

# **NORTHWEST TERRITORIES WATER BOARD**

WATER LICENCE APPLICATION QUESTIONNAIRE

FOR

OIL AND GAS EXPLORATION: DRILLING

Prepared by

Department of Indian Affairs and Northern Development  
Water Resources Division  
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## **INTRODUCTION**

The purpose of this questionnaire is to solicit supplemental information from an applicant to support their application for a Water Licence (or renewal). It is anticipated that the completion of this questionnaire will reduce the delays arising from the Northwest Territories water board having to solicit additional information after an application has been submitted. This information will be used during the environmental assessment and screening of your application, which must be undertaken prior to the approval of a Water licence.

The applicant should complete the questionnaire to the best of their ability, recognizing that some questions may not be relevant to the proposed project. For questions that do not relate to the operation, the applicant is requested to indicate "N/A" (not applicable). For information from other sources, please fully reference the material fully cited, including the title of the document and the page numbers referred to.

If any questions arise while completing the questionnaire, the applicant may wish to contact the Northwest Territories Water Board at (867) 765-0106.

Chairman  
Northwest Territories Water Board

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# SECTION 1: APPLICANT INFORMATION

1.1 Applicant: \_\_\_\_\_  
Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

1.2 Project Name: \_\_\_\_\_  
Property Name: \_\_\_\_\_  
Exploration Licence Number: \_\_\_\_\_  
Closest Community (s): \_\_\_\_\_  
Min/Max latitude of Project area: \_\_\_\_\_  
Min/Max longitude of Project Area: \_\_\_\_\_

1.3 Primary Company Contact: \_\_\_\_\_  
Title: \_\_\_\_\_  
Contact Number: \_\_\_\_\_  
Alternate Contact Numbers: \_\_\_\_\_  
Fax: \_\_\_\_\_

1.4 Field Contact: \_\_\_\_\_  
Title: \_\_\_\_\_  
Contact Number: \_\_\_\_\_  
Alternate Contact Numbers: \_\_\_\_\_  
Fax: \_\_\_\_\_

**1.5** List the contractors (ie. Major, Sewage, Water) that will be involved in the project:

Company Name: \_\_\_\_\_

Primary Contact: \_\_\_\_\_

Title: \_\_\_\_\_

Contact Number: \_\_\_\_\_

Alternate Contact Numbers: \_\_\_\_\_

Fax: \_\_\_\_\_

Company Name: \_\_\_\_\_

Primary Contact: \_\_\_\_\_

Title: \_\_\_\_\_

Contact Number: \_\_\_\_\_

Alternate Contact Numbers: \_\_\_\_\_

Fax: \_\_\_\_\_

Company Name: \_\_\_\_\_

Primary Contact: \_\_\_\_\_

Title: \_\_\_\_\_

Contact Number: \_\_\_\_\_

Alternate Contact Numbers: \_\_\_\_\_

Fax: \_\_\_\_\_

**1.6** List all other permits or authorizations applied for:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## SECTION 2: PRE-SITE ASSESMENT

2.1 Please complete the following chart for those items that currently exist in the project area – a snapshot of the area before your project commences. Attach a map depicting all of the indicated items in the project area, as well as the surface drainage patterns and elevation contours.

		Description	
A. Well sites	Yes <input type="checkbox"/>	Latitude:	
	No <input type="checkbox"/>	Longitude:	
B. Waste dumps	Yes <input type="checkbox"/>	Latitude:	
	No <input type="checkbox"/>	Longitude:	
C. Fuel and chemical storage areas	Yes <input type="checkbox"/>	Latitude:	
	No <input type="checkbox"/>	Longitude:	
D. Sump areas	Yes <input type="checkbox"/>	Latitude:	
	No <input type="checkbox"/>	Longitude:	
E. Wastewater discharge locations	Yes <input type="checkbox"/>	Latitude:	
	No <input type="checkbox"/>	Longitude:	
F. Camps	Yes <input type="checkbox"/>	Latitude:	
	No <input type="checkbox"/>	Longitude:	
G. Transportation routes	Yes <input type="checkbox"/>	Latitude:	
	No <input type="checkbox"/>	Longitude:	

<b>H.</b> Pingos	Yes <input type="checkbox"/>	Latitude:	
	No <input type="checkbox"/>	Longitude:	
<b>I.</b> Staging areas	Yes <input type="checkbox"/>	Latitude:	
	No <input type="checkbox"/>	Longitude:	
<b>J.</b> Seismic lines	Yes <input type="checkbox"/>	Latitude:	
	No <input type="checkbox"/>	Longitude:	
<b>K.</b> Parks and/or protected areas	Yes <input type="checkbox"/>	Latitude:	
	No <input type="checkbox"/>	Longitude:	
<b>L.</b> Wildlife management area	Yes <input type="checkbox"/>	Latitude:	
	No <input type="checkbox"/>	Longitude:	
<b>M.</b> Bird sanctuaries	Yes <input type="checkbox"/>	Latitude:	
	No <input type="checkbox"/>	Longitude:	
<b>N.</b> Trap lines	Yes <input type="checkbox"/>	Latitude:	
	No <input type="checkbox"/>	Longitude:	
<b>O.</b> Other	Yes <input type="checkbox"/>	Latitude:	
	No <input type="checkbox"/>	Longitude:	

## SECTION 3: WATER USE AND WASTE DISPOSAL

### 3.1 Water Use

Maximum quantity per day (m<sup>3</sup>):

---

Total quantity for project (m<sup>3</sup>):

---

Planned uses of water:

---

Operating capacity of the pump:

---

Size of intake screen:

---

Source of potable water:

---

**3.1.2** Please provide information for each water source as required by the Department of Fisheries and Oceans: "Protocol for Water Withdrawal for Oil & Gas Activities in the Northwest Territories".

### 3.2 Waste Disposal

**3.2.1** Will a camp(s) be provided?

Yes

No

If yes, indicate the maximum number of people that will be accommodated

Capacity:

---

Maximum Accommodated:

---

**3.2.2** Will the camp remain in one place for the duration of the project, or move around? Please describe the camp type (e.g. sleigh camp) and attach diagrams of the proposed layout.

**3.2.3** What is the proposed method of sewage and greywater treatment/disposal?

---

Please describe the treatment process.

---

What is the maximum capacity per day (in m<sup>3</sup> and people) of the treatment system?

---

Please attach a diagram(s) of the treatment system labeling all of the major components.

---

**3.2.4** describe the manner in which the treated effluent will be disposed/discharged to the environment:

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**3.2.5** What other back-up methods are available to sewage and greywater treatment/disposal (i.e. contingency)?

---

**3.2.6** What is the proposed method of solid waste disposal?

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**3.2.7** List all hazardous materials that will be used during the project as defined under the *Transport of dangerous Goods regulations*.

---

**3.2.8** Fuel storage

Type of Fuel	Amount (L)	Method of Storage/Containment	Location

---

**3.2.9** What is the method of hazardous waste disposal?

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## SECTION 4: DRILLING PROGRAM INFORMATION

4.1 What is the frame of this project? Will this project be carried out and completed during frozen ground conditions?

---

4.2 Please describe the methods in which equipment will be brought to the project area and provide a list of heavy equipment that will be transported to the site.

---

4.3 Describe any access routes and their method of construction. How many streams will be crossed? Will any stream crossings greater than 5m be required?

---

4.4 Please provide the name, latitude and longitude and UTM coordinates for all proposed well sites.

Name	Latitude	Longitude	UTM

4.5 Indicate the total estimated volume of drilling wastes in cubic metres.

---

4.6 Indicate methods for the disposal of drilling wastes and attach a management plan.

- Sump
- Remote sump
- Down Hole
- On-site Treatment
- Off-site
- Other \_\_\_\_\_

**4.7** What is the capacity in cubic metres of the sump? Attach a drawing to scale of the layout of the proposed sump.

---

How will the sump berms be protected from erosion?

---

Provide information on the soil type, permeability and depth of the active layer at the proposed sump location.

---

How will water used for drilling be recycled/reclaimed?

---

What measures are contemplated for surface drainage controls?

---

What are the planned abandonment procedures for sumps?

---

**4.8** Mud SystemType(s): Check all that apply:

- Gelchem
- Invert
- KCL
- Other \_\_\_\_\_

Please provide a complete list of all planned drilling mud activities.

---

**4.9** Indicate any potential for encountering artesian aquifers or lost circulation within the surface hole (to casing depth):

---

**4.10** Describe the surficial geologic and hydrogeologic conditions in the immediate vicinity of the well site.

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## **SECTION 5: CONTINGENCY PLANNING, ABANDONMENT AND RESTORATION PLANNING**

- 5.1** Attach the proposed or existing contingency plan which describes course of action, mitigative measures and equipment available for use in the event of system failures and spills of hazardous materials (in compliance with NWT Water Board Guidelines for Contingency planning, 1987)
- 5.2** Outline the planned abandonment and restoration procedures.
- 

## **SECTION 6: ENVIRONMENTAL ASSESMENT AND SCREENING**

- 6.1** Has this project ever undergone an initial environmental assessment, including previous owners? If yes, by whom/when:
- 

- 6.2** What baseline data has been collected for the water bodies you intend t cross, or draw water from in the area? Please attach data.
- 

- 6.3** What baseline data has been collected and evaluated with respect to the biophysical components of the environment potentially affected by the project (wildlife, soils, air quality, etc.)? Please attach data.
- 

- 6.4** What community consultation has been done in regards to this project? Provide details of the program.
- 

- 6.5** Please provide the following information:

- a)** description of the environment (including known historic sites, results of any archeological assessments, wildlife, waterbodies, etc.)
- b)** potential environmental impacts (including cumulative and socio-economic effects).
- c)** proposed mitigation to potential environmental impacts.
- d)** any follow-up or monitoring programs to be implemented to verify effectiveness of mitigation measures.

## SECTION 7: LIST OF ATTACHMENTS

Reference to Question #	Title	Page / Section Number