

NORTHWEST TERRITORIES WATER BOARD

**ONSHORE OIL AND GAS
EXPLORATION DRILLING
QUESTIONNAIRE**

FOR

WATER LICENCE APPLICATIONS

**Prepared by:
Department of Indian Affairs and Northern Development
Water Resources Division
August 1999
Version 5.07**

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 delays arising from the Northwest Territories Water Board having to solicit additional information after an application has already been submitted. This information will also be useful during the environmental assessment and screening of your application, which must be undertaken prior to development and approval of a water licence.

The applicant should complete the questionnaire to the best of his/her ability, recognizing that some questions may not be relevant to the project under consideration. For questions that do not relate to his/her operation, the applicant is requested to indicate "N/A" (Not Applicable).

If any questions arise while completing the questionnaire, the applicant may wish to contact the Northwest Territories Water Board at (867) 669-2772. If your question is that of a technical nature please contact the Regulatory Approvals Section of the Water Resources Division, Department of Indian Affairs and Northern Development (INAC), at (867) 669-2651.

Chairman,
Northwest Territories Water Board

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If space is insufficient for any of the responses on this questionnaire, use the back of the sheet or attachments.

List attachments in Appendix 1.

Print or type your responses.

SECTION 1:

PRELIMINARY SITE ASSESSMENT

DATE: October 20, 2000

1.1 APPLICANT

COMPANY NAME: Chevron Canada Resources

ADDRESS: 500-5th Avenue S.W.

Calgary, Alberta

T2P 0L7

PROPERTY NAME/EXPLORTION LIC. #: #385 and #395

CLOSEST COMMUNITY: Inuvik

LATITUDE/LONGITUDE OF WELL CENTRE (Degrees, minutes, seconds): Project area:
Latitude 68°30' - 69°09'N Longitude 133°42' - 135°09'W

1.2 PRIMARY COMPANY CONTACT:

NAME: Kevin Williams

TITLE: Geophysicist

CONTACT NUMBER: (403) 234-5403

ALTERNATE CONTACT NUMBERS: _____

1.3 FIELD CONTACT:

NAME (If known): Bob Dreaver

TITLE (If known): Project Manager, Geco-Prakla

CONTACT NUMBER: (403) 509-4486

1.4 INDICATE THE STATUS OF THIS APPLICATION:

NEW APPLICATION



RENEWAL



IF RENEWAL, INCLUDE LICENCE NUMBER: _____

1.5 SITE HISTORY

INDICATE IF THIS SITE CONTAINS ANY KNOWN:

FORMER WELL SITES _____
WASTE DUMPS _____
FUEL AND CHEMICAL STORAGE AREAS _____
SUMP AREAS _____
WASTE WATER DISCHARGE LOCTIONS _____

DESCRIBE SITES AND REFERENCE THEM ON THE MAP IN QUESTION 1.6

1.6 ATTACH MAPS DRAWN TO SCALE SHOWING LOCATIONS OF EXISTING AND PROPOSED:

CAMP FACILITIES,
WELL SITE(S),
SUMPS,
WATER SOURCES,
FUEL AND CHEMICAL STORAGE FACILITIES,
DRILLING MUD STORAGE FACILITIES,
DRAINAGE CONTROLS,
TRANSPORTATION ROUTES (SEASONAL AND ALL WEATHER)*,
ELEVATION CONTOURS,
LOCATIONS OF WATERBODIES
DRAINAGE PATTERNS FOR WELL AND CAMP SITES.

* Clearly identify crossings over water courses greater than 5 m at ordinary high water mark.

See attached Project Description.

1.7 DESCRIBE THE PROPOSED OR CURRENT METHOD OF FRESHWATER WITHDRAWAL, THE TYPE AND OPERATING CAPACITY OF THE PUMPS USED AND THE INTAKE SCREEN SIZE.

Water for ice access, building snow ramps, and possibly a supplementary camp source, will be obtained from channels of the Mackenzie River. Water withdrawal rates are not expected to exceed 100 m³/day. Intake hoses will be screened with 1.3 cm (0.5") wire mesh.

- 1.8 ESTIMATE MAXIMUM DRAW DOWN AND RECHARGE CAPABILITY OF THE RIVER OR LAKE FROM WHICH FRESH WATER WILL BE DRAWN. QUOTE DRAW DOWN IN CENTIMETRES, OR, STATE PERCENTAGE OF FLOW WITHDRAWN.

Less than 1% draw down.

- 1.9 INDICATE IF PERMAFROST IS EXPECTED TO BE ENCOUNTERED UNDER:

CAMP FACILITIES	<u>X</u>
WELL SITE	<u>N/A</u>
ACCESS ROUTES	<u>X</u>
SUMPS	<u>N/A</u>
OTHER	<u>N/A</u>

- 1.10 INDICATE ANY POTENTIAL FOR ENCOUNTERING ARTESIAN AQUIFERS OR LOST CIRCULATION WITHIN THE SURFACE HOLE (TO CASING DEPTH)

N/A

- 1.11 ATTACH A DESCRIPTION OF THE SURFICIAL GEOLOGIC AND HYDRO-GEOLOGIC CONDITIONS IN THE IMMEDIATE VICINITY OF THE WELLSITE

See attached Project Description.

SECTION 2:

WATER USE AND WASTE DISPOSAL

- 2.1 OUTLINE ALL WATER USAGE IN THE DRILL PROGRAM, CAMP FACILITIES, AND ROAD CONSTRUCTION. INDICATE THE SOURCE AND VOLUME OF WATER FOR EACH USE.

	Source	Use	Average Volume (m ³ /day)
1.	Mackenzie River	ice access	100m ³ /day
2.	Mackenzie River	building snow ramps	100m ³ /day
3.	Mackenzie River	possible supplementary camp source	100m ³ /day
4.			
			TOTAL: 100m ³ /day

- 2.2 WILL DRILLING WASTES CONTAIN DETRIMENTAL SUBSTANCES INCLUDING, BUT NOT LIMITED TO, OIL BASED OR INVERT MUDS AND HIGH SALINITY FLUIDS?

YES _____ NO X

IF YES, INDICATE SUBSTANCES:

- 2.3 INDICATE THE TOTAL ESTIMATED VOLUME OF DRILLING WASTES

_____ CUBIC METRES

- 2.4 INDICATE METHODS FOR DISPOSAL OF DRILLING WASTES.

_____ SUMP
 X DOWN HOLE (REQUIRES NEB APPROVAL) – DRILL CUTTINGS
 X ON-SITE TREATMENT (PROVIDE PLAN)
_____ OFF-SITE (GIVE LOCATION AND METHOD OF DISPOSAL)

See project description.

- 2.5 IF A SUMP IS BEING USED, ATTACH THE FOLLOWING INFORMATION
SCALE DRAWINGS AND DESIGN OF SUMPS,
CAPACITY IN CUBIC METRES,
BERM EROSION PROTECTION,
SOIL PERMEABILITY AND TYPE
RECYCLING/RECLAIMING WATERS,
SURFACE DRAINAGE CONTROLS,
ABANDONMENT PROCEDURES.

2.6 WILL A CAMP BE PROVIDED?

YES



NO



2.7 IF YES, THEN INDICATE THE CAPACITY AND THE EXPECTED MAXIMUM
NUMBER OF PERSONS THAT WILL BE ACCOMMODATED.

CAPACITY

71

PERSONS

MAXIMUM ACCOMMODATED

85

PERSONS

SECTION 3:

CONTINGENCY, ABANDONMENT AND RESTORATION PLANNING

- 3.1 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).**
See attached Project Description.

- 3.2 ATTACH AN INVENTORY OF HAZARDOUS MATERIALS ON THE PROPERTY (AS DEFINED UNDER TRANSPORTATION OF DANGEROUS GOOD REGULATIONS).**
See attached Project Description.

- 3.3 ATTACH AN OUTLINE OF PLANNED ABANDONMENT AND RESTORATION PROCEDURES.**
See attached Project Description.

SECTION 4:

ENVIRONMENTAL ASSESSMENT AND SCREENING

Your application and other project details, such as this questionnaire, will be sent out for review by local aboriginal and public groups as well as territorial and federal government agencies. Their comments regarding the significance of project impacts are considered before a decision is made to allow the project to proceed. Because formal assessment and screening of water licences was only initiated in about 1989, applicants will find that this process may be required even if the project has been built and in operation for several years. However, if your project has been previously screened a further assessment may not be required, or a more limited process may be used. This will depend on individual circumstances, including the stage of the project. Some projects may need a higher level of review or submission of more information before being screened.

- 4.1 HAS THIS PROJECT EVER UNDERGONE AN INITIAL ENVIRONMENTAL ASSESSMENT, INCLUDING PREVIOUS OWNERS?

YES

☒

NO

☐

IF YES, BY WHOM / WHEN: EA by Inuvialuit Environmental Inc., October 2000
See attached Project Description.

- 4.2 HAS BASELINE DATA BEEN COLLECTED FOR THE MAIN WATER BODIES IN THE AREA?

YES

☒

NO

☐

IF YES, ATTACH DATA.
See attached Project Description.

- 4.3 HAS BASELINE DATA BEEN COLLECTED AND EVALUATED WITH RESPECT TO THE BIOPHYSICAL COMPONENTS OF THE ENVIRONMENT POTENTIALLY AFFECTED BY THE PROJECT (WILDLIFE, SOILS, AIR QUALITY).

YES

☒

NO

☐

IF YES, ATTACH DATA.
See attached Project Description.

- 4.4 ATTACH A DESCRIPTION OF ALL PROPOSED AND EXISTING ENVIRONMENTAL MONITORING PROGRAMS.
See attached Project Description.

- 4.5 HAS A COMMUNITY CONSULTATION PROGRAM BEEN INITIATED?

YES

☒

NO

☐

IF YES, PROVIDE DETAILS OF THE PROGRAM.
See attached Project Description.

SECTION 5:

LIST OF ATTACHMENTS

Reference to Question #	Title	Number of pages
1.6	Maps	See attached project description
1.11	Surficial geologic and hydrogeologic conditions	See attached project description
2.4	Disposal of drilling wastes	See attached project description
3.1	Contingency Plans	See attached project description
3.2	Hazardous Materials	See attached project description
3.3	Abandonment and Restoration	See attached project description
Section 4	Environmental Assessment and Screening	See attached project description