

NORTHWEST
TERRITORIES
WATER BOARD



ᐃᓕᓴᓴᓴᓴ
ᐃᓕᓴᓴᓴᓴ

WATER REGISTER: N7L1-1781

January 17, 2002

Mr. John Duckett
Senior Engineer, Project Manager
AEC West Ltd.
3700, 707 - 8 Avenue S.W.
CALGARY, AB T2P 1H5

Dear Mr. Duckett:

ISSUANCE OF A "B" TYPE LICENCE - KAMIK

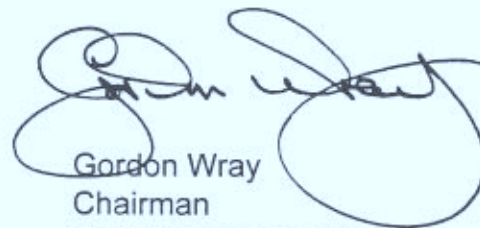
Attached is a duplicate of Licence No. N7L1-1781 granted to AEC West Ltd. by the Northwest Territories Water Board in accordance with the *Northwest Territories Waters Act*. The other original of this Licence has been filed with the Department of Indian Affairs and Northern Development in Yellowknife, Northwest Territories.

Also attached are general procedures for the administration of licences in the Northwest Territories. I request that you review these and address any questions to the Board's office.

In conclusion, please be advised that this letter with attached procedures, all inspection reports, and correspondence related thereto are part of the public Water Register, and are intended to keep all interested parties informed of the manner in which the Licence requirements are being met. All Water Register material will be considered when the Licence comes up for renewal or amendment.

The full cooperation of AEC West Ltd. is anticipated.

Sincerely,



Gordon Wray
Chairman
N.W.T. Water Board

Attach.

**GENERAL PROCEDURES FOR THE ADMINISTRATION OF LICENCES
ISSUED UNDER THE NORTHWEST TERRITORIES WATERS ACT
IN THE NORTHWEST TERRITORIES**

1. At the time of issuance, a copy of the Licence is placed on the Water Register in the Office of the Northwest Territories Water Board in Yellowknife, and is then available to the public.
2. To enforce the terms and conditions of the Licence, the Minister of Indian Affairs and Northern Development has appointed Inspectors in accordance with Section 35(1) of the *Northwest Territories Waters Act*. The Inspectors coordinate their activities with officials of the Water Resources Division of the Department of Indian Affairs and Northern Development. The Inspector responsible for Licence No. N7L1-1781 is located in the North Mackenzie -Inuvik District Office.
3. To keep the Water Board and members of the public informed of the Licensee's conformity to Licence conditions, the Inspectors prepare reports which detail observations on how each item in the Licence has been met. These reports are forwarded to the Licensee with a covering letter indicating what action, if any, should be taken. The inspection reports and covering letters are placed on the public Water Register, as are any responses received from the Licensee pertaining to the inspection reports. It is therefore of prime importance that you react in all areas of concern regarding all inspection reports so that these concerns may be clarified.
4. If the renewal of Licence No. N7L1-1781 is contemplated it is the responsibility of the Licensee to apply to the Water Board for renewal of the Licence. The past performance of the Licensee, new documentation and information, and points raised during a public hearing, if required, will be used to determine the terms and conditions of any Licence renewal. Please note that if the Licence expires and another has not been issued, then water and waste disposal must cease, or you, the Licensee, would be in contravention of the *Northwest Territories Waters Act*. It is suggested that an application for renewal of Licence No. N7L1-1781 be made at least eight months in advance of the Licence expiry date.
5. If, for some reason, Licence No. N7L1-1781 requires amendment, then a public hearing may be required. You are reminded that applications for amendments should be submitted as soon as possible to provide the Water Board with ample time to go through the amendment process. The process may take up to six (6) months or more depending on the scope of the amendment requested.

6. Specific clauses of your Licence make reference to the Board, Analyst or Inspector. The contact person, address, phone and fax number of each is:

BOARD: Executive Assistant
Northwest Territories Water Board
Box 1500
YELLOWKNIFE, NT X1A 2R3
Phone No: (867) 669-2772
Fax No: (867) 669-2719

ANALYST: Analyst
Water Laboratory
Department of Indian Affairs
and Northern Development
Box 1500, 4601 - 52nd Avenue
YELLOWKNIFE, NT X1A 2R3
Phone No: (867) 669-2780
Fax No: (867) 669-2718

INSPECTOR: Inspector
North Mackenzie-Inuvik District Office
Department of Indian Affairs
and Northern Development
P.O. Box 2100
INUVIK, NT X0E 0T0
Phone No: (867) 777-3361
Fax No: (867) 777-2090

7. Your Licence requires a security deposit be submitted. Should the security deposit be submitted in the form of a "letter of credit", recommended wording is outlined below. It is advised that a "draft" letter of credit be forwarded to Water Resources Division for review. The contact person, address, phone and fax number of the individual administering security deposits is:

Office Administrator
Water Resources Division
Indian and Northern Affairs Canada
Box 1500
YELLOWKNIFE, NT X1A 2R3

Phone No: (867) 669-2651
Fax No: (867) 669-2716

LETTER OF CREDIT (Security deposits) - recommended wording

[BANK ADDRESS]

IRREVOCABLE LETTER OF CREDIT

[The term "Documentary Credit" may also be used instead of "Letter of Credit"]

DATE OF ISSUE: [date] **OUR REFERENCE NUMBER:** [Bank's Reference Number]
AMOUNT: CAD\$#####.00
MAXIMUM: #####.00
CANADIAN DOLLARS ONLY

APPLICANT

["Customer" can be used instead
of "Applicant"]
[Company's Name]
[Company's Address]

BENEFICIARY:

RECEIVER GENERAL FOR CANADA
ON BEHALF OF THE MINISTER OF
INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
4914 - 50 Street, 3rd Floor
P.O. Box 1500
YELLOWKNIFE, NT X1A 2R3

ATTENTION: REGIONAL DIRECTOR GENERAL
DIAND - NT REGION

RE: SECURITY PURSUANT TO [the Water Licence Type and Number]

AT THE REQUEST AND FOR THE ACCOUNT OF [Company's Name] (THE "APPLICANT"), WE, [Bank's Name], HEREBY ESTABLISH IN YOUR FAVOUR OUR IRREVOCABLE LETTER OF CREDIT NO. [Bank's Reference Number] ("CREDIT") FOR SUMS NOT EXCEEDING IN THE AGGREGATE [Amount of Security required stated in Canadian Dollars].

THIS CREDIT IS AVAILABLE WITH US FOR DRAWING AT SIGHT, WITHOUT ENQUIRY AS TO WHETHER YOU HAVE A RIGHT AS BETWEEN YOURSELF AND THE APPLICANT TO MAKE SUCH DEMAND AND WITHOUT RECOGNIZING ANY CLAIM OF THE APPLICANT, AGAINST PRESENTATION TO US, BY YOU OR YOUR DULY AUTHORIZED REPRESENTATIVE OR AGENT, OF THE FOLLOWING DOCUMENTS:

1. A SIGHT DRAFT DRAWN ON [Bank's Name and Address of the Branch that the security can be drawn at, usually one of the Bank's larger commercial banking centres]; AND
2. THE ORIGINAL OF THIS IRREVOCABLE LETTER OF CREDIT NO. [Bank's Reference Number] FOR ENDORSEMENT OF PAYMENT THEREON; AND
3. A STATEMENT SIGNED BY AN OFFICIAL OF THE DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT CERTIFYING
 - A) THAT THE SIGNATORY IS AN OFFICIAL OF THE DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT AND HAS THE AUTHORITY TO SIGN THE STATEMENT ON BEHALF OF THE MINISTER OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT (THE "MINISTER"), AND
 - B) EITHER
 - I. THAT THE MINISTER IS ENTITLED TO APPLY THE AMOUNT DRAWN, BEING ALL OR PART OF THE SECURITY POSTED AND MAINTAINED PURSUANT TO [the Water Licence Type and Number] ISSUED BY THE NORTHWEST TERRITORIES WATER BOARD, WHETHER AS ORIGINALLY ISSUED OR AS AMENDED OR RENEWED FROM TIME TO TIME, OR
 - II. THAT THIS CREDIT IS DUE TO EXPIRE IN THIRTY (30) DAYS OR LESS AND THAT THE APPLICANT HAS NOT REPLACED THIS CREDIT BY POSTING WITH THE MINISTER OTHER SECURITY SATISFACTORY TO THE MINISTER.

PARTIAL DRAWING ARE PERMITTED.

NORTHWEST TERRITORIES WATER BOARD

Pursuant to the *Northwest Territories Waters Act* and Regulations the Northwest Territories Water Board, hereinafter referred to as the Board, hereby grants to

AEC WEST LTD.

(Licensee)

3700, 707 - 8 Avenue S.W.

of

CALGARY, ALBERTA T2P 1H5

(Mailing Address)

hereinafter called the Licensee, the right to alter, divert or otherwise use water subject to the restrictions and conditions contained in the *Northwest Territories Waters Act* and Regulations made thereunder and subject to and in accordance with the conditions specified in this Licence.

Licence Number

N7L1-1781

Licence Type

"B"

Water Management Area

NORTHWEST TERRITORIES 07

Location

Mackenzie Delta
Latitude 68°58' to 69°16' N.
Longitude 133°20' to 134°10' W.
NORTHWEST TERRITORIES

Purpose

TO USE WATER AND DISPOSE OF
WASTE FOR INDUSTRIAL
UNDERTAKINGS

Description

SEISMIC PROGRAM

Quantity of Water Not to be Exceeded

100 CUBIC METRES DAILY

Effective Date of Licence

JANUARY 17, 2002

Expiry Date of Licence

DECEMBER 31, 2003

This Licence issued and recorded at Yellowknife includes and is subject to the annexed conditions.

NORTHWEST TERRITORIES WATER BOARD


Witness


Chairman

"Minister" means the Minister of Indian Affairs and Northern Development;

"Modification" means an alteration to a physical work that introduces a new structure or eliminates an existing structure and does not alter the purpose or function of the work, but does not include an expansion;

"Project Description" refers to the report titled "Project Description for the Proposed AEC West Ltd. Kamik 2D Winter 22001/2002 Seismic Program", dated October 2001, prepared by Inuvialuit Environmental and Geotechnical Inc. and additional information dated December 21, 2001, from Inuvialuit Environmental and Geotechnical Inc.

"Regulations" mean Regulations proclaimed pursuant to Section 33 of the *Northwest Territories Waters Act*;

"Sewage" means all toilet waste and greywater;

"Toilet Wastes" mean all human excreta and associated products, but does not include greywater;

"Waste" means waste as defined by Section 2 of the *Northwest Territories Waters Act*; and

"Waters" mean waters as defined by Section 2 of the *Northwest Territories Waters Act*.

PART B: GENERAL CONDITIONS

1. The Licensee shall file a Final Report with the Board not later than March 31st of the year following the calendar year reported which shall contain the following information:
 - a) the total quantity in cubic metres of fresh Water obtained from all sources;
 - b) the total quantities in cubic metres of each and all Waste discharged;
 - c) the results of sampling carried out under the Surveillance Network Program;
 - d) a summary of any modifications carried out on the water supply and waste disposal facilities, including all associated structures;
 - e) a list of spills and unauthorized discharges; and

- f) and other details on water use or waste disposal requested by the Board within forty-five (45) days before the annual report is due.
- 2. The Licensee shall comply with the "Surveillance Network Program" annexed to this Licence, and any amendment to the said "Surveillance Network Program" as may be made from time to time, pursuant to the conditions of this Licence.
- 3. The "Surveillance Network Program" and compliance dates specified in the Licence may be modified at the discretion of the Board.
- 4. The Licensee shall, within thirty (30) days of the issuance of the Licence, post the necessary signs to identify the stations of the "Surveillance Network Program". All postings shall be located and maintained to the satisfaction of an Inspector.
- 5. Meters, devices or other such methods used for measuring the volumes of water used and waste discharged shall be installed, operated and maintained by the Licensee to the satisfaction of an Inspector.
- 6. Within thirty (30) days of issuance of this Licence, 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 One Hundred Fifty Thousand (\$150,000.00) Dollars in a form suitable to the Minister.
- 7. The Licensee shall ensure a copy of this Licence is maintained at the site of operation at all times.

PART C: CONDITIONS APPLYING TO WATER USE

- 1. The Licensee shall obtain Water from the channels of the Mackenzie River as described in the Project Description or as otherwise approved by an Inspector.
- 2. The daily quantity of water used for all purposes shall not exceed 100 cubic metres.

3. The water intake hose used on the water pumps shall be equipped with a screen with a mesh size sufficient to ensure no entrainment of fish.

PART D: CONDITIONS APPLYING TO WASTE DISPOSAL

1. The Licensee shall direct all Greywater to the filtering system as described in the Project Description or as otherwise approved by an Inspector.
2. All Greywater discharged from the filtering system shall be directed to the land surface and/or the surface of the Mackenzie River at a location approved by an Inspector. Any produced sludge shall be disposed of at an approved landfill or as otherwise approved by an Inspector.
3. All Greywater being discharged from the filtering system shall meet the following interim effluent quality requirements:

<u>Sample Parameter</u>	<u>Maximum Average Concentration</u>
BOD ₅	30.0 mg/L
Total Suspended Solids	35.0 mg/L
Oil and Grease	5.0 mg/L

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

4. The Licensee shall ensure that all Toilet Wastes are directed to the electric toilets as described in the Project Description, with the produced inert ash disposed of at an approved landfill site or as otherwise approved by an Inspector.
5. All analyses shall be conducted in accordance with methods prescribed in the current edition of "Standard Methods for the Examination of Water and Wastewater" or by such other methods as may be approved by an Analyst.
6. The Licensee shall dispose of all solid Waste in a manner acceptable to an Inspector.

PART E: CONDITIONS APPLYING TO MODIFICATIONS

1. The Licensee may, without written approval from the Board, carry out Modifications to the planned undertakings provided that such Modifications are consistent with the terms of this Licence and the following requirements are met:
 - a) the Licensee has notified an Inspector in writing of such proposed Modifications at least five (5) days prior to beginning the Modifications;
 - b) such Modifications do not place the Licensee in contravention of either this Licence or the Act;
 - c) an Inspector has not, during the five (5) days following notification of the proposed Modifications, informed the Licensee that review of the proposal will require more than five (5) days; and
 - d) an Inspector has not rejected the proposed Modifications.
2. Modifications for which all of the conditions referred to in Part E, Item 1 have not been met may be carried out only with written approval from an Inspector.
3. The Licensee shall provide to the Board as-built plans and drawings of the modifications referred to in this Licence within ninety (90) days of completion of the modifications.

PART F: CONDITIONS APPLYING TO STREAM AND WATER BODY CROSSINGS

1. The Licensee shall ensure that only clean snow is used on all stream or water body crossings and that no debris is left on the surface of the stream or water body.
2. Stream or water body crossings shall be notched or removed before spring break-up to facilitate natural flow.

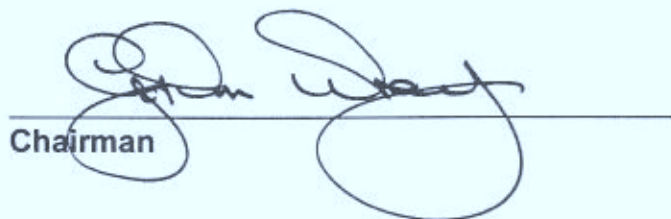
3. The removal of naturally occurring material from the bed or banks of any stream or water body below the ordinary high water mark is not permitted.

PART G: CONDITIONS APPLYING TO CONTINGENCY PLANNING

1. Prior to the commencement of operations, the Licensee shall submit to the Board for approval, a Contingency Plan in accordance with the Board's "Guidelines for Contingency Planning, January 1987", or subsequent edition.
2. If, during the period of this Licence, an unauthorized discharge of waste occurs, or if such a discharge is foreseeable, the Licensee shall:
 - a) report the incident immediately via the 24 Hour Spill Report Line (867) 920-8130; and
 - b) submit to an Inspector a detailed report on each occurrence not later than thirty (30) days after initially reporting the event.

NORTHWEST TERRITORIES WATER BOARD


Witness


Chairman

NORTHWEST TERRITORIES WATER BOARD

LICENSEE: AEC West Ltd.
LICENCE NUMBER: N7L1-1781
EFFECTIVE DATE OF LICENCE: January 17, 2002
EFFECTIVE DATE OF
SURVEILLANCE NETWORK PROGRAM: January 17, 2002

SURVEILLANCE NETWORK PROGRAM

A. Location of Sampling Stations

<u>Station Number</u>	<u>Description</u>
1781-1	Treated Greywater at the Point of Discharge

B. Sampling and Analysis Requirements

1. Water at Station Number 1781-1, shall be sampled every two weeks, and analysed for the following parameters:

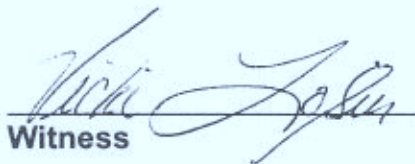
BOD ₅	Total Suspended Solids
Oil and Grease	Faecal Coliforms
Ammonia	pH
Phosphorous	

2. More frequent sample collection maybe required at the request of an Inspector.
3. All sampling, sample preservation, and analyses shall be conducted in accordance with methods prescribed in the current edition of "Standard Methods for the Examination of Water and Wastewater", or by such other methods approved by an Analyst.
4. All analyses shall be performed in a laboratory approved by an Analyst.
5. The Licensee shall, by February 28, 2002, submit to an Analyst for approval a Quality Assurance/Quality Control Plan.
6. The Plan referred to in Part B, Item 5 shall be implemented as approved by an Analyst.

C. Reports

1. The Licensee shall, within thirty (30) days following the month being reported, submit to the Board all data and information required by the "Surveillance Network Program" including the results of the approved Quality Assurance Plan.

NORTHWEST TERRITORIES WATER BOARD


Witness


Chairman