
William Brake	Superintendent	April 17 2009
Name	Title	Date

**35. LIST OF ATTACHMENTS**

Attachment 1. Summary of New Salt Storage Shed project as provided by Asset Management

Appendix 1: Environmental Effects Grid

ENVIRONMENTAL EFFECTS IDENTIFICATION GRID																			
Please complete the various activities below based on the specific characteristics of your project		ENVIRONMENTAL COMPONENTS																	
		PHYSICAL ENVIRONMENT							BIOLOGICAL ENVIRONMENT				HUMAN ENVIRONMENT						
		AIR		SOIL		WATER			FLORA		FAUNA		HABITAT		ARCHAEOLOGICAL RESOURCES	HISTORICAL RESOURCES	PUBLIC HEALTH	PUBLIC SAFETY	
		QUALITY	NOISE EXPOSURE	QUALITY	EROSION	GROUND	SURFACE	LANDSCAPING	LAND	AQUATIC	MARINE	LAND	AQUATIC	MARINE					
PHYSICAL ACTIVITIES PHYSICAL WORKS	PREPARATION	Surveying																	
		Studies and surveys																	
		Soil sampling																	
		Organization of work site																	
		Access routes																	
	CONSTRUCTION	Supply of materials																	
		Burning																	
		Clearing	X						X		X							X	
		Demolition	X						X		X							X	
		Disposal of waste	X						X		X							X	
		Blasting/drilling																	
		Dredging																	
		Drainage/ditch																	
		Storage of materials							X	X		X							X
		Excavation	X						X	X		X							X
		Grading	X						X	X		X							X
	OPERATION OR DECOMMISSIONING	Backfilling	X						X		X							X	
		Use of machinery	X															X	
		Transportation of materials																	
Waste disposal																			
Wastewater disposal																			
REFER TO INCLUSION LIST REGULATIONS	Maintenance																		
	Use							X	X					X			X		
	Vehicle traffic																		