



Subject: **Action to End Radioactive Waste Discharges to Sea from Sellafield**

1. **Introduction:** The NFLA-organised 5th Irish and UK Local Authorities Standing Conference on Nuclear Hazards met in Cork between 20 - 21 March 2003 at the invitation of Cork City Council. The NFLA Legal Adviser provided a presentation on opportunities for local authority action on radioactive marine discharges to sea from Sellafield.
2. **Background:** Two "spent" nuclear fuel reprocessing plants at Sellafield, West Cumbria, produce radioactive liquid waste. This enters the Irish Sea, affecting the Irish Sea coastline, and is then carried by currents around the west, north and east coasts of Scotland, across the North Sea, up the Norwegian coast and on to the Arctic sea. Closing these plants would significantly reduce further pollution.

The B205 reprocessing plant: The first plant, B 205, reprocesses spent fuel from UK Magnox reactors. Currently BNFL says it plans to close these remaining operating Magnox stations as follows: Chapelcross 2005 (phased reactor shutdown from 2003), Dungeness 2006; Sizewell 2006; Oldbury 2008; and Wylfa 2010. BNFL aims to close B205 itself in 2012 after it has reprocessed the last Magnox fuel but this target is unreliable. 80% of the radioactive dose to the public from Sellafield comes from B205.

The THORP reprocessing plant: The second plant, THORP, reprocesses spent fuel under contract from British Energy and foreign customers. THORP will close when all contracts for its services end either by contract withdrawal, contract renegotiation or contract completion. At 2000 THORP was reported to have the following work:

	UK tonnes Heavy Metal (tHM)	Overseas (tHM)
Remaining Fuel to be reprocessed under existing baseload contracts, after 1 April 2000 (to be completed by 2006/7)	1,000 (i.e British Energy)	3,200
Remaining Fuel to be reprocessed under existing post-baseload contracts.	3,400 (i.e British Energy)	400 (primarily German)

3. **Driving down discharges:** In 1998 the state parties to the Convention for the Protection of the Marine Environment of the North-East Atlantic ("OSPAR Convention") agreed the OSPAR Strategy. This sets two crucial objectives vitally affecting the UK:
 - achieving "concentrations in the (marine) environment ... close to zero for artificial radioactive substances" by 2020; and
 - "progressive and substantial reductions of discharges, emissions and losses of radioactive substances" in the meantime.Member state Environment Ministers are set to review progress with this strategy in Bremen, Germany from 23 to 27 June this summer.



THE LOCAL GOVERNMENT VOICE ON NUCLEAR ISSUES

Manchester City Council, Town Hall, Manchester, M60 2LA

Tel: 0161 234 3244

Fax: 0161 234 3379

E-Mail: nfznc@gn.apc.org

Website: <http://www.gn.apc.org/nfznc/>

4. **Current UK policy breaches the OSPAR Strategy**

B205: Current UK Strategy accepts BNFL plans to close its last Magnox plant in 2010 and B205 in 2012. However, achieving the 2012 target will *increase* annual discharges because this target is only achievable by *increasing* the throughput of Magnox spent fuel. The alternative is to lengthen the period of operation of B205 beyond 2012. Both approaches are in breach of the second OSPAR objective. The only answer is to close the remaining Magnox stations now and reduce the B205 output thereafter. This could be done without difficulty. Magnox plants deliver only 2.5 GW of electricity to the UK electricity market that is currently suffering from overcapacity.

THORP: Current UK strategy assumes the possibility of THORP operating after 2020. Although an unlikely scenario, this is in breach of the first OSPAR objective. The only answer is to secure the closure of THORP as soon as possible and well before 2020. If the tonnage of spent nuclear fuel covered by BE and German contracts were diverted to dry storage (a perfectly feasible alternative), then THORP could close soon without difficulty.

5. **Technetium-99 (Tc-99) and plutonium**

Tc-99: B205 is the primary source of the radioactive pollutant Tc-99. This has a half-life of 213,000 years, accumulates in the thyroid, and has been found in marine life at levels that exceed those permitted by the EU after a nuclear accident (Community Food Intervention Levels - CFILs) in, for example, lobsters in the Irish Sea and seaweed off the Norwegian coast. It is one of the radionuclides that has increased in amount discharged in breach of the OSPAR Strategy.

Plutonium: It is estimated that a trillion bequerels of plutonium per annum transfer out of the Irish Sea to affect the North Sea, the Norwegian coast and the Arctic Environment. This is primarily being released from old plutonium discharges trapped in sediments off the Sellafield coastline, but continuing plutonium discharges from B205 and THORP exacerbate the problem. This undermines the achievement of the first OSPAR objective and damages relations with Irish and Scandinavian neighbours and their fishing communities.

6. **Continuing Tc-99 discharges?**

Tc-99 pollution is either (i) newly produced from ongoing reprocessing or (ii) stored. The Environment Agency has agreed that BNFL can store *newly-produced* Tc-99 on land and convert it into a vitrified solid waste. However *stored* Tc-99 will continue to be discharged in triennial 'batches' of about 30 terabequerels each.

This is highly controversial. The UK Minister for the Environment, Food and Rural Affairs, Margaret Beckett, asked the Environment Agency before Christmas whether a ban on these discharges could be imposed. The Agency considered that technical, interim storage difficulties and cost militated against this. In contrast environmental groups argued that technical and storage difficulties were not insurmountable. With political will, and funding, these problems could be solved. They also argued that cost was being assessed against dose and increased cancer risk (and deaths) attributable *locally* to Tc-99 over the next 500 years, when the true balance to be struck was against dose and increased cancer risk (and deaths) *globally* over the next 213,000 years.

7. **Opportunities for Action**

The OSPAR meeting in Bremen: A Ministerial meeting of signatory states to the OSPAR Convention will take place in Bremen between 23-27 June 2003. This will be the first occasion Ministers will be participating in the review of the OSPAR Strategy.

The European Union: The European Union is to complete a review of the scope for EU action to complement the OSPAR strategy by 2004. It is looking in particular at reductions in discharges from B205 and THORP and is aware that there is little data concerning the impact of radioactive discharges on marine ecosystems. It could introduce a recommendation on the level of radioactivity in the marine environment.

The British-Irish Council (Environment Sectoral Group): The Council was created under the Agreement reached in the Multi-Party Negotiations in Belfast in 1998. At the Fourth Environment Sectoral meeting in the Isle of Man papers submitted jointly by Ireland and the Isle of Man on radioactive waste and plutonium storage at Sellafield will argue for site closure. These meetings are attended by the UK

Government (the Minister for the Environment, Michael Meacher MP); the Northern Ireland Office (Angela Smith MP, Acting Permanent Secretary); the Republic of Ireland (Minister for the Environment & Local Government, Martin Cullen TD); the Scottish Executive (Minister for the Environment and Rural Development, Ross Finnie MSP); the Welsh Assembly Government (Environment Minister, Sue Essex AM); the Isle of Man (Minister for Local Government and the Environment, Hon Pamela M Crowe MHK); and Representatives of the Channel Islands.

8. Suggested Action

OSPAR: NFLA member councils can help achieve substantial reductions of radioactivity discharged to the marine environment, as envisaged by the OSPAR Strategy, by writing to the Minister for the Environment, Michael Meacher MP (address overleaf):

urging that the only way to secure compliance with the OSPAR strategy is to

- close Magnox stations now;
- substitute storage contracts for reprocessing contract between BNFL and its British Energy and German customers; and
- require the Environment Agency to ban further discharge of stored Tc-99; asking that Government announce these decisions before the next Ministerial meeting of signatory states to the OSPAR Convention in Bremen, 23-27 June 2003;

copying their letters to the Ministers of the Environment listed on p4 (overleaf) and to the NFLA Secretariat for further distribution.

European Union: NFLA member councils can write to: their MEP on the Fisheries Committee; the Commissioner for the Environment of the EC and their representatives on the Committee of the Regions; urging them to ensure that the EU Marine Strategy when adopted in the future prohibits discharges from UK (and French) nuclear reprocessing plants.

British-Irish Council: NFLA member councils can write, in the case of Welsh authorities, to the Minister for the Environment, Sue Essex AM urging her to support the position on Sellafield taken by the members of the British-Irish Council from the Republic of Ireland and from the Isle of Man, and in the case of Scottish authorities, to the Minister for the Environment and Rural Development, Ross Finnie MSP, in similar terms.

UK Parliament: NFLA member councils can write to their MPs urging them to sign EDM No.366 which calls for an end to government subsidies to British Energy for reprocessing.

Scottish Parliament: Scottish NFLAs can write to the Minister for the Environment and Rural Development, Ross Finnie MSP, urging him to support Western Isles Council's concern over the inadequacies of Tc-99 pollution-monitoring by the Scottish Environment Protection Agency.

9. **Assistance from the Secretariat**: The NFLA Secretariat can provide sample letters and further information about this briefing though the details above are sufficient for member authorities to write in their own terms. Addresses of British – Irish Council and OSPAR Ministers are below.

BRITISH-IRISH COUNCIL

UK: Michael Meacher, Minister for the Environment: see under OSPAR above

Northern Ireland: Angela Smith MP, Parliamentary Under Secretary of State for Northern Ireland, Northern Ireland Office, Block B, Castle Buildings, Belfast, Northern Ireland BT4 3SG
Fax: 028 9052 8195

Email: privateoffice.belfast@nio.x.gsi.gov.uk

Wales: Sue Essex AM, Minister for the Environment, National Assembly for Wales, Cardiff Bay, Cardiff CF99 1NA
Fax: 029 2089 8129

Email: sue.essex@wales.gsi.gov.uk

Scotland: Ross Finnie MSP, Minister for Environment and Rural Development

Pentland House, 47 Robbs Loan, Edinburgh EH14 1TY
Fax 0131 348 5784

Email: ross.finnie.msp@scottish.parliament.uk
or scottish.ministers@scotland.gov.uk

Isle of Man: Minister for Local Government and the Environment

Hon Pamela M Crowe MHK, Isle of Man Government, Murray House, Mount Haverlock, Douglas, IoM, IM2 5SF
Fax 01624 685773

Email: via Martin.hall@dlge.gov.im

Republic of Ireland: Martin Cullen TD

Minister for the Environment and Local Government: see under OSPAR below

OSPAR MINISTERS and EU COMMISSIONER – Contact Details

Jef Tavernier
Minister, Ministry of the Environment, Public Health and
Consumer Protection, Kunstlaan 6-9, Avenue des Arts,
B-1210, Brussels, **Belgium**
Fax: 0032 2-220.2067
E-mail environment@health.fgov.be

Hans Christian Schmidt
Minister for the Environment, Ministry of the
Environment, Højbro Plads 4, 1200 Copenhagen K,
Denmark
Fax: 00 45 33 32 22 27 email: mim@mim.dk

Mr. Jan-Erik Enestam
Minister for the Environment, Ministry of the
Environment, P.O. Box 380, FIN-00131
Helsinki, **Finland**
Jan-Erik.Enestam@ymparisto.fi
fax: int. +358 9 160 39311

Mme Roselyne Bachelot-Narquin
Minister for Ecology and Sustainable Development,
Ministère de l'Aménagement du Territoire et de
L'Environnement, 20 avenue de Ségur, 75302
Paris Cedex 07 SP, **France**
Fax: 0033 1 42 19 11 23
ministere@environnement.gouv.fr

Herr Jurgen Trittin
Federal Minister for Environment, Nature Conservation
and Nuclear Safety, Ministry for the Environment,
Nature Conservation and Nuclear Safety
Alexanderplatz 6, 10178 Berlin, **Germany**
email: postmaster@bmu.de

Siv Fridleifsdottir
Minister, Ministry for the Environment
Vonarstraeti 4, IS-150
Reykjavik, **Iceland**
Fax: 3545624566
postur@umh.stjr.is

Martin Cullen TD
Minister for the Environment and Local Government
Custom House, Dublin 1, **Ireland**
Fax: 051-876943
Email: minister@environ.irlgov.ie

Charles Goerens
Minister, Ministère de l'Environnement,
18, Montée de Pétrusse, L-2918
Luxembourg
Fax: 00352400410 charles.goerens@mev.etat.lu

Henk Kamp
Minister for Housing, Planning and the Environment,
Ministry of Transport, Public Works and Water
Management, PO Box 20906, 2500 EX
Den Haag, **Netherlands**
Fax: 3170351785
postbus@bsg.cend.min.venw.nl

Siri Bjerke, Minister
Ministry of the Environment
P.O. Box 8013 Dep.
N-0030, Oslo, **Norway**
Tel: 004722245700
Fax: 4722249507
odin@ft.dep.telemax.no

José Eduardo Martins
State Secretary for the Environment
Ministry of Environment and Natural Resources
Rua de Século 51-2, 1200, Lisbon
Portugal
Fax: 35113468469
dga@dga.min-amb.pt

Lena Sommestadt
Minister for the Environment
Ministry of Environment
Tegelbacken 2, S-103 33
Stockholm, **Sweden**
Fax: 468211690
registrator@environment.ministry.se

Philippe Roch
Minister, Federal Department of Environment,
Transportation, Energy and Communications
Bundeshaus Nord, Kochergasse 10
CH-3003, Bern, **Switzerland**
Fax: 41313119576
Philippe.Roch@buwal.admin.ch

Excmo. Sr. D. Jaume Matas Palou
Minister, Ministry of the Environment
Plaza San Juan de la Cruz ,28071
Madrid, **Spain**
Fax: 0034915978544
Email: secretaria.ministro@gabmin.mma.es

The Rt Hon Michael Meacher MP
Minister, Department of the Environment, Food and
Rural Affairs, Nobel House 17 Smith Square,
London SW1P 3JR, **United Kingdom**
Fax: 020 7219 5945/ 020 7238 5976
Email: michael.meacher@defra.gsi.gov.uk , or via
gabrielle.edwards@defra.gsi.gov.uk

Margot Wallstrom, Commissioner for the Environment,
European Commission, 200 rue de la Loi 1049
Brussels, Belgium
Email: Margot.Wallstrom@cec.eu.int

Each State's civil servant contact with postal/email
address is at:
<http://www.ospar.org/eng/html/welcome.html>
see "Contracting parties"

The OSPAR Commission Secretariat is at New Court, 48
Carey Street, London WC2A 2JQ , Tel: 020 7430 5200 /
Fax: 0207430 5225
Email: secretariat@ospar.org