



# ENVIRONMENTAL IMPACT SCREENING COMMITTEE

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FAXED

10 December 2001

Submission Number: 11/01-01

**John Duckett**

Senior Engineer and Project Manager  
Western Region, AEC West Ltd.  
3700 - 707 8th Ave. SW  
Calgary AB T2P 1H5



Mr. Duckett:

**RE: AEC West Ltd. (Duckett), Kamik 2D Winter 2001/2002 Seismic Program**

During a meeting held 3-5 December 2001, the Environmental Impact Screening Committee (EISC) screened the above-noted project description. Based on the information provided, the EISC decided that the development will have no significant negative impact on the environment or Inuvialuit wildlife harvesting in the Inuvialuit Settlement Region [IFA Section 11.(13)(a)]. A copy of the decision has been attached.

Subject to a final decision by the licensing or permitting authority, the issuance of appropriate permits and approvals may proceed.

On 8 November 2001 the Inuvialuit Land Administration requested that the Environmental Impact Screening Committee conduct an environmental screening of the above-noted development pursuant to subsection 11.(1)(c) of the *Inuvialuit Final Agreement*. Therefore the EISC's decision pertains to those portions of the development located on both crown and private lands within the Inuvialuit Settlement Region.

In rendering its decision, the EISC held the following assumptions:

- AEC West Ltd. is committed to carrying out the mitigative measures listed in Table 18 of its project description and that all on-site workers will be made aware of those mitigative measures.
- The company will not use dynamite in its seismic program and will be finished shooting the program by 7-10 March 2001 as described during discussions with the EISC in Inuvik on 4 December 2001.
- There will not be any mechanized clearing of bush within 100 metres of streams or lakes in the program area.

- Proper mitigative measures will be carried out to prevent disturbance to the archaeological site TLU5, given that the project description indicates that the site may be impacted by the seismic program (page 92).

Comments on your proposed program were submitted to the EISC by several groups. They are being forwarded to you for your consideration. We note that you have received some of the letters already. However, they have been attached for the benefit of those copied on this letter.

Please contact me if you have any questions.

Regards,



Linda Graf  
Secretary

cc: Hans Arends, ILA, Tuktoyaktuk  
Dennis Arey, Aklavik HTC  
Terry Baker, National Energy Board, Calgary  
Richard Binder, Inuvik HTC  
Greg Cook, Water Resources, DIAND, Yellowknife  
Frank Pokiak, Tuktoyaktuk HTC  
Gordon Wray, N.W.T. Water Board, Yellowknife

Encl. (7) EISC Decision  
Letter from Tuktoyaktuk HTC, Dated 20 November 2001  
Letter from FJMC, Dated 28 November 2001  
Letter from the Inuvik HTC, Dated 29 November 2001  
Letter from Environment Canada, Dated 30 November 2001  
Letter from DFO, Dated 4 December 2001  
Letter from PWNHC, Dated 5 December 2001



**ENVIRONMENTAL IMPACT SCREENING COMMITTEE**

**SUBMISSION NUMBER: 11/01-01**

**NAME OF PROPONENT:** AEC West Ltd., John Duckett

**PROJECT DESCRIPTION:** *Kamik 2D Winter 2001/2002 Seismic Program*

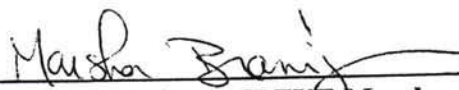
**DECISION OF THE SCREENING PANEL (circled):**

1. The development will have no such significant negative impact and may proceed without further environmental impact assessment and review under the Inuvialuit Final Agreement. [IFA s. 11. (13) (a)]
2. The development could have significant negative environmental impact and is subject to assessment and review under the Inuvialuit Final Agreement. [IFA s. 11. (13) (b)]
3. The development proposal has deficiencies of a nature that warrant a termination of its consideration and the submission of another project description. [IFA s. 11. (13) (c)]

Signed on the 4<sup>th</sup> day of DECEMBER, 2001.

  
\_\_\_\_\_  
William Klassen, Chair

  
\_\_\_\_\_  
Johnny Lennie, Canada Member

  
\_\_\_\_\_  
Marsha Branigan, GNWT Member

\_\_\_\_\_  
Chuck Hubert, YTG Member

\_\_\_\_\_  
Billy Day, Inuvialuit Member

  
\_\_\_\_\_  
Alex Kaglik, Inuvialuit Member

  
\_\_\_\_\_  
Fred Wolki, Inuvialuit Member

*Tuktoyaktuk Hunters & Trappers Committee*



P.O. Box 286, Tuktoyaktuk, N.W.T. X0E 1C0 • Phone (867) 977-2457 • Fax (867) 977-2433

November 20, 2001

Linda Graf, Secretary  
Environmental Impact Screening Committee  
Box 2120  
Inuvik, NWT X0E 0T0

Dear Linda:

RE: AEC West Ltd. - Kamik 2D Winter 2001/2002 Seismic Program  
Anadarko Canada Corporation, Immerk Winter 2001/2002 2D Seismic Program

The Tuktoyaktuk Hunters and Trappers Committee held a consultation meeting with representatives from AEC West Ltd. and Anadarko Canada Corporation on October 18, 2001 to discuss the project descriptions for seismic work. The following are concerns raised by the Board:

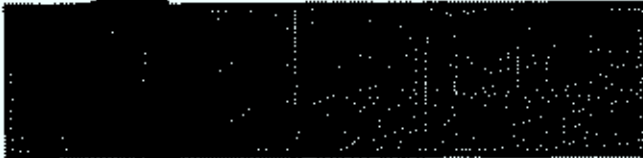
- signs to be erected for access roads (safety reasons)
- do not disturb any archeological sites that may be in the area
- wildlife and environmental monitors must be hired for the duration of the project, keep in mind that these positions must remain separate

If you have any further questions please do not hesitate to call our office at 977-2457.

Sincerely,

Frank Pokiak  
Chairman

cc Inuvialuit Land Administration  
Tuktoyaktuk Community Corporation  
Tuktoyaktuk Elders Committee  
Inuvialuit Game Council



**FISHERIES JOINT  
MANAGEMENT COMMITTEE**

Joint Secretariat – Inuvialuit Renewable Resource Committees  
Box 2120, Inuvik, NT, X0E 0T0  
Tel: 867.777.2828 Fax: 867.777.2610 Email: fjmc@jointsec.nt.ca

November 28, 2001

Bill Klassen, Chair  
Environmental Impact Screening Committee  
Box 2120  
Inuvik, NT  
X0E 0T0

Dear Mr. Klassen:

**Re: Comments on 2001/02 Industry Submissions before EISC December 2001**

During our last regular meeting and community tour (November 19-23, 2001), the Fisheries Joint Management Committee had the opportunity to discuss 2 industry proposals before EISC in early December. This letter contains our comments and concerns on these submissions<sup>1</sup>.

While this Committee has no specific concerns about these proposals, we hope that the various federal (DFO, INAC) and regional agencies (ILA) with responsibilities to inspect oil & gas operations in the Beaufort-Delta will be out on the land in full force this winter to ensure industry compliance with commitments made in these submissions and the multitude of others this Committee has commented on over the past few months.

On behalf of the Committee, thank you for giving the FJMC this opportunity to comment on these proposals before EISC.

Sincerely,

Robert K. Bell  
Chairman

cc: Ron Allen, DFO; Redmond Clarke, DFO; Rudy Cockney, INAC; Robert Hornal, EIRB;  
Duane Smith, IGC; Norm Snow, JS; Peter Cott, DFO; Hans Arends, ILA

<sup>1</sup> AEC West Ltd- Kamik 2D Winter 2001/02 Seismic Program; Anadarko Canada Corporation- Inuvik Winter 2001/02 2D Seismic Program.

RECEIVED  
DEC 03 2001



EISC  
P.O. Box 2120  
Inuvik N.T.  
XOE-OTO

November 29, 2001

Re: AEC West Ltd. Kamik 2D winter 2001/2002 Seismic Program

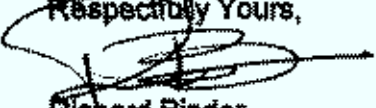
Dear Linda,

We received the above noted project description. There are a number of issues raised resulting from programs that were conducted last year, that still apply, those are;

- : To ensure that there is sufficient ice to prevent vehicles from going through the ice, to avoid potential negative impacts to fish, habitats and water quality.
- : A number of our people use various travel routes (portages) through out the delta, and surrounding areas. If the program right of way or travel route crosses over these, the banks should be cleared so that it does not create a problem for people who rely on these routes to get from one place to another.
- : Company equipment (included contractors) should stay on the right of way. We have received a number of reports of equipment traveling all over the place. This was evident when we flew over some other programs last summer. We realize that there may not be any long-term impacts, however they should minimize this by staying on their right-of-way. In some classes it may be unavoidable.
- : The banks of rivers, lakes and coastal regions are very vulnerable to slumpage and erosion. Approached should be constructed to avoid any negative impacts to these areas.
- : On a final note, wildlife monitor must be hired for all projects. The HTC's have the mandate to supply these monitors.

If you have any questions in regards to any of the above, please give us a call at (867) 777-3671

Respectfully Yours,

  
Richard Binder

C/c  
Tuk HTC  
Aklavik HTC  
Sachs HTC  
Paulatuk HTC  
Holman HTC  
IGC  
IRC  
ILA  
AEC West  
DIAND Inuvik



Environment Environnement  
Canada Canada

Environmental Protection Branch  
5204 - 50<sup>th</sup> Avenue  
Suite 301  
Yellowknife, NT X1A 1E2

30 November, 2001

Our File: 4709 002 027

Environmental Impact Screening Committee  
P. O. Box 2120  
Inuvik, NT  
X0E 0T0

BY Facsimile: 867-777-2610

Attention: Linda Graf

Re: AEC West Ltd. (Duckett), Kamik 2D Winter 2001/2002 Seismic Program.

Environment Canada's contribution to your request for specialist advice is based primarily on the mandated responsibilities of Section 36(3) of the *Fisheries Act*, the *Canadian Environmental Protection Act (CEPA)* and the *Migratory Birds Convention Act*.

AEC West Ltd., a division of Alberta Energy Company, is proposing to conduct a 2D seismic program north of the North Storm Hills region and south of Kugamallit Bay and known as the, Kamik 2D winter 2001/2002 seismic program. The program consists of five seismic lines with tracked vibroseis equipment used as the primary energy source. Dynamite is to be used on larger water bodies where data cannot be collected using the vibroseis method. The charges will be placed in drilled holes using a casing drilling rig and placed in accordance with DFO guidelines and offset distances. A sleigh-mounted camp, which will house approximately 65 people will be utilized.

Fuel storage for the sleigh camp will consist of six individual sleighs, each holding two, 7560 litre tanks of diesel fuel and two additional sleighs, each carrying, 1890 litre tanks of gasoline. All tanks for the fuel camp will have secondary containment with spill-proof fueling mechanisms.

The sleigh camp is equipped with electric toilets that eliminate sewage waste through incineration. The resulting ash which is inert will be disposed at an approved landfill site. Grey water, that includes only shower water, wash water, and kitchen water, will be filtered and discharged to the surface.

#### Comments and Recommendations

- Meeting the requirements of the *Federal Fisheries Act* is mandatory, irrespective of any provincial regulatory or permitting system. Section 36 of the *Fisheries Act* specifies that unless authorised by federal regulation, no person shall deposit or permit the deposit of deleterious substances of any type in water frequented by fish, or in any place under any conditions where the deleterious substance, or any other deleterious substance that results from the deposit of the deleterious substance, may enter any such water.
- The proponents Fuel and Oil Spill Contingency Plan Northwest Territories, Fuel Delivery and Transfer Description, Appendix B; page 4, states: "Each fuel supply vehicle or bowser should be equipped with spill kits containing a 30 or 40 gallon container, sorbent, non-sparking shovels, personal protective equipment and a spill response pocket guide." EC recommends that each fuel supply vehicle or bowser, will be equipped with an adequate spill kit to contain spills and that drip pans be used at all fuel transfer sites when transferring fuel.

The proponent shall ensure that any chemicals, fuel or wastes associated with the proposed project do not enter waters frequented by fish.

- Sediment shall not be deposited in any definable waterbody. Bank disturbances must be minimized, and all disturbed areas



stabilized upon completion of the project. Suitable erosion control measures shall be implemented at all crossings.

- The proponents Spill Contingency Plan should also include, a copy of the NWT-24 Hour Spill Line Reporting Form.
- Environment Canada understands that cumulative effects is a very difficult concept for Proponents and Reviewers alike to comment and reach consensus on. Environment Canada recognizes that AEC West Ltd. is cognizant of potential cumulative impacts, however their determination that residual cumulative effects from this project are predicted to be low in magnitude and local in extent is open to challenge. Without having a strategy for implementing the proposed Northwest Territories wide Cumulative Effects Assessment and Management Framework (CEAMF), predicting the actual cumulative environmental impacts will remain to be subjective. Without thresholds and appropriate indicator species identified, the determination of significance in cumulative effects assessment will continue to be a challenge. Environment Canada is encouraged to see that EIRB and EISC are working in cooperation with Kavik Axys Ltd. in preparing guidelines for quantitatively assessing cumulative effects, as well as conducting a workshop to provide guidance on the application of the guidelines. However, Environment Canada encourages all proponents to participate in completing the development of the CEAMF, so that all of those involved will have greater certainty and clarity in conducting good environmental assessments.
- EPB shall be advised of any material changes to plans or operations associated with this project.

Please do not hesitate to contact me at (867) 669-4744 or ron.bujold@ec.gc.ca with any questions or comments.

Yours truly,



Ron Bujold  
Aquatic Environmental Technician

- Steve Harbicht (Head, Assessment & Monitoring, EPB)
- Paula Pacholek (Coordinator, A&M, EPB)

Fisheries  
and OceansPêches  
et OcéansFish Habitat Management  
P.O. Box 1871  
Inuvik, Northwest Territories  
X0E 0T0Your file *Votre référence*Our file *Notre référence*

SC01083

December 4, 2001

AEC West Ltd.  
3900, 421-7<sup>th</sup> Avenue S.W.  
Calgary, AB  
T2P 4K9Attention: John Duckett**RE: AEC West Ltd. Kamik 2D Winter 2001/2002 Seismic Program - DFO  
Letter of Advice**

Dear Mr. Duckett:

The Department of Fisheries and Oceans, Fish Habitat Management – Western Arctic Area (DFO) received the project description for the proposed AEC West Ltd. Kamik 2D seismic program. This letter is to advise that I have reviewed the proposal and am providing the following comments on behalf of DFO.

It is my understanding from the information provided that:

- The program will entail the 2D seismic exploration totalling approximately 133 km.
- Specialized casing drill technology will be used to conduct seismic in all waterbodies greater than 400 m in width. The remainder of the program will be conducted using vibroseis (which is a non-explosive technique).
- No surmps are associated with any of the camps.

Since the proposed seismic work will occur on and/or near waterbodies, I have concluded that the proposed work may result in the harmful alteration, disruption or destruction of fish habitat. The following mitigation measures, if implemented, should prevent any potentially harmful impacts to fish and fish habitat. This list includes measures outlined in the proposal.

- **The use of explosives within waterbodies that do not have bottom fast ice should be avoided if possible.**
- **Prior to any seismic activity taking place in waterbodies not frozen to the bottom and where dynamite is to be used as the energy source, DFO must be satisfied that all conditions specified in the June 13, 2001 DFO letter (attached for your convenience) have been met.**

SC01083

- All charges deployed under waterbodies not completely frozen to the bottom should be buried a minimum setback of 15 m below the lakebed. (The set back shall be measured from the start of the consolidated material layer below the lakebed to the top of the buried charge). Please note that it states on page 12 of the proposal that:

*"...drillers will be instructed to attain a minimum depth of 9 m below the consolidated material or hardpan at the bottom of the waterbody, or as otherwise agreed to with DFO."*

It is the position of DFO that a 9 m burial depth for charges below lakes not frozen to the bottom is insufficient and a minimum setback of 15 m is required.

- Only charges of 2 kg or less shall be used in waterbodies not completely frozen to the bottom.
- Access routes should follow existing trails, winter roads or cut lines where possible to minimize unnecessary clearing of vegetation and soil compaction. Vegetation is critical for the protection of littoral and riparian fish habitats since it provides cover and enhances bank stability. DFO is pleased to hear that access routes will be used co-operatively between AEC West Ltd. and Conoco for their adjoining programs, avoiding unnecessary surface disturbance.
- Mechanized clearing should not occur within 100 metres of any stream or lake to protect bank stability, avoid soil compaction and retain riparian vegetation.
- If winter road construction, camp use, etc. requires water in sufficient volume that the source waterbody may be drawn down, please submit details (volume required, size of waterbody, etc.) to DFO for review. It states on page 16 of the proposal that :

*"Utility water for the sleigh camp will be obtained...from local lakes or streams as required."*

DFO does not recommend the use of streams and small or shallow lakes as a water source.

- Water intakes should be properly screened with fine mesh to prevent the entrainment of fish. Please refer to the *Freshwater Intake End-of-Pipe Fish Screen Guideline* (DFO, 1995) available upon request.
- "Mushroom shoes" or "boots" on the blades of vehicles, such as a loader, are recommended as a protective measure to minimize ground disturbance and erosion.
- Cutting of crossing approaches should not be conducted unless approved in writing by DFO. The preferred method for crossings to avoid bank cutting is with the construction of snow ramps.

*Note: The use of material other than ice or snow to construct a temporary crossing-over of any ice-covered stream is prohibited under Section 11 of the Northwest Territories Fishery Regulations, unless authorized by a Fishery Officer.*

- Winter crossings should not impede water flow and should be v-notched or otherwise removed prior to spring break-up.
- Reclamation activities should include bank stabilization and re-vegetation as required. This work should be completed prior to spring thaw.

Depositing deleterious substances into fish bearing waters is prohibited as stated under subsection 36(3) of the *Fisheries Act*. The following additional mitigation measures are intended to prevent the deposition of deleterious substances and possible habitat disturbance or loss:

- All activities including maintenance procedures and vehicular refuelling should be controlled to prevent the entry of petroleum products, debris, slash, rubble, or other deleterious substances into the water.
- All wastes, drill cuttings, sewage and wastewater containments, should be located a minimum of 100 metres from any water body if possible, and be sufficiently burned or otherwise contained to ensure that these substances do not enter any waterbody.
- Fuel storage should have secondary containment (such as doubled walled tanks, berms etc.) that is sufficient to ensure that fuel will not be able to enter any waterbody.
- No material should be left on the ice when there is the potential for that material to enter the water (i.e. spring break-up).
- A spill contingency plan should be made available to all persons required to work on site and followed in the event of a spill.
- All spills of oil, fuel, or other deleterious material should be reported immediately to the 24-Hour Spill Line at (867) 920-8130 as well as the National Energy Board as per their regulatory provisions.

If the proposed work is carried out as described in the plans provided to DFO and mitigation measures are implemented as required, the proposed work will not be considered as contravening subsection 35(1) of the *Fisheries Act* which reads:

*"No person shall carry on any work or undertaking that results in the harmful alteration, disruption or destruction of fish habitat."*

Therefore, an Authorization under subsection 35(2) of the *Fisheries Act* will not be necessary. If the harmful alteration, disruption or destruction of fish habitat and/or the deposition of deleterious substances into fish bearing waters occurs as a result of an unapproved change in the plans for the proposed works or failure to implement the necessary mitigative measures, prosecution under subsection 35(1) and/or subsection 36(3) of the *Fisheries Act* may be initiated.

**However, as previously stated all conditions contained in the June 13, 2001 DFO letter must be met to DFO's satisfaction prior to the approval of any seismic activity taking place in waterbodies that are not frozen to the bottom and where dynamite is to be used as the energy source.**

Please note that this Letter of Advice does not release the proponent of the responsibility for obtaining any permits that may be required.

**This Letter of Advice should be kept on site during any work in or around water and be understood by staff working at the site.**

If you have any questions, please contact Pete Cott at (867) 777-7520 or me at (867) 777-7521 or by fax at (867) 777-7501.



Kathleen Barron  
Habitat Biologist  
Fish Habitat Management  
Department of Fisheries and Oceans- Western Arctic

Attached: June 13, 2001 letter regarding DFO conditions for seismic on waterbodies.

Copy: Pete Cott, Area Habitat Biologist - DFO  
Bruce Hanna, Habitat Biologist-DFO  
Mark Simms, Fishery Officer- DFO  
Linda Graf - Environmental Impact Screening Committee  
Brian Collins- DIAND, Water Resources  
R.A. Cockney- DIAND, Land Administration  
Ed McLean - Fisheries Joint Management Committee  
Hans Arends - Inuvialuit Land Administration  
John Korec - National Energy Board

REC' 5 Dec 2001



Northwest  
Territories Education, Culture and Employment

201-24

December 5, 2001

Ms. Linda Graf

Environmental Impact Screening Committee

BY FAX 867-777-2610

P.O. Box 2120

Inuvik, NT X0E 0T0

Re: AEC West Ltd., Kamik 2D Winter 2001/2002 Seismic Program, (11/01-01)

We have reviewed the document and note that numerous archaeological sites have been recorded within, or near the development zone. Indeed, according to the Project Description prepared by Inuvialuit Environmental and Geotechnical Inc. (IEG), at least two sites have been identified as being in threat of direct impact from the project activities. Based on information currently available we strongly recommend that the following conditions be attached the permit:

- that the two locations (identified in the Project Description as NhTs-9 and TLU 5) be flagged on the ground, and avoided by at least 30 metres. Flagging the sites will require the services of a qualified archaeologist holding a valid NWT Archaeologists Permit;
- following completion of the work the flags must be removed;
- that the proponent be directed to remain at least 30 metres from the boundaries of all known archaeological sites in the vicinity of their work;
- that the proponent be urged to proceed with caution in all operations as the area exhibits a high potential for locating new archaeological sites;
- that the proponent be directed to conduct a follow-up study next summer to assess potential impacts to heritage resources as a result of this winter's activities.

We are aware that an extensive archaeological inventory program, coordinated by IEG, took place this summer in the region, and some results from this have been presented in the application, though we have not seen the complete archaeological research report. The archaeologist (Don Hanna) under contract to IEG worked in the area this past



summer and currently holds a valid permit, and consequently would be able to undertake the work without further approval from our office.

Sincerely,



Barbara Cameron  
Acting Director  
Culture, Heritage and Languages Division

Prince of Wales Northern Heritage Centre

cc. Hans Arends, ILA, (Fax: 977-2467)