

(b) Letter from the Agent of Ireland to the Registrar of the Tribunal dated 21 November 2001 responding to questions from the Tribunal



**An Priomb-Aturnae Stáit**  
**THE CHIEF STATE SOLICITOR**

Osmond House, Little Ship Street, Dublin 8  
Tel: 01-4176100 Fax: 01-4176299

21 NOV 2001  
14:35 *AE*

Philippe Gautier  
Registrar  
International Tribunal for the Law of the Sea  
Am internationalen Seegerichtshof 1  
22609 Hamburg  
Germany

21 November 2001

Dear Registrar:

**Ireland v United Kingdom:**  
**Response to the Tribunal's Written Questions**

Ireland is pleased to provide responses to the questions of the International Tribunal as follows:

1. It will be clear from the pleadings and Ireland's oral statements that it has been considering various potential courses of action in relation to different aspects of the MOX authorisation process. One such option has been the possibility of submitting a complaint to the European Commission relating to Directive 96/29/EURATOM. This Directive requires that every new practice which will produce ionising radiation must be 'economically justified' by the national authorities. This involves weighing the economic benefits against the costs. Ireland is concerned about the United Kingdom's decision to exclude all of the capital costs of the MOX plant - £470 million - from the justification exercise. This decision was challenged by two non-governmental organisations, Greenpeace and Friends of the Earth, in judicial review proceedings in the English courts. Annex 15 to the United Kingdom's Response sets out the judgment of the High Court of 15 November 2001, which decided that the exclusion of capital costs was compatible with Directive 96/29/EURATOM. This judgment is currently under appeal. Ireland is noting developments in the English proceedings. Ireland has not decided what, if any, action it will take in relation to European law.
2. References to relevant articles and two reports are set out at the Annex hereto. One of the reports is enclosed. The highlighted date in this report confirms that in the mid-1990s, in terms of Caesium-137 levels in seawater, the Irish Sea was more radioactively contaminated than the following bodies of water: the Antarctic, Pacific, Indian, Atlantic, and Arctic Oceans, the English Channel, and the Mediterranean and Baltic Seas. Copies of the articles and the other report are being obtained and will be delivered to the Tribunal by 5 p.m. on Thursday 22<sup>nd</sup> November.

3. Ireland is not in a position to supply detailed information about transports by sea of radioactive materials to and from Sellafield facilities, as the United Kingdom has declined to provide information. However, Ireland understands that there would be a significant increase arising from the commissioning of the MOX plant, due to transports to the THORP plant and then from the MOX plant. Information relating to the number and timing of transports has been excised from the public versions of the PA and ADL Reports commissioned by the United Kingdom, upon which the public consultations on the MOX plant were based.

In this regard Ireland wishes to address a point made by Counsel for the United Kingdom (Richard Plender QC) in his closing address. He stated that:

'Since the MOX plant will make use of derivatives from the THORP plant, it might be possible to say that shipments to the THORP plant are shipments associated with the MOX plant. It was precisely to avoid such ambiguity that the Attorney General, while of course now and again using terms such as 'related' and 'associated', took care to speak of transports arising from the commissioning of the MOX plant. It was to the latter that he was referring, as, I hope, was perfectly clear when he spoke. He was not talking of shipments to or from the THORP plant.

You have also heard a certain amount about the falsification of data incident at the MOX demonstration facility. It is a matter of public knowledge that the MOX fuel, which was the subject of that incident, is to be returned. It will not be returned to the MOX plant but to a storage pool. It is presently not anticipated that this will be returned until some time late next year... There will be no export of MOX fuel from the plant until summer 2002. There is to be no import to the THORP plant of spent nuclear fuel for conversion to the MOX plant within that period either... I have been told this afternoon that if one were to read the word 'October' for 'summer' that would give acceptable greater precision.' [Verbatim record of the proceedings, Tuesday 20 November 2001 at 15.15, page 26, lines 13-38.]

The fuel involved in the MOX falsification scandal, supplied to the Japanese customer, is due to be returned to BNFL. The ADL Report confirms that this is one of the five conditions imposed by the Japanese customers for the restart of the Japanese MOX programme [ADL Report, pages 14-15]. Ireland here attaches a number of documents that are relevant to clarifying the situation. The Director of the Office of Non-proliferation Policy in the United States Department of Energy has confirmed that:

'Upon its return to British Nuclear Fuels, the material will be stored in an approved facility pending recovery of the plutonium contained in the unirradiated fuel assemblies. The recovered plutonium will be returned to Japan in the form of fresh MOX fuel assemblies.'

This makes it clear that, although manufactured at the Mox Demonstration Facility, where the falsification scandal occurred, and although it will initially be stored on its return to Sellafield, the fuel will then be reprocessed at the THORP facility to remove the plutonium, and that plutonium will go into the plutonium store. From there, plutonium may be transferred to the MOX plant (once it has been commissioned) in which it will be used to make new MOX pellets. The MOX pellets will then be returned to Japan in the form of fresh MOX fuel assemblies. A letter signed by the Minister of the Mission of Japan to the European Union, states that this shipment will take place 'in the course of April through December 2002'. Given that the returned fuel will be used in the MOX plant, Ireland considers that this constitutes a transport associated with the expected commissioning of the MOX plant, and that it may occur as early as April 2002.

Finally, Ireland wishes to note that Counsel for the United Kingdom omitted to note, no doubt by reason time constraints, that the NIREX development was to be located at a site known as Longlands Farm, which is located approximately 1 mile from the Sellafield site. A map is attached for the Tribunal's information.

Yours sincerely,



David J O'Hagan  
Chief State Solicitor

- Annex 1: Irish Sea References (list)

ANNEX 1

21 NOV 2001

Irish Sea References

1. House of Commons

First report from the Environment Committee, Session 1985-86. Radioactive Waste. Vol 1 report together with the proceedings of the committee relating to the Report. HMSO (1986)

2. Mitchell, PI. Condren, L. Leon Vintro, L. McMahon, CA.

Trends in plutonium, americium and radiocaesium accumulation and long-term bioavailability in the western Irish Sea mud basin. **Journal of Environmental Radioactivity** 44 (1999) 223-251.

3. Leonard, KS. McCubbin, P. Blowers, P. Taylor, BR.

Dissolved plutonium and americium in surface waters of the Irish Sea, 1973-1996. **Journal of Environmental Radioactivity** 44 (1999), 129-158.

4. Kershaw, PL. Denoon, DC. Woodhead, DS

Observations on the redistribution of plutonium and americium in the Irish Sea sediments, 1979 to 1996: concentrations and inventories. **Journal of Environmental Radioactivity** 44 (1999), 191-221.

5. MacKenzie, AB. Cook, GT. Mc Donald, P.

Radionuclide distributions and particle size associations in the Irish Sea surface sediments: implications for actinide dispersion.

**Journal of Environmental Radioactivity** 44 (1999) 275-296

6. Hunt, GJ

Transfer across the human gut of environmental plutonium, americium, cobalt, caesium and technetium: studies with cockles (*Cerastoderma edule*) from the Irish Sea.

**J. Radiological Protection** 1998 Vol. 18 No 2 101-109

7. Swift DJ, Nicholson, MD.

Variability in the edible fraction content of  $^{60}\text{Co}$ ,  $^{99}\text{Tc}$ ,  $^{110\text{m}}\text{Ag}$ ,  $^{137}\text{Cs}$  and  $^{241}\text{Am}$  between individual crabs and lobsters from Sellafield (north eastern Irish Sea)

**Journal of Environmental Radioactivity** 54 (2001) 311-326

8. McAulay, IR, Doyle, C.

Radiocaesium levels in Irish Sea fish and the resulting dose to the population of the Irish Republic

**Health Physics** Vol 48 (3), 333-337. 1985

9. Leonard, KS., McCubbin, D., McMahon, CA, Mitchell, PI.,  
Bonfield, R.

$^{137}\text{Cs}/^{87}\text{Sr}$  Ratios in the Irish Sea and adjacent waters: a source term for the Arctic Radiation Protection Dosimetry Vol 75 No 1-4, 207-212 (1998)

10. Ryan, TP., Long, S., Smith, V., Dowdall, AM., Pollard, D., Cunningham, JD.

*Plutonium-241 and Its Progeny in Sellafield Discharges to the Irish sea and Their Impact on the Irish Environment.* In **Radiation Research Volume 2: Proceedings of the Eleventh International Congress of Radiation research, Dublin, Ireland July 18-23, 1999.** Edited by Moriarty, M. et al. (2000).

- Annex 2: Copy of letter from the US Department of Energy to the US Nuclear Regulatory Commission, with three attachments

ANNEX 2



Department of Energy  
National Nuclear Security Administration  
Washington, DC 20585

ATTACHMENT 1


Mr. Ronald D. Hauber  
Office of International Programs  
Nuclear Regulatory Commission  
Washington, DC 20555

Dear Mr. Hauber:

This subsequent arrangement concerns the retransfer of eight unirradiated mixed-oxide (MOX) fuel assemblies containing 3,459,377 g of U S -origin uranium (9,879 g U-235); and 255,966 g plutonium from the Kansai Electric Power Co., Inc. to the Euratom Supply Agency. The material which is currently located at the Takahama Nuclear Power Station Unit 4, Japan, is being returned to British Nuclear Fuels PLC, United Kingdom, because it cannot be utilized as originally intended. Upon its return to British Nuclear Fuels, the material will be stored in an approved facility pending recovery of the plutonium contained in the unirradiated fuel assemblies. The recovered plutonium will be returned to Japan in the form of fresh MOX fuel assemblies.

I would appreciate your concurrence as soon as possible. If you have any questions, please contact Stan Gehlbart of my staff at (202) 586-3806, or fax me at (202) 586-6789. Thank you.

Sincerely,

  
Trisha DeHill  
Director  
Office of Nonproliferation Policy

BILLING CODE 6450-01-P

DEPARTMENT OF ENERGY  
Office of Arms Control and Nonproliferation

PROPOSED SUBSEQUENT ARRANGEMENT

AGENCY: DEPARTMENT OF ENERGY

ACTION: SUBSEQUENT ARRANGEMENT

**SUMMARY:** This notice has been issued under the authority of Section 131 of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2160). The Department is providing notice of a proposed "subsequent arrangement" under the Agreement for Cooperation Between the United States and Japan Concerning Peaceful Uses of Nuclear Energy and the Agreement for Cooperation in the Peaceful Uses of Nuclear Energy between the United States and the European Atomic Energy Community (EURATOM).

This subsequent arrangement concerns the retransfer of eight unirradiated mixed-oxide (MOX) fuel assemblies, containing 3,439,377 g of U.S.-origin uranium (9,879 g U-235) and 255,086 g plutonium, from the Kansai Electric Power Co., Inc. to the Euratom Supply Agency. The material, which is currently located at the Takahama Nuclear Power Station Unit 4, Japan, is being returned to British Nuclear Fuels PLC, United Kingdom, because it cannot be utilized as originally intended. Upon its return to British Nuclear Fuels, the material will be stored in an approved facility pending recovery of the plutonium contained in the unirradiated fuel assemblies. The recovered plutonium will be returned to Japan in the form of fresh MOX fuel assemblies.

In accordance with Section 131 of the Atomic Energy Act of 1954, as amended, we have determined that this subsequent arrangement is not inimical to the common defense and security.

This subsequent arrangement will take effect no sooner than fifteen days after the date of publication of this notice, and after fifteen days of continuous session of the Congress, beginning the day after the date on which the reports required under Section 131 of the Atomic Energy Act, as amended, are submitted to the Committee on Foreign Affairs of the House of Representatives and the Committee on Foreign Relations of the Senate. The two time periods referred to above may run concurrently.



DATED:  
For the Department of Energy

Trisha Dedik  
Director  
Office of Nonproliferation Policy

MB#10

Number

APPROVAL FOR RETRANSFER OF SPECIAL NUCLEAR MATERIAL  
OF UNITED STATES ORIGIN

The material of the United States Department of Energy is hereby transferred to the transferee

from The Government of Japan (for Kansai Electric Power Co., Inc.)  
(Transferor)

to Eurom Supply Agency (for British Nuclear Fuels plc)  
(Transferee)

of the United States supplied special nuclear material in the quantity and meeting the specifications described below (hereinafter called "specified material") which the transferor obtained pursuant to its Agreement for Cooperation for Civil Uses with the United States Government. Material was originally obtained by transferor from the U.S. Department of Energy, under Contract or Order Number AT(49-14)UES/JA2 and AT(49-14)UES/JA6 and Export License Number \_\_\_\_\_.

SPECIFIED MATERIAL

(Fill in where applicable)

Fuel Type	Number	Total U or Pu (in Grams)	U-233, U235 (in Grams)	Isotopic Percent U233, U235 or Pu (%)
Mixture of Uranium and Plutonium Oxides, PWR Type	8 Assemblies	U 3,439,377 Pu 255,086	9,879	About 6.96

The specified material, in the form of unirradiated MOX fuel assemblies, now located at Takahama Nuclear Power Station Unit No.4, Japan is being returned to the United Kingdom as it can not be utilised in the Nuclear Power Station as originally intended due to problems with the quality control data. It will upon approval hereby by the United States Department of Energy be transferred in the course of April through December 2002 for use at British Nuclear

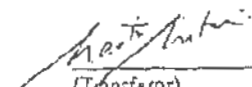
Fuels plc, the United Kingdom, and will be accepted for the following specified purpose:

Storage in an approved facility in the UK pending recovery of the plutonium contained in the unirradiated fuel assemblies. Return of the recovered plutonium to Japan in the form of fresh MOX fuel assemblies.

The transferor, with the concurrence of the transferee, will notify within 30 days after the aforesaid date the U.S. Department of Energy of the actual date and quantity of material transferred. It is agreed by the transferor and transferee that as of that date the specified material will cease to be subject to the Agreement for Cooperation and contract indicated above and will be subject to the transferee's Agreement for Cooperation for Civil Uses with the United States Government.

The Government of Japan

The Euratom Supply Agency

	July 11, 2001		
_____ (Transferor)	_____ (Date)	_____ (Transferee)	_____ (Date)
Mission of Japan to the European Union			
Naoto Nishikawa			
Minister			

Above requested transfer under Article \_\_\_\_ of Transferee's Agreement for Cooperation for Civil Uses with the United States Government approved, provided physical transfer is consummated by

\_\_\_\_\_  
(For the United States Department of Energy) (Date)



EUROPEAN COMMISSION  
DIRECTORATE-GENERAL FOR ENERGY AND TRANSPORT  
EURATOM SAFEGUARDS OFFICE  
Accounting and Auditing

EURATOM RESTRICTED

ESO-3/IB/DC-mf-E/32/1135/01

20. 7. 01

Annex I-b

AGREEMENT FOR CO-OPERATION IN THE PEACEFUL USES OF NUCLEAR  
ENERGY BETWEEN EURATOM AND THE UNITED STATES OF AMERICA

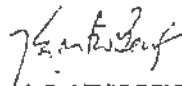
To:	US Department of Energy NN-43, Room GA045 Washington, DC 20585-0490 Attention: Mr Rich Goorevich	Fax n°: DOE: (1) 202 5861348
From:	J. Santos Bento, Head of Unit Euratom, Luxembourg, ESO-3	Fax n°: +352 4301 33545
E-mail:	Jean.Binck@cec.eu.int (J. BINCK)	

**ACKNOWLEDGEMENT OF RECEIPT OF PRIOR NOTIFICATION**  
Ref. : EUR-J-01/2001

In response to the prior notification of the Japanese Mission to the EU in Brussels concerning the indirect transfer from Takahama Nuclear Power Station Unit 4, Japan of eight assemblies with 3 439 377 g U-<sup>tot</sup> (9 879 g U-235) and 255 086 g Pu scheduled for the period of April - December 2002, the Commission confirms that British Nuclear Fuels plc, UK, is a legal person duly authorised to receive nuclear material transferred pursuant to the Agreement. Form US DOE MB#10 attached gives full details of the transfer.

The nuclear material is being returned to the United Kingdom, because it cannot be used in the Nuclear Power Station due to problems with the quality control data.

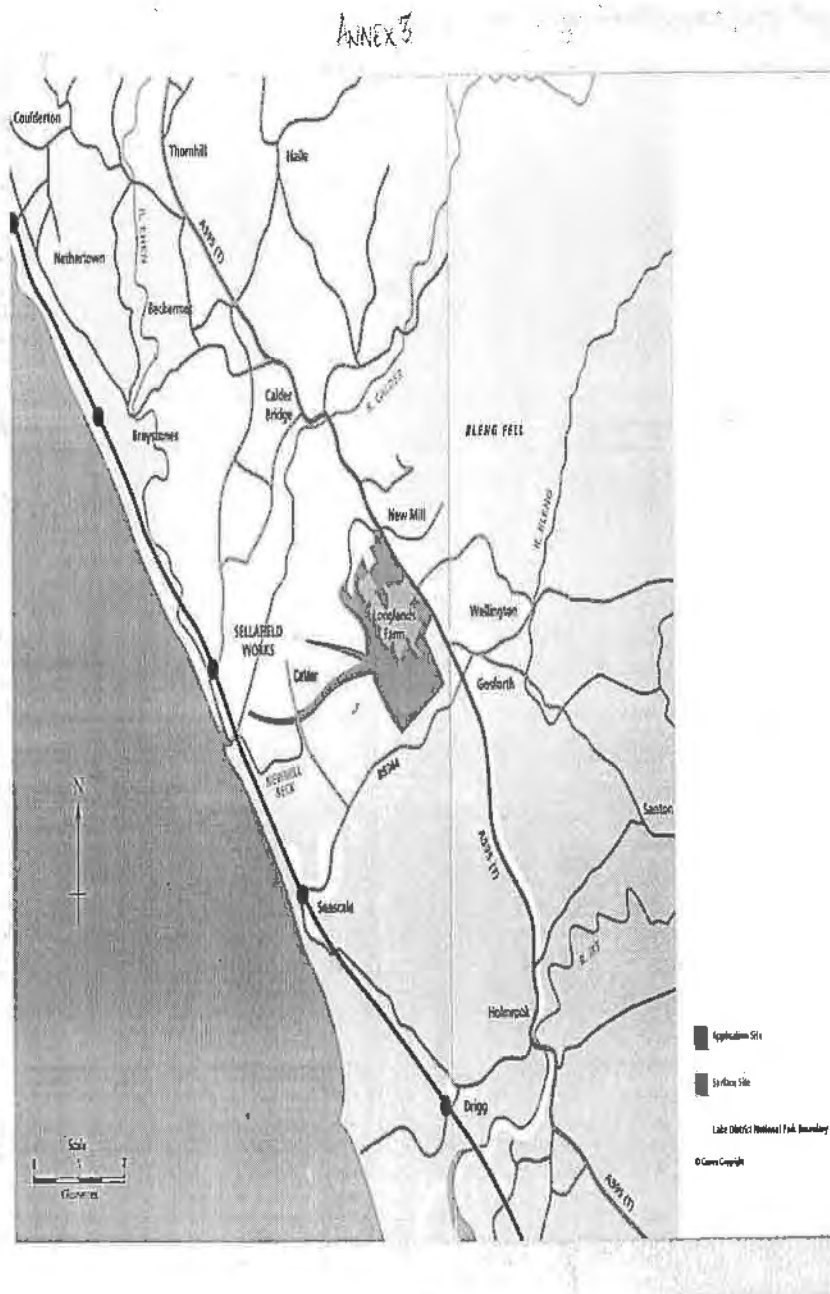
The Commission confirms that the nuclear material related to this indirect transfer will become subject to the Agreement upon receipt and further confirms that the exact quantity of nuclear material to be included in the inventory of nuclear material subject to the Agreement will be that established through exchange of the information contained in Annex III A of the Administrative Arrangement relating to the above referred transfer.

  
J. SANTOS BENTO

Encl.: 1 MB-10 form

Copy: - Supply Agency, Brussels (ref.: AG7/5609/1) Mme Flingou et M. Ennals

- Annex 3: Map of Sellafield application site and surface site



**-Annex 4: *Radionuclides in the Oceans: Inputs and Inventories*, coordinators: P. Guéguéniat, P. Germain and H. Métivier, collection of papers presented at the symposium “Radionuclides in the Oceans” (RADOc 96-97) (not reproduced)**

**(c) Submitted by Ireland on 22 November 2001:**

**- Irish Sea References (list) (reproduced as Annex 1 to the letter from the Agent of Ireland to the Registrar of the Tribunal dated 21 November 2001, see (b) under Responses to questions from the Tribunal, above), attached:**

- First Report from the Environment Committee of the House of Commons, Session 1985-86, “Radioactive Waste”, Vol. 1 (not reproduced)**
- copies of the 9 articles concerning radioactivity in the Irish Sea listed in the references (not reproduced)**

(d) Letter from the Agent of Ireland to the Registrar of the Tribunal dated 23 November 2001 indicating website on which the Report of the European Parliament (STOA Report) is available



**An Príomh-Aturnac Stáit  
THE CHIEF STATE SOLICITOR**

Convent House, 111-113 Ship Street, Dublin 8  
Tel: 01-476100 Fax: 01-476299

My Ref:

Your Ref:

If telephoning please ask for:-  
Christine Loughlin, 4176238  
Fax: 4780153

23 November, 2001

Philippe Gautier  
Registrar  
International Tribunal for the Law of the Sea  
Am internationalen Seegerichtshof 1  
22609 Hamburg  
Germany

By fax: 00 49-40-35607-245

24 November 2001

Dear Registrar:

**Ireland v United Kingdom:  
Questions from the Tribunal**

On Wednesday 22 November 2001 we provided responses to the three questions which had been posed by the parties from the International Tribunal. We omitted to mention that on that day the Report of the European Parliament (STOA) (on the Possible Toxic Effects from the Nuclear Reprocessing Plants at Sellafield (UK) and Cap de la Hague (France)) was published on the web site of the European Parliament.

The Report is available at [http://www.europarl.eu.int/stoa/publi/pdf/00-17-01\\_en.pdf](http://www.europarl.eu.int/stoa/publi/pdf/00-17-01_en.pdf).

The decision to publish the Report was adopted by the STOA Panel (composed of Member of the European Parliament) on 23 October 2001 without dissent.

Yours sincerely,

  
David J. O'Hagan  
Chief State Solicitor.