

NORTHWEST  
TERRITORIES  
WATER BOARD



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WATER REGISTER: N7L1-1777

December 13, 2002

Mr. Pete Millman  
Environmental Planner  
Devon Canada Corporation  
1600, 324 - 8 Avenue S.W.  
CALGARY, AB T2P 2Z5

Dear Mr. Millman:

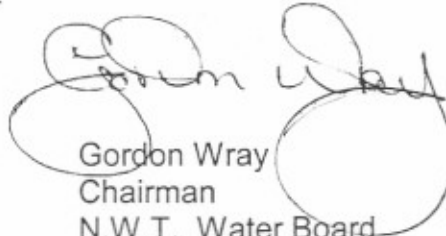
**WATER LICENCE N7L1-1777 AMENDMENT**

The Northwest Territories Water Board has reviewed your application for amendment to the term, location, water use and effluent quality parameters of the current Water Licence.

The Board hereby approves this request. Please find attached an amendment. The other duplicate of this amendment has been filed with the Water Resources Division of the Department of Indian Affairs and Northern Development.

If you require further assistance, please contact this office. For technical enquiries, contact Ms Sarah Aho at (867) 669-2402 or Mr. David Milburn at (867) 669-2650 of the Water Resources Division.

Sincerely,



Gordon Wray  
Chairman  
N.W.T. Water Board

Attach.

# NORTHWEST TERRITORIES WATER BOARD LICENCE AMENDMENT

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LICENSEE:	DEVON CANADA CORPORATION
LICENCE NUMBER:	N7L1-1777
EFFECTIVE DATE:	DECEMBER 13, 2002
EXPIRY DATE:	DECEMBER 31, 2004

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Pursuant to the *Northwest Territories Waters Act* the Northwest Territories Water Board hereby grants the following Licence Amendment.

1. PART A, Item 1 (a) is hereby rescinded and replaced with:
  - a) This Licence entitles Devon Canada Corporation to use water and dispose of waste for municipal and industrial undertakings in the Mackenzie Delta for the Napartok Winter Drilling Program 2002 - 2003 Napartok D which entails the drilling of two wells from the locations depicted in the Table below:

Well Reference	Latitude	Longitude
Napartok F-29	68°28'19"N	134°36'24"W
Napartok N-03	68°32'59"N	134°31'24"W

and associated camp, Northwest Territories.

2. PART B, Item 1 (a) is hereby rescinded and replaced with:
  - a) the total quantity in cubic metres of fresh Water obtained from each and all sources;
3. PART B, Item 1 is hereby enhanced with:
  - h) an itemized list indicating the names and quantities of all drilling mud additives used; and
  - i) any revisions to the approved Contingency Plan.

4. PART B, Item 5 is hereby rescinded and replaced with:
  5. Prior to the use of water for municipal undertakings or the disposal of waste and pursuant to Section 17(1) of the Act and Section 12 of the Regulations, the Licensee shall have posted and shall maintain a security deposit of Six Hundred Fifty Thousand (\$650,000.00) Dollars in a form suitable to the Minister.
  
5. PART B, Item 8 and 9 are hereby added:
  8. All monitoring data shall be submitted in printed form and electronically in spreadsheet format on a diskette or other electronic forms acceptable to the Board.
  9. All reports shall be submitted to the Board in printed format accompanied by an electronic copy in a common word processing format on diskette or other electronic forms acceptable to the Board.
  
6. PART C, Item 2 is hereby rescinded and replaced with:
  2. The daily quantity of water used for all purposes shall not exceed 1500 cubic metres.
  
7. PART D, Item 2 is hereby rescinded and replaced with:
  2. All Waste discharged from the Sewage Treatment Facility shall be directed to the Mackenzie River at a location approved by an Inspector.
  
8. PART D, Item 3 is hereby rescinded and replaced with:
  3. All Waste discharged from the Sewage Disposal Facility shall meet the following effluent quality requirements:

Sample Parameter	Maximum Average Concentration
Biological Oxygen Demand (BOD <sub>5</sub> )	80.0 mg/L
Total Suspended Solids (TSS)	100.0 mg/L
Faecal Coliforms	10E4 CFU/dL
Oil and Grease	5.0 mg/L
Total Residual Chlorine (TRC)	<0.01 mg/L

The Waste discharged shall have a pH between 6 and 9.

9. PART D, Item 4 is hereby rescinded and replaced with:
  4. All Waste that does not meet the requirements in Part D, Item 3 shall be trucked to the Town of Inuvik Waste Treatment Facility.
10. PART D, Item 12 is hereby rescinded.
11. PART D, Item 21 and 22 are hereby added:
  21. Introduction of water to Waste for the purpose of achieving effluent quality requirements in Part D, Item 4 is prohibited.
  22. All drilling Waste shall be contained in the drill Waste Sump a minimum of one (1) metre below the active layer.
12. PART H is hereby added:

**PART H: CONDITIONS APPLYING TO ABANDONMENT AND RESTORATION**

1. Upon completion of all activities, the Licensee shall ensure that all equipment and materials are removed from the site. Other final restoration activities as outlined in the Project Description should be implemented to the satisfaction of an Inspector.
2. The Licensee shall monitor all drilling Waste sumps after closure for a period of three (3) years during the thaw season consisting of the following measures:
  - a) install subsurface monitoring systems designed to detect thawing of the drilling waste; and
  - b) monitor for salinity migration using electromagnetic induction; and
  - c) conduct an annual inspection of the site during the thaw season, and submit a written report of the inspection, including photographs of the site, to the Board by October 1<sup>st</sup> of the year the inspection is conducted.

13. The Surveillance Network Program, PART B Item 1 is hereby rescinded and replaced with:

1. Water at Station Number 1777 -1, shall be sampled every week during decant, and analyzed for the following parameters:

BOD <sub>5</sub>	Total Suspended Solids
Oil and Grease	Faecal Coliforms
Ammonia	pH
Total Residual Chlorine	

14. The Surveillance Network Program, PART D is hereby added:

**D. Flow and Volume Measurement Requirements**

1. The daily and monthly quantities of water obtained from the Mackenzie River shall be measured and recorded in cubic metres.

This Licence Amendment issued and recorded at Yellowknife, Northwest Territories on December 13, 2002.

**NORTHWEST TERRITORIES WATER BOARD**

  
Witness

  
Chairman