The Environment Council

BNFL NATIONAL STAKEHOLDER DIALOGUE

Recommendations Monitoring Group

Final Report to the Main Group

April 2005

212 High Holborn
London WC1V 7BF
tel 020 7836 2626
fax 020 7242 1180
email info@envcouncil.org.uk
www.the-environment-council.org.uk

Produced by The Environment Council

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If you have any comments or queries regarding this report please contact:

Rhuari Bennett
Direct Line: +44 (0) 20 7632 0134
E-mail: rhuarib@envcouncil.org.uk

The process was designed and facilitated by Richard Harris of RJH Associates for The Environment Council and by Helen Ashley and Rhuari Bennett of The Environment Council.

212 High Holborn
London WC1V 7BF
tel 020 7836 2626
fax 020 7242 1180
email info@envcouncil.org.uk
www.the-environment-council.org.uk

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Foreword

Aim of the BNFL National Dialogue
The BNFL National Dialogue involved a wide range of organisations and individuals interested in or concerned about nuclear issues. Its aim was *to inform BNFL's decision-making process about the improvement of their environmental performance in the context of their overall development.*

The dialogue was open to national organisations and regional groups as well as expert and specialist concerns. If you would like more information, visit www.the-environment-council.org.uk or contact The Environment Council on 020 7632 0134.

Guidance on Interpreting this Report
The principal purpose of this report is to inform the stakeholders who were members of the 'Main Group' in the dialogue.

Participation (by organisation or individuals) in either the overall dialogue or the working groups must not be taken as an indication of support or disagreement with BNFL's activities.

Any quotes from the reports used in talks, articles, consultation papers and/or other documents published on paper or electronically must be put within the context given within the relevant section of the working group's report. The Environment Council strongly advise those considering quoting from the reports to forward their proposed text for review to the Dialogue coordinator (e-mail: rhuarib@envcouncil.org.uk)

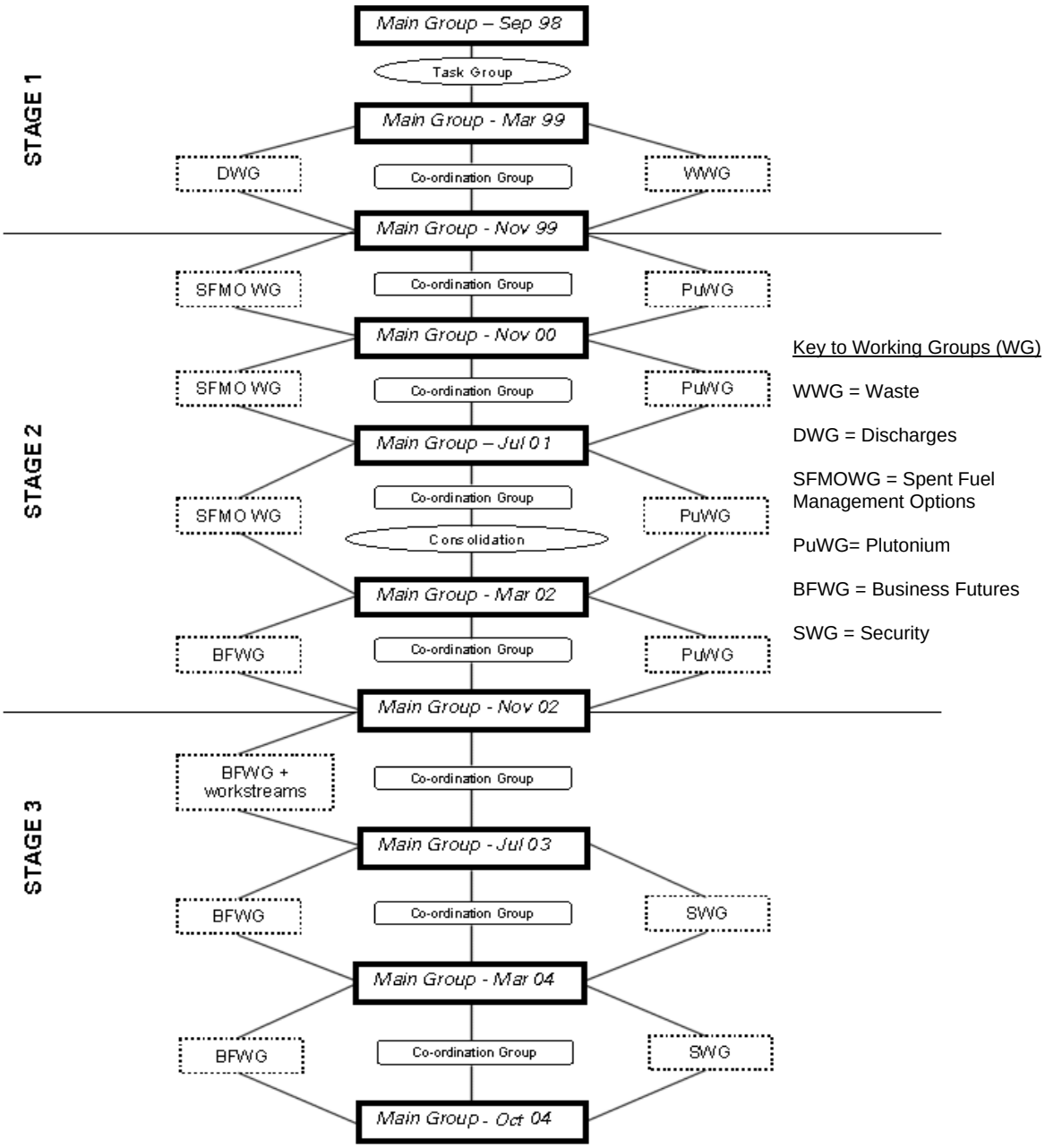
The role of the convenor
The convenor of the dialogue is The Environment Council, an independent UK charity. The Environment Council is responsible for designing and facilitating each stage in the dialogue, and provides relevant support, like issuing invitations and booking venues.

The Environment Council is not responsible for any issue discussed in the dialogue, and holds no formal position on any of the substantive issues that are or might be considered. It is for the participants to decide what issues are raised, how they might be addressed and how any observations, conclusions and recommendations might be recorded and communicated.

The Environment Council, April 2005.

History of the BNFL National Stakeholder Dialogue

The diagram below outlines the inception and evolution of the BNFL National Stakeholder Dialogue process. A more detailed history and explanation of each of the groups, together with the reports produced and lists of group members is available at www.the-environment-council.org.uk



Notes:

- The Coordination Group is responsible for providing guidance on linkages and continuity between groups, as well as identifying problems and "potential wobbles".
- "Socio-Economic" and "Transport" issues were discussed throughout the process.

Contact Rhuari Bennett for more information on 0207 632 0134 *rhuarib@envcouncil.org.uk*

1. Introduction

The Recommendations Monitoring Group (RMG) was established by the final Main Group Meeting of the BNFL National Stakeholder Dialogue in October 2004, in response to a recommendation of the Coordination Group. The agreed terms of reference are given in Appendix 1. The RMG task has been to:

1. Support adoption and implementation of Dialogue recommendations where necessary by offering advice, meetings or presentations to relevant bodies such as DTI, NDA, new BNFL, CoRWM, CERRIE etc.
2. Review the take-up of Dialogue recommendations by these bodies
3. Report to the former Main Group as to progress of the relevant bodies implementing these recommendations
4. Assist The Environment Council with enquiries from the public and press as necessary e.g. questions of content or more involved questions of process

The RMG remit runs until the end of the financial year ending on 31 March 2005 at which time it is required to send out a written update to stakeholders who had been members of the Main Group. This report fulfils that requirement and with its delivery the RMG ceases to exist as do all other formal BNFL National Stakeholder Dialogue structures, entities and procedures. However, Dialogue participants are reminded of the ground rules reaffirmed at the final Main Group meeting that commend a continuation of the spirit of confidentiality of information imparted during the work.

2. Consolidation of and Transmission of Recommendations

The October 2004 Main Group Meeting agreed that the recommendations from the various Working Groups, as presented in the Coordination Group Report[1], should be consolidated to make them transparent and accessible. The RMG took the Coordination Group report recommendations, restructured them into a consistent format, and divided them into three groups according to the organisations at which they were directed (BNFL, NDA, other). The recommendations in this final form are given in Appendices 2-4. These were sent to the relevant organisations with a covering letter from The Environment Council, which is reproduced as Appendix 5. The organisations concerned were:

- British Nuclear Fuels plc (BNFL)
- Nuclear Decommissioning Authority (NDA)
- Department of Trade and Industry (DTI)
- Committee on Radioactive Waste Management (CoRWM)
- Environment Agency (EA)
- Department of Environment, Food and Rural Affairs (Defra)
- Scottish Environment Protection Agency (SEPA)
- Office of Civil Nuclear Security (OCNS)
- Department of Health (DoH)
- Health and Safety Executive (HSE)

[1] Overview of the BNFL National Stakeholder Dialogue, 1998-2004, Final Report, December 2004. See www.the-environment-council.org.uk

- North West Development Agency (NWDA)
- Ministry of Defence (MoD)
- National Radiological Protection Board (NRPB)
- International Commission on Radiological Protection (ICRP)
- British Energy (BE)

Individual members of the RMG acted as contacts for each organisation to provide support and background clarification regarding the recommendations, if needed.

3. Advice, Meetings and Presentations

A meeting was requested by the Policy Directorate at No10 Downing Street to discuss an overview of the BNFL National Stakeholder Dialogue and its recommendations, including any outstanding concerns. Representatives of the RMG gave a presentation on 22 December 2004. The notes of the meeting are attached as Appendix 6.

The offer of further clarification or assistance made in the covering letter to the Nuclear Decommissioning Authority was taken up by the CEO, Ian Roxburgh (see Appendix 7). A representative group of the Business Futures Working Group met with him on 21 February 2005.

4. Responses to Recommendations

Responses were received from all organisations except DEFRA. These are attached as Appendices 8-21. The RMG noted that the responses were broadly supportive of the Dialogue and its recommendations, but the comments provided have variable levels of depth and relevance. Not all of the responses gave the RMG confidence that the organisations had fully appreciated the content of the recommendations nor intended to adopt and act on them. The RMG concluded that it would not be practicable to attempt a detailed analysis of the responses in the time available. However, the RMG notes two recommendations signed off by the October 2004 Main Group:

- All stakeholders should monitor progress by BNFL, NDA and others identified against these recommendations
- Stakeholders should use the consolidated recommendations and the BNFL response to assess the impact of the Dialogue.

The RMG therefore recommends that future stakeholder engagement structures and individual stakeholders should carry out such an analysis to the extent they consider appropriate in order to provide the necessary monitoring beyond 31 March 2005.

5. Conclusion

The RMG believes that, with the publication of this report, it has fulfilled the goals set for it. The RMG commends the report to members of the former Main Group and as an aid to future stakeholder engagement structures.

List of Appendices

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Appendix 1. Recommendations Monitoring Group – Terms of Reference (updated 31 Jan 05)

Background

The agreed programme of substantial work of the BNFL National Stakeholder Dialogue ended on 13/14 October 2004 with the final meeting of the Main Group. All previous work and recommendations will be passed to the relevant bodies such as DTI, NDA, new BNFL etc. Whilst every effort was made to manage the handover of previous work between this Dialogue and the new bodies, a need was identified for a time-limited activity to monitor the progression of the work of the Dialogue into these bodies to ensure the Dialogue's recommendations are adopted where possible. This paper sets out revised Terms of Reference for a Recommendations Monitoring Group (RMG), updated with suggestions made during the final Main Group meeting.

Aim and Scope

The RMG will:

5. Support adoption and implementation of Dialogue recommendations where necessary by offering advice, meetings or presentations to relevant bodies such as DTI, NDA, new BNFL, CoRWM, CERRIE etc.
6. Review the take-up of Dialogue recommendations by these bodies
7. Report to the former Main Group as to progress of the relevant bodies implementing these recommendations
8. Assist The Environment Council with enquiries from the public and press as necessary e.g. questions of content or more involved questions of process

Status

The initiation of the RMG was mandated by the Main Group meeting in October 2004, where these ToRs were agreed. After this October meeting the "Main Group" ceased to exist as a body in terms of decision making and mandating, so the RMG is therefore a free-standing body, not formally 'reporting to' an active Main Group. The RMG will however be able to draw on stakeholders from the 'old' Main Group where necessary in order to support its work.

Membership

The former Main Group agreed that the membership of the RMG should be the same as the old Coordination Group plus some volunteers from the old Main Group, providing their membership adheres to the usual ground rules for participation in working groups of the Dialogue[2]. This will provide useful continuity from previous work on dialogue coordination.

Duration

The RMG will run until the end of the financial year ending on 31 March 2005. It is anticipated that it will meet twice: for one day in January 05 and for one day in March 05, with a potential contingency meeting in February 05. After it has sent out a written update at the end of March to stakeholders who were part of the Main Group, the RMG will cease to exist – as would all formal Dialogue structures, entities and procedures.

[2] Ground Rules for working groups, 6th draft.

Appendix 2. BNFL National Stakeholder Dialogue: Recommendations for BNFL

No	Recommendation	Action or Event	Reporting Point	Responsibility (BNFL)
1	BFWG should use SFMOWG work as a basis for ongoing work *(BNFL agreed)* and should examine any alternative use for Thorp after whichever scenario unfolds*. This will be monitored by BFWG*.	Arrive at decision on future Thorp programme based on throughput, contracts, pond storage capacity, and vitrification plant performance.	Thorp Programme - Thorp performance against 2004/5 target of 725 tonnes	Barry Snelson 31.03.2005 and annual report
3	The Magnox announcement (23/5/00) firmed up the programme for reactors and B205, including Calder closure in March 03 which was later implemented. The throughput of B205 etc covered in SAP and fed into SFMOWG and covered by SAP		Progress on defuelling reactors	Mark Morant – to 2012
			Fuel delivery strategy and performance	Mark Morant – to 2012
			B205 performance against 2004/5 target of 800 tonnes	Barry Snelson
3 **cont**	The Magnox announcement (23/5/00) firmed up the programme for reactors and B205, including Calder closure in March 03 which was later implemented. The throughput of B205 etc covered in SAP and fed into SFMOWG and covered by SAP		B205 performance – 'reprocessing envelope diagram'	Barry Snelson – updates to 2012
			Projected Magnox reprocessing throughput before 2012 B205 closure, assuming that Magnox stations continue to operate to declared lifetimes	Barry Snelson – updates to 2012
			Decide whether or not to build head end on Thorp – progress on R&D work. Has a decision been taken?	***Barry Snelson – end 2004***
15	BNFL should immediately submit the Generic Test Framework to the NDA for development within its stakeholder engagement process and subsequent implementation			Before 01.04.05
16	BNFL should submit the work packages identified in the Disposition of Plutonium Framework to the NDA for inclusion in the next Life Cycle Baseline and Near Term Work Plans.			Before 01.04.05

No	Recommendation	Action or Event	Reporting Point	Responsibility (BNFL)
25	Studies should be carried out on the discharge impacts of decommissioning		What information can BNFL make available? Needs to be linked with the current review of Life Cycle Baseline	***Lawrie Haynes 01.10.04***
			What would BNFL want to see as a product from stakeholders in this area?	***Lawrie Haynes 01.10.04***
28	BNFL must match Magnox lifetimes to B205 performance with minimum fuel in ponds and no plans for long term wet storage *and BNFL agreed to report on B205 throughput.* Reduction of discharges and waste volumes with early passive storage must be a feature of whichever option chosen. *BNFL agreed*.			Mark Morant Barry Snelson
31	Mitigation plans are required whichever option is involved, and the ERM report is being updated	Significant Sellafield job reductions begin 2012	Report on initiatives and plans to mitigate expected socio-economic effects of Sellafield job reductions	Barry Snelson
40	BNFL should proactively engage with its workforce and local communities on issues related to the transition from owner-operator to NDA contractor			Barry Snelson
41	*The key observation from the Dialogue work is the interaction between vitrification performance and the reprocessing programmes which can be carried out while still conforming to the obligation to reduce stocks of liquid high level waste*	Reduction of HAL storage to 200m3 buffer level by 2015	Vitrification plant progress – production and containers to store against 2004/5 target of 460 containers to store	Barry Snelson March 2005 and ongoing
			Progress on line 3 commissioning	Barry Snelson March 2005 and ongoing
			Progress in the reduction in stocks of High Active Liquid Waste against NII specification curve	Barry Snelson March 2005 and ongoing

No	Recommendation	Action or Event	Reporting Point	Responsibility (BNFL)
42	Discharges – indicative reduction programmes were a good start though details of OSPAR implementation not agreed. BNFL should 'strive to the utmost for reductions over and above pre-OSPAR plans with clear commitment to plant timescales.	Sellafield site to comply with OSPAR requirements as defined	Report on discharge reduction – 'within region of optimisation – D1 plus/ D2 minus and D3 plus'	Barry Snelson
43	On discharges, the announcement did not meet all aspirations, being towards the end of range studied, but firmed up the expected profile. The changes could increase the rate of reductions in the period before 2020, *with total lifetime discharges capped by lifetimes plus Calder and actions by BNFL and regulators for reductions.*			Barry Snelson For Defra annual discharge reporting – OSPAR 2020
44	BNFL should reduce discharges within region of optimisation – D1 plus/ D2 minus and D3 plus. There was some disappointment that increased B205 throughput would increase discharges – but still within region of optimisation as long as Tc reduction is achieved and most changes move towards lower end of the region of optimisation.		Progress on technetium discharge reduction	Barry Snelson For Defra annual discharge reporting – OSPAR 2020
			Total Alpha discharges	Barry Snelson For Defra annual discharge reporting – OSPAR 2020
45	BNFL should make utmost endeavours on Tc reduction, with C-14, Sr-90, Ru-106 and Pu/Am as next tier priorities. Tc was consulted on by EA, and the later decision document supports early reduction subject to technology – in line with original DWG recommendation. *A-41 reduction achieved by early Calder shutdown*.		Progress on reduction of C-14, Sr-90 and Ru-106 discharges	Barry Snelson For Defra annual discharge reporting – OSPAR 2020
46	There was uncertainty in I-129 with *impact below model* and appropriate reduction strategies plus work on the model were urged plus work on model. S*treet 3 scrubber was brought into operation* and a Thorp iodic acid trial planned.		Progress on modelling of I-129 discharges and use of iodic acid	Barry Snelson For Defra annual discharge reporting – OSPAR 2020

No	Recommendation	Action or Event	Reporting Point	Responsibility (BNFL)
54	WWG urges all to accept its agreed principles ●Package waste in passively safe monitorable retrievable form in shortest possible time ●Interim storage (with suitable performance and safety review) offers a feasible option for >50 years – but the Company must involve itself in research on long term storage and the possibility of disposal ●Changing values of stakeholders within 50 years will necessitate revisiting all assumptions, factors and standards, with different timescales being considered in MADA/SAP work in SFMOWG. ●The Company must successfully embrace change, and should use the 9 scenarios adopted elsewhere in Stakeholder Dialogue which has occurred.		Progress on the definition and achievement of monitorable and retrievable storage	Lawrie Haynes
61	We do already have an immobilisation research programme focussed initially on Pu residues. This could readily be extendable to the balance of the UK's inventory should a Government policy change be made to alter Pu's current status as a source of energy for use in the future to a waste. BNFL will continue to actively work with the Government and other stakeholders as policy is clarified and resolved in a timely manner. The area of plutonium management will require formulation of policy and guidelines to enable appropriate waste forms to be developed and Pu's role within them would need to be assessed. Low specification MOX is but one possible option on which we comment in more detail later		Report on R+D programme	Sue Ion
67	BNFL should never allow economic concerns to override security needs and be prepared to provide justification when challenged.			Roger Howsley Ongoing

No	Recommendation	Action or Event	Reporting Point	Responsibility (BNFL)
68	All appropriate agencies (e.g. NDA, Department for Trade and Industry (Dti), BNFL) should ensure that the importance of this issue is communicated forcefully to the Treasury, including appropriate staffing and resourcing levels within OCNS.			Roger Howsley Prior to April 2005
69	BNFL and OCNS independently should confirm whether, under current legal arrangements and guidance notes, they have clearly identifiable responsibilities and appropriate funds for compensation, in respect of the consequences of terrorist incidents. If not, the situation should be rectified.			Roger Howsley July 2005
74	Finalise MoU between BNFL and UKAEAC to avoid any mis-understanding over accountabilities and decision-making, including the use of force.			Roger Howsley June 2005
75	BNFL needs to explore with the UKEAAC and others the possibility of de-classifying all or releasing parts of this document.			Roger Howsley June 2005
77	BNFL should include a couple of questions on nuclear security on existing public and stakeholder opinion polls and develop a baseline to establish whether the release of more information dealing with nuclear security increases public confidence.			Roger Howsley December 2004
79	BNFL should evaluate the FoI Act to determine the extent to which BNFL can go beyond its provisions for restricting information to the public in order to increase confidence and publish how it complies with the Act.			Roger Howsley publication of compliance with and evaluation of FOIA by end Jan 2005
80	BNFL should have formal procedures in place that make an assessment of security implications a prerequisite in its building siting policy.			Roger Howsley January 2005

No	Recommendation	Action or Event	Reporting Point	Responsibility (BNFL)
81	BNFL should make it clear to the potentially affected public what the states of alert mean and their implications on emergency response. BNFL should also commit to regular communication of the state of alert at the facility to the local population by appropriate media.			Roger Howsley From April 2005
83	BNFL and OCNS should take all necessary measures to increase and monitor public confidence in their security systems including a) monitoring responses to all information put into the public domain and b) appending questions to documentation requesting feedback on user friendliness, etc.			Roger Howsley Publication of OCNS Annual Report (May/June 2005)?
87	BNFL should retain its corporate Security Directorate to ensure corporate oversight of security standards is maintained.			Roger Howsley ongoing
88	BNFL and OCNS should determine and publish the criteria used to judge whether the security system has failed to the extent that leads to the consequence of that operation ceasing.			Roger Howsley In OCNS annual report?
89	BNFL should consider publishing its annual report on security performance, with sensitive details removed.			Roger Howsley From July 2005
90	BNFL should make its practice consistent with the recommendations that are going forward to the NDA in respect of the presumption of availability of all documentation, with exemptions being determined by criteria set by stakeholders, including OCNS.			Roger Howsley April 2005
91	Efforts should be made by BNFL to develop a benchmarking system.			Roger Howsley April 2005
93	BNFL should continue to review its reporting regimes.			Roger Howsley Annual Review from April 2005

No	Recommendation	Action or Event	Reporting Point	Responsibility (BNFL)
96	BNFL should promote its willingness to engage with stakeholders in regard to international transport in en route countries, whilst observing diplomatic protocols.			David Bonser Ongoing
98	BNFL should support, expedite and participate in as appropriate the reform of the existing Local Liaison Committee (LLC) system, in conjunction with the Nuclear Decommissioning Authority (NDA), to establish site-based and transport-related engagement processes, which include a security element drawn from some of the LLC stakeholders who will require additional security vetting. OCNS should have active participation in any new arrangement to ensure that the broader national and international security aspects are addressed through this stakeholder process.			Roger Howsley Barry Snelson Mark Morant - the stakeholder group should be established by April 2005
99	BNFL and OCNS should put pressure on the embryonic NDA to take on board a commitment to continued stakeholder engagement, embracing the views and opinions of stakeholders generated by the Dti consultation process over the last two years, with particular reference to reforming the LLCs, stakeholder capacity building, and adequate funding. See 1.8.			Roger Howsley Coordination Group of BNFL National Stakeholder Dialogue – now and ongoing
108	BNFL should review with OCNS whether completely independent personnel should be used as the simulated adversary.			Roger Howsley From April 2005
109	Advanced computer simulations should be used to enhance the realism and range of scenarios that can be tested.			Roger Howsley From April 2006

No	Recommendation	Action or Event	Reporting Point	Responsibility (BNFL)
110	The application of different security standards to similar nuclear shipments without explanation causes confusion and concern, this could be a topic for future stakeholder engagement. Classified information may be assessed in a two-tier stakeholder dialogue process			Roger Howsley
112	BNFL and OCNS should keep under review all system testing used by other security agencies, including force-on-force exercises.			Roger Howsley Initiate by April 2005
113	BNFL should initiate a Joint Fact Finding programme with LLCs or their successors (funded by the NDA), complemented by dialogue at a national level, to establish whether it is possible to arrive at greater agreement about the range of consequences arising from potential terrorist acts as defined in the DBT. The Group recognises that this is conditional upon the establishment of a two-tier stakeholder engagement process.			Roger Howsley Barry Snelson Mark Morant
114	BNFL, OCNS and Nuclear Installations Inspectorate (NII) should re-evaluate the worst case scenario accidents, and the worst case terrorist incidents at its sites resulting in radiation release, in the light of the proposed Joint Fact Finding mentioned above and should undertake to review and rewrite if necessary the emergency plan with relevant local authorities in light of those findings, and communicate it by all media possible			Roger Howsley April 2006
115	The development of a Security Hazard Indicator would assist in principle in this task and would enable people to see the cost benefit of spend.			Roger Howsley December 2004

No	Recommendation	Action or Event	Reporting Point	Responsibility (BNFL)
116	Make sure that policy on new building siting and changes in existing buildings are subject to Security Hazard Indicator analysis.			Roger Howsley Ongoing from January 2005
118	BNFL should be aware of the latest technology being applied in this area (identity management), but should also take into account cost benefits through the Security Hazard Indicator.			Roger Howsley Ongoing
119	The development of a Security Hazard Indicator should be completed as a matter of urgency and its results used to prioritise the decommissioning of potentially hazardous facilities.			Roger Howsley December 2004
123	BNFL should use the methodology [*from the DWG report*] to create strategy and site specific plans for all other BNFL sites. The announced closure dates will affect reactor sites plus fuel supply from Springfields		Use DWG methodology to create strategy and site-specific plans	Lawrie Haynes Steve Tritch
124	Companies within the new BNFL group should note the KSIs relevant to their business and ensure that these are addressed within their ongoing business plans.			Lawrie Haynes Steve Tritch
125	BNFL Business Groups should develop engagement strategies, consistent with BFWG proposals, and which meet the requirements and expectations of their respective stakeholders, including integration with the NDA's stakeholder engagement process where appropriate			Lawrie Haynes Steve Tritch Peter Bleasdale David Bonser
128	The NDA and BNFL should incorporate best practice sustainability appraisal in all strategy and programme development			Lawrie Haynes Steve Tritch Peter Bleasdale David Bonser
130	BNFL should include new nuclear build and export of nuclear technologies as part of the relevant BNFL business stakeholder engagement activity			Richard Mayson

Appendix 3. BNFL National Stakeholder Dialogue: Consolidated Recommendations for the NDA

No	Recommendation	Action or Event	Reporting Point	Responsibility (NDA)
1	BFWG should use SFMOWG work as a basis for ongoing work *(BNFL agreed)* and should examine any alternative use for Thorp after whichever scenario unfolds*. This will be monitored by BFWG*.	Arrive at decision on future Thorp programme based on throughput, contracts, pond storage capacity, and vitrification plant performance.	Decision on future Thorp programme	Annual review
		Thorp reprocessing completed – current orders only	Completion by 2011	Annual review
2	The NDA should use the SFMOWG work relating to AGR fuel arisings and the associated Strategic Action Plan scenarios to inform its own policy development and as background to its stakeholder engagement on development of programmes and options			
3	The Magnox announcement (23/5/00) firmed up the programme for reactors and B205, including Calder closure in March 03 which was later implemented. The throughput of B205 etc covered in SAP and fed into SFMOWG and covered by SAP		Progress against Magnox reactor closure programme, include financial year date 2009/10 for Wylfa	Annual report to 2009/10
	The Magnox announcement (23/5/00) firmed up the programme for reactors and B205, including Calder closure in March 03 which was later implemented. The throughput of B205 etc covered in SAP and fed into SFMOWG and covered by SAP		Develop contingency plans for wetted fuel and dry fuel in reactor cores	Report progress
			Technical issues of dry transportation of fuel from Magnox stations to Sellafield – technical issues resolved, regulatory aspects?	Report progress
			Progress on Interim Safe Storage (ISS) of fuel in purpose built stores	Report progress

No	Recommendation	Action or Event	Reporting Point	Responsibility (NDA)
4	The NDA should establish, adopt and publish, before 1 April 2005 and in co-operation with its stakeholders, a set of principles to guide its management of nuclear liabilities			01.04.05
5	The NDA should ensure that their principles on the management of nuclear liabilities are reviewed by their stakeholders within 12 months of publication			by 01.04.06
6	The NDA should develop the Key Issue Summaries as suggested by the DTI, before April 2005			01.04.05
7	The DTI and NDA should arrange for cross-sectoral stakeholder scrutiny of the NDA's contractorisation. The outcome should be reported to the first meeting of the NSG			by 01.04.06
8	The NSG should review the NDA's contracting principles, procedures and subsequent contracts against the BFWG Principles before the first contracts are competed			by first contract competition
9	The NDA should establish arrangements for the NSG to regularly review whether the implementation of the NDA's model of contractorisation is effectively delivering the NDA's cleanup functions and responsibilities as set out in the Energy Act 2004			by 01.04.06
10	The NDA should, by March 2005, set out how it will resource and deliver the White Paper commitments on openness and transparency and stakeholder engagement.			by 01.04.05
12	The NDA should ensure that its corporate culture respects and meets stakeholder expectations of high quality engagement with consistency, openness and transparency as stated in the White Paper			by 01.04.06
13	The NDA should ensure that the Strategic Issues Register is developed in a way which takes account of stakeholder views and concerns			by 01.04.06

No	Recommendation	Action or Event	Reporting Point	Responsibility (NDA)
14	The NDA should be aware of the level of stakeholder engagement capability available to it from other established stakeholder engagement programmes including the BNFL National Stakeholder Dialogue and its Working Groups			by 01.04.05
17	The NDA should ensure that the programme of research and evaluation on plutonium disposition is reported to the NSG within the first year of the NDA's creation, and invite the Group to consider how it wishes to be involved			By 01.04.06
19	The NDA should continue to develop a programme to derive methodologies, tools and measures for the justification and prioritisation of cleanup activities through prompt, effective and broad based stakeholder involvement			By 01.07.05
20	The NDA should include optimisation of discharges in its methodologies and measures for the justification and prioritisation of clean-up as addressed above			By 01.07.05
21	The NDA should adopt the Hazard Indicator as one of a suite of tools by which to help measure and justify its prioritisation clean-up operations			By 01.07.05
24	On its formation, the NDA should give urgent consideration as to how stakeholders may best be engaged in decisions about site endpoints on a case by case basis.			01.04.05
25	Studies should be carried out on the discharge impacts of decommissioning		What information can [*NDA]* make available? Needs to be linked with the current review of Life Cycle Baseline	By 01.07.05
			What would [*NDA]* want to see as a product from stakeholders in this area?	By 01.07.05
26	Specific examples of increased priority by the Company were R+T investment, HAL stock		Work on the hazard indicator	By 01.07.05

No	Recommendation	Action or Event	Reporting Point	Responsibility (NDA)
	R+T investment, HAL stock management, the Historic Waste Management Project, and Drigg PCM retrieval. Scenarios and framework have been taken up by SFMOWG and PuWG. BFWG should look at passivity measurement		Review of Life Cycle Baseline planning and prioritisation	By 01.07.05
			How are stakeholders being involved in this review process?	By 01.07.05
27	SFMOWG asked for more time (10/11/01) to complete its work *and this was approved, with comments (86) by Main Group (83).* When published (Summer 2001) the Group commended the report and the Strategic Action Plans to BNFL and other decision makers in role development of LMA and possible funding for early closure scenarios. The overriding need is to be transparent in taking conflicting needs of environment and socio-economic into account. *BNFL responded to SAPs.*			
29	Socio-economic, cost and safety may produce pressure against discharge reductions and suitable studies should be commissioned. The ERM study was welcomed, was being used by in planning by local and regional Government, and went a long way to fulfilling the need, while having no direct impact on DWG recommendations. Socio-economic data for Ireland and Norway was to be supplied			
31	Mitigation plans are required whichever option is involved, and the ERM report is being updated	Significant Sellafield job reductions begin 2012	Report on initiatives and plans to mitigate expected socio-economic effects of Sellafield job reductions	
33	The NDA, with local and regional partners, should update and extend ERM's Socio-Economic Study as soon as the NDA's strategy for the nuclear sites in West Cumbria is developed, to allow the results to be shared with the West Cumbria Strategic Forum at the earliest opportunity.			

No	Recommendation	Action or Event	Reporting Point	Responsibility (NDA)
34	The NDA should undertake regular reviews and updates of the Socio-Economic studies as an ongoing commitment of The West Cumbria Strategic Forum			
39	The NDA, as part of its socio-economic commitments, should encourage its M&O contractors to develop and use similar processes (for example joint fact finding and work with stakeholders) to explore potential opportunities for diversification			
42	Discharges – indicative reduction programmes were a good start though details of OSPAR implementation not agreed. BNFL should 'strive to the utmost for reductions over and above pre-OSPAR plans with clear commitment to plant timescales.	Sellafield site to comply with OSPAR requirements as defined	Report on discharge reduction – 'within region of optimisation – D1 plus/ D2 minus and D3 plus'	For Defra annual discharge reporting – OSPAR 2020
53	A future group should study prolonged dry storage of Magnox – plus feedback into Magnox programme and discharge reductions, and this was taken on by SFMOWG.			NDA
54	WWG urges all to accept its agreed principles ●Package waste in passively safe monitorable retrievable form in shortest possible time ●Interim storage (with suitable performance and safety review) offers a feasible option for >50 years – but the Company must involve itself in research on long term storage and the possibility of disposal ●Changing values of stakeholders within 50 years will necessitate revisiting all assumptions, factors and standards, with different timescales being considered in MADA/SAP work in SFMOWG. ●The Company must successfully embrace change, and should use the 9 scenarios adopted elsewhere in Stakeholder Dialogue which has occurred.		Progress on the definition and achievement of monitorable and retrievable storage	

No	Recommendation	Action or Event	Reporting Point	Responsibility (NDA)
56	The 'plutonium owner' should ensure that the development of detailed proposals for the management of separated plutonium, the associated decision making, incorporate stakeholder engagement is an integral part of the process. Where appropriate, this should extend to the associated investigations**.**			
57	The 'plutonium owner' should disregard use of MOX in the Dungeness B, Hunterston B, Hinkley B, Hartlepool and Heysham 1 reactors as options for the management of separated PU			NDA BE

No	Recommendation	Action or Event	Reporting Point	Responsibility (NDA)
58	In the interests of fully establishing the practicability or otherwise of using MOX fuel in Sizewell B, Heysham 2 and Torness, and before any decisions on implementation are taken: ●The 'plutonium owner' and BE (as the 'plutonium user') should enter into initial discussions to explore the financial basis for this option (NB This recommendation may change depending on outcome of current restructuring of BE). ●The availability of capacity in SMP should be reviewed, taking account both of the duration and timing of fulfilling contract commitments to overseas customers and the feasibility of a life extension for the plant. ●Should these explorations indicate that using plutonium in Sizewell B or either of the AGRs may be attractive from liability management point of view, the 'plutonium owner' and 'user' should undertake a comprehensive environmental assessment including the evaluation of transport, reactor safety, environmental discharge, public safety (including the risks from extreme core disruption events), and waste form storage issues. This assessment should be conducted in consultation with stakeholders at national and local levels.			

No	Recommendation	Action or Event	Reporting Point	Responsibility (NDA)
59	To explore the feasibility or otherwise of utilising plutonium, in the event that any programme of new build reactors were to proceed, we recommend that before any decision are taken: ●The financial basis on which plutonium might be utilised in new build reactors should be explored at an early stage between the 'plutonium owner' and the likely developer of any new build reactors. The existing collaborative agreement on new build between BNFL and BE may be a suitable vehicle for this. ●The availability of capacity in SMP should be reviewed, taking account of the feasibility of a life extension for the plant. ●Should these explorations (and the outcome of the energy review) be favourable to plutonium use in new build, the prospective developer should undertake a comprehensive environmental impact assessment on the proposal including the evaluation of transport, reactor safety (including the risks from extreme core disruption events), environmental discharge, and waste form storage issues. This assessment should be conducted in consultation with stakeholders at national and local levels. ●A detailed comparison of MOX, Inert Matrix Fuel (IMF) and conventional uranium fuels should be undertaken prior to deciding which fuel type to use			

No	Recommendation	Action or Event	Reporting Point	Responsibility (NDA)
60	In the light of long lead times, the 'plutonium owner' should commit promptly to an immobilisation research, process development and design study to more fully establish the optimum technology for plutonium immobilisation. This should include: ●Underpinning research on ceramic immobilisation matrices ●Consideration of possible plutonium loadings, inclusion of neutron absorbers, safety and safeguards requirements ●Assessment of possible product forms against waste specification requirements ●Design studies for process optimisation ●Consideration of low spec MOX as an immobilised plutonium product ●A Best Practicable Environmental Option (BPEO) analysis, conducted with stakeholder involvement, which brings together findings of the above in order to establish the optimum process and waste form ●A comprehensive environmental impact assessment on the proposal including the evaluation of plant safety, environmental discharge, and waste form storage issues. This assessment should be conducted in consultation with stakeholders at national and local levels.			

No	Recommendation	Action or Event	Reporting Point	Responsibility (NDA)
62	In order to ensure the option of using SMP immobilised plutonium as low-spec MOX is not foreclosed, the 'plutonium owner' should before final decisions about plutonium management are made: ●Undertake a more detailed assessment of the suitability of low spec MOX as a form of immobilised plutonium product, including consideration of security, safety, safeguards, waste form qualification and other relevant issues. ●Undertake a design study to establish whether SMP could feasibly be modified to produce a more 'optimised' plutonium waste form, either in current or newly added production lines. ●Review the use of SMP in the light of the above investigations and those of the other options as recommended above, once the future contractual commitments of SMP for overseas and domestic customers become clearer. ●Include the 'SMP option' in the BPEO for immobilisation options recommended in respect of new build plant.			
63	Research and process development for plutonium immobilisation should concentrate on those options which do not involve an added external radiation barrier. However other means of increasing the intrinsic security of the product should be explored.			

No	Recommendation	Action or Event	Reporting Point	Responsibility (NDA)
64	At this stage, it is important to keep options open so that contingencies are available for each plutonium disposition option. In order to ensure this: ●All the actions and explorations indicated above should be carried out to the point at which the 'plutonium owner' can make informed decisions (with stakeholder involvement) on the contribution each option should make to management of the plutonium stockpile. ●In reaching these decisions, consideration should be given to: maintenance of contingency in the longer-term, community views on the long-term storage onsite of plutonium waste forms, social-economic factors including employment, and the impact of plutonium stockpile management options on the wider Sellafield clean-up programme ●The 'plutonium owner' should then develop a more detailed plan which shows how the options could be used to convert the current and projected future stockpile of separated plutonium into a passively safe form suitable for long-term storage and, potentially, ultimate disposal. ●Such a plan should aim to achieve conversion to a timescale which would render construction of new plutonium dioxide stores, or refurbishment of existing stores unnecessary, except for compelling safety or security reasons.			

No	Recommendation	Action or Event	Reporting Point	Responsibility (NDA)
65	The NDA to make transparently clear to OCNS and interested stakeholders that the funding for effective security arrangements is available.			This should happen prior to April 2005.
66	Appropriate resources should be put into emergency planning and post-incident response			Ongoing
68	All appropriate agencies (e.g. NDA, Department for Trade and Industry (Dti), BNFL) should ensure that the importance of this issue is communicated forcefully to the Treasury, including appropriate staffing and resourcing levels within OCNS.			
100	The NDA (and possibly OCNS) should consider how to resource maintenance of links between stakeholders and their constituents, and should bring this issue to the attention of the LLCs or their successors, complemented by dialogue at a national level. Within any future stakeholder process, the NDA should periodically review the quality of stakeholder communication with constituents.			
113	BNFL should initiate a Joint Fact Finding programme with LLCs or their successors (funded by the NDA), complemented by dialogue at a national level, to establish whether it is possible to arrive at greater agreement about the range of consequences arising from potential terrorist acts as defined in the DBT. The Group recognises that this is conditional upon the establishment of a two-tier stakeholder engagement process.			After April 2005

No	Recommendation	Action or Event	Reporting Point	Responsibility (NDA)
117	The NDA should inherit and develop the Security Hazard Indicator and apply this to minimise the overall movement of radioactive materials (and hence terrorist risk) which it will be required to manage through its decommissioning programme.			Ongoing from April 2005
123	BNFL should use the methodology from its report to create strategy and site specific plans for all other BNFL sites. The announced closure dates will affect reactor sites plus fuel supply from Springfields		Use DWG methodology to create strategy and site-specific plans	
127	The NDA should take account of the findings of the Magnox Decommissioning Dialogue			
128	The NDA and BNFL should incorporate best practice sustainability appraisal in all strategy and programme development			
129	The NDA should set up methodology and procedure for implementing the BFWG Principles relating to continued operation of commercial plants			

Appendix 4. BNFL National Stakeholder Dialogue: Consolidated Recommendations for Organisations other than BNFL or NDA

No	Recommendation	Action or Event	Reporting Point	Responsibility
11	In the lead up to the launch of the NDA in April 2005 the DTI should proactively manage the establishment of an NDA Stakeholder Engagement Process			DTI by 01.04.05 Peter MacDonald
18	CoRWM should give consideration to the Disposition of Separated Plutonium case study in its work on the inventory of radioactive materials to be managed in the long-term			CoRWM By 01.07.06 Gordon MacKerron
22	The responsible UK agencies and Government departments should jointly develop policy on contaminated land, taking account of previous and ongoing stakeholder engagement, by the end of 2005			Defra as convenors Radioactive Waste Policy Group By 31.12.2005
23	DEFRA, the devolved adminstrations and the NDA should give urgent consideration to disposal options for very large volumes of material with low levels of residual contamination and if necessary include this in CoRWM's terms of reference			Defra as convenors Radioactive Waste Policy Group By 31.12.2005
32	The West Cumbria Strategic Forum should take due account of previous Dialogue work on Socio-Economic issues at their first meeting			DTI Peter MacDonald
37	The West Cumbria Strategic Forum should give careful consideration to the Diversification report as part of its coordination role to give leadership, minimise the chance of fragmentation and secure funding, and initiate implementation of recommendations as appropriate within the first year			DTI Peter MacDonald
38	The NWDA in its annual plan should ensure that its Northwest cluster organisations in conjunction with BNFL explore opportunities to exploit BNFL's technologies into non-nuclear commercial activity. They should report progress within a year to the West Cumbria Strategic Forum			NWDA 01.01.06 Steve Broomhead
47	Government departments and agencies with regulatory functions (principally DEFRA, DoH, *HPA, SEPA*, EA, HSE), together with the NDA, take account of CERRIE's work and develop a coherent approach to taking account of uncertainty in the risks both from radioactivity and from other sources in regulation and in the prioritisation of clean-up.			Defra, DoH, EA, *SEPA,* HSE, *HPA*

No	Recommendation	Action or Event	Reporting Point	Responsibility
48	In developing its 2005 Recommendations, ICRP gives specific attention to the report of CERRIE; that it considers more explicitly the significance of advances in radiobiology (as well as epidemiology) since its 1990 recommendations; that it indicates more specifically the degrees of uncertainty inherent in the estimation of radiation risk and how these should be taken into account by decision makers; and that in future developments of its dosimetric models it addresses clearly the subject of uncertainty, providing tools and data which may be used to assess uncertainty in the estimation of radiation doses			ICRP [*through DoH and NRPB*] John Cooper
49	Department of Health continue to encourage and, where necessary, fund the NRPB to maintain UK national expertise in dosimetric modelling, and to actively participate in the international effort which will be needed if ICRP is to respond to the above recommendation			DoH
50	Department of Health and other Government Departments ensure that adequate funding for radiobiological and epidemiological research is provided, in line with COMARE's recommendations, recognising that the required expenditure is only a very small fraction of the cost of discharging the UK's nuclear liabilities			DoH and other Government Departments
51	Despite the difficulties experienced by CERRIE, future efforts to resolve controversy in this area should include the involvement of stakeholders and should take account of the experience with processes that have been successful in dealing with disagreement and uncertainty in stakeholder dialogue projects, especially the benefits which can result from the clear definition of and commitment to groundrules at the initiation of any engagement process, and the use of joint fact finding			DoH and other Government Departments
52	Government and regulators should set criteria for acceptability of waste forms. No progress was noted but *MAC diversion being proceeded with* and DWG urged a TPP trial.			Defra, HSE, EA, SEPA
55	DEFRA should take the lead in establishing a waste form qualification system, which can be applied to potential plutonium waste forms, as a matter of urgency, taking into account the work currently being done for intermediate level wastes by the Health and Safety Executive (HSE), the Scottish Environmental Protection Agency (SEPA) and the Environment Agency (EA).			Defra

No	Recommendation	Action or Event	Reporting Point	Responsibility
56	The 'plutonium owner' should ensure that the development of detailed proposals for the management of separated plutonium, the associated decision making, incorporate stakeholder engagement is an integral part of the process. Where appropriate, this should extend to the associated investigations**.**			BE Tony Free
57	The 'plutonium owner' should disregard use of MOX in the Dungeness B, Hunterston B, Hinkley B, Hartlepool and Heysham 1 reactors as options for the management of separated PU			BE Tony Free
58	In the interests of fully establishing the practicability or otherwise of using MOX fuel in Sizewell B, Heysham 2 and Torness, and before any decisions on implementation are taken: ●The 'plutonium owner' and BE (as the 'plutonium user') should enter into initial discussions to explore the financial basis for this option (NB This recommendation may change depending on outcome of current restructuring of BE). ●The availability of capacity in SMP should be reviewed, taking account both of the duration and timing of fulfilling contract commitments to overseas customers and the feasibility of a life extension for the plant. ●Should these explorations indicate that using plutonium in Sizewell B or either of the AGRs may be attractive from liability management point of view, the 'plutonium owner' and 'user' should undertake a comprehensive environmental assessment including the evaluation of transport, reactor safety, environmental discharge, public safety (including the risks from extreme core disruption events), and waste form storage issues. This assessment should be conducted in consultation with stakeholders at national and local levels.			BE Tony Free

No	Recommendation	Action or Event	Reporting Point	Responsibility
59	To explore the feasibility or otherwise of utilising plutonium, in the event that any programme of new build reactors were to proceed, we recommend that before any decision are taken: ●The financial basis on which plutonium might be utilised in new build reactors should be explored at an early stage between the 'plutonium owner' and the likely developer of any new build reactors. The existing collaborative agreement on new build between BNFL and BE may be a suitable vehicle for this. ●The availability of capacity in SMP should be reviewed, taking account of the feasibility of a life extension for the plant. ●Should these explorations (and the outcome of the energy review) be favourable to plutonium use in new build, the prospective developer should undertake a comprehensive environmental impact assessment on the proposal including the evaluation of transport, reactor safety (including the risks from extreme core disruption events), environmental discharge, and waste form storage issues. This assessment should be conducted in consultation with stakeholders at national and local levels. ●A detailed comparison of MOX, Inert Matrix Fuel (IMF) and conventional uranium fuels should be undertaken prior to deciding which fuel type to use			DTI Peter MacDonald
66	Appropriate resources should be put into emergency planning and post-incident response			DTI Peter MacDonald
68	All appropriate agencies (e.g. NDA, Department for Trade and Industry (Dti), BNFL) should ensure that the importance of this issue is communicated forcefully to the Treasury, including appropriate staffing and resourcing levels within OCNS.			OCNS John Reynolds Prior to April 2005
69	BNFL and OCNS independently should confirm whether, under current legal arrangements and guidance notes, they have clearly identifiable responsibilities and appropriate funds for compensation, in respect of the consequences of terrorist incidents. If not, the situation should be rectified.			OCNS John Reynolds July 2005

No	Recommendation	Action or Event	Reporting Point	Responsibility
70	The adequacy of emergency planning funding arrangements should be reviewed in light of the re-evaluation of the worst case scenario accidents and the worst case terrorist incidents.			DTI Peter MacDonald April 2006
71	The next OCNS report should specifically include a section addressing NDA priorities for security.			OCNS John Reynolds May/June 2005 Annual report
72	The Group believes that there needs to be continuous examination by relevant stakeholders (including consideration of a two-tier stakeholder engagement framework) of the arguments for and against the withholding of specific types of information. At this stage, OCNS should specifically review the reason for non-disclosure of information on radioactive waste.			OCNS John Reynolds Ongoing
73	Make sure Amendment to NISR 2003 includes dispute procedure.			OCNS John Reynolds Initiated through Government by DTI at next Amendment
76	Publish civil nuclear classification guides or explain why they are classified.			OCNS John Reynolds June 2006
78	OCNS should monitor and report back to stakeholders the number of visits to its Disclosure Guidance document posted on its website to give an indication of interest.			OCNS John Reynolds - results by next OCNS Annual Report (May/June 2005)
82	OCNS should bring inconsistencies in regulations covering radioactive substances to the attention of policy makers in Government so that regulations are consistent, because it has a direct bearing on the public perception of nuclear security.			OCNS John Reynolds Current
83	BNFL and OCNS should take all necessary measures to increase and monitor public confidence in their security systems including a) monitoring responses to all information put into the public domain and b) appending questions to documentation requesting feedback on user friendliness, etc.			OCNS John Reynolds Publication of OCNS Annual Report (May/June 2005)

No	Recommendation	Action or Event	Reporting Point	Responsibility
84	OCNS should make representations to Government to extend the membership of its advisory board to include suitably a qualified representative from a broader base of stakeholders, including Non-Government Organisations (NGOs), in order to provide a range of perspectives to allow for balanced discussion.			OCNS John Reynolds April 2005
85	Sufficient information should be provided by OCNS (the vetting agency), following consultation with the vettee, to BNFL to manage any potential risk.			OCNS John Reynolds April 2005
86	As a minimum, vetting agencies should consider making the criteria used for vetting available to BNFL.			OCNS John Reynolds April 2005
88	BNFL and OCNS should determine and publish the criteria used to judge whether the security system has failed to the extent that leads to the consequence of that operation ceasing.			OCNS John Reynolds In OCNS annual report
92	OCNS should review its openness and transparency policy taking regard to NDA's practices and those of similar security organizations, taking into account FoIA requirements.			OCNS John Reynolds January 2005
94	OCNS should set up its own independent website.			OCNS John Reynolds December 2005
95	OCNS should respond to invitations by foreign states to contribute to the briefing of concerned stakeholder groups in en route countries in connection with international transport of nuclear material.			OCNS John Reynolds ongoing
97	UK Government should undertake to address stakeholder concerns regarding salvagability of a lost cargo, arrangements of emergency port calls, and environmental impact statement regarding the shipment.			Government Departments (?) ASAP
99	BNFL and OCNS should put pressure on the embryonic NDA to take on board a commitment to continued stakeholder engagement, embracing the views and opinions of stakeholders generated by the Dti consultation process over the last two years, with particular reference to reforming the LLCs, stakeholder capacity building, and adequate funding. See 1.8.			Coordination Group of BNFL National Stakeholder Dialogue – now and ongoing

No	Recommendation	Action or Event	Reporting Point	Responsibility
100	The NDA (and possibly OCNS) should consider how to resource maintenance of links between stakeholders and their constituents, and should bring this issue to the attention of the LLCs or their successors, complemented by dialogue at a national level. Within any future stakeholder process, the NDA should periodically review the quality of stakeholder communication with constituents.			OCNS – now and ongoing John Reynolds OCNS policy decision by September 2005
101	The governance arrangements for OCNS should include an annual examination of resource needs. The OCNS budget should be published annually.			DTI Peter MacDonald June 2005 and annually
102	OCNS should be established along similar lines to the NII to achieve a degree of independence from potential Government pressure. Cabinet Office guidelines on best practice should be adopted in this process.			OCNS John Reynolds by April 2005
103	The OCNS should consider a management statement as recommended by the Better Regulation Task Force (2003) which could potentially be met by the establishment of an authoritative and independent oversight body. See 2.3 and 2.4.			OCNS John Reynolds April 2005
104	OCNS should ensure the DBT is dynamic and takes into account as many threat scenarios and consequences as possible.			OCNS John Reynolds ongoing
105	OCNS to publish as many aspects of the DBT as possible, as is done in the United States, to demonstrate as robust a response as possible and to increase public confidence.			OCNS April 2005
106	OCNS needs to ensure that the results of the test programme are properly considered by the appropriate safety and security authorities.			OCNS April 2006
107	OCNS should make the explanation of states of alert publicly available. OCNS should also ensure that states of alert are always based on objective circumstances, should reflect the real situation and not be subject to political manipulation.			OCNS John Reynolds April 2005
108	BNFL should review with OCNS whether completely independent personnel should be used as the simulated adversary.			OCNS John Reynolds From April 2005
110	The application of different security standards to similar nuclear shipments without explanation			Stakeholders

No	Recommendation	Action or Event	Reporting Point	Responsibility
	similar nuclear shipments without explanation causes confusion and concern, this could be a topic for future stakeholder engagement. Classified information may be assessed in a two-tier stakeholder dialogue process			OCNS John Reynolds
111	As part of its programme of increasing public confidence and understanding of the DBT methodology and the judgments made, OCNS should consider a presentation to the relevant Parliamentary Select Committee (Trade & Industry).			OCNS John Reynolds July 2005
112	BNFL and OCNS should keep under review all system testing used by other security agencies, including force-on-force exercises.			OCNS John Reynolds Initiate by April 2005
113	BNFL should initiate a Joint Fact Finding programme with LLCs or their successors (funded by the NDA), complemented by dialogue at a national level, to establish whether it is possible to arrive at greater agreement about the range of consequences arising from potential terrorist acts as defined in the DBT. The Group recognises that this is conditional upon the establishment of a two-tier stakeholder engagement process.			NDA John Reynolds After April 2005
120	Government should seek to reduce the level of terrorist threat by vigilance, but also by trying to understand the views and concerns of adversaries.			Government Ongoing
121	Examine the law in relation to trespassing at airports, the Channel Tunnel and nuclear installations in other countries.			Government ASAP – target date 2005
122	Consideration should be given by Ministers to formalising parliamentary oversight of civil nuclear security arrangements and the annual report published by OCNS.			Government July 2005
126	Main Group members should provide feedback to BNFL on the content of the 2004 CSR report			Main Group Members

Appendix 5. Covering letter from The Environment Council

address

2 February 2005

Dear

Recommendations Arising from BNFL National Stakeholder Dialogue

In 1998, BNFL, recognising that the nuclear industry had a long history of unenviable relationships with many of its stakeholders, decided to pursue a policy to attempt to alter the situation. This recognised that the 'conversation' that BNFL had typically been having with its stakeholders should become more positive and less antagonistic.

Through The Environment Council, BNFL brought together a number of key stakeholders who agreed to explore the potential for working together on some of the most challenging subjects facing the industry.

This led to the formation of what became the BNFL National Stakeholder Dialogue, whose aim was: "*to inform BNFL's decision-making process about the improvement of their environmental performance in the context of their overall development*".

The Stakeholder Dialogue has been a structured series of meetings that brought together a wide range of stakeholders often with disparate views and interests to discuss environmental issues around BNFL's business. It was funded by BNFL but managed by an independent convenor, The Environment Council, on behalf of all the stakeholders involved.

This Stakeholder Dialogue process has been unique; it was the longest, largest and most thorough Dialogue process ever undertaken in Europe. It involved over 70 organisations, represented by some 200 individuals. It took 6 years and covered in detail the main topics listed below:

- Waste
- Discharges
- Spent Fuel
- Plutonium
- Socio Economic issues
- Security
- Business Futures

Successive Working Groups have produced reports, containing details of agreements and areas where disagreement remained, together with recommendations for further action. The detailed reports are available on The Environment Council Website www.the-environment-council.org.uk

The recommendations from all Working Groups and the responses to them have been brought together and consolidated to remove repetition and overlap. A complete list of the recommendations, providing an auditable trail to the reports, is attached for your information. A further compilation of the recommendations has been prepared identifying organisations, and where known specific individuals, which have continuing responsibilities after the formation of the Nuclear Decommissioning

Authority (NDA). These recommendations have been allocated to either BNFL, the NDA, or other organisations. At the final Main Group Meeting of the Dialogue in October 2004, these recommendations were formally accepted for action by Mike Parker (CEO, BNFL), Ian Roxburgh (CEO, NDA) and Gordon MacKerron (Chair, CoRWM). The recommendations we believe to be relevant to you are contained in the attached table.

Could you arrange for your organisation to respond to these recommendations, in the form:

1. Is the recommendation addressed to the right organisation? If not, can you assist by identifying the organisation which would be relevant?
2. Where individuals are named, are these the right people to address the recommendations? If not, can you assist by identifying the individuals who should be named?
3. Do you understand the recommendations or require further clarification?
4. How are you addressing or proposing to address these recommendations, identifying any timescales?
5. How are you proposing to report progress against these recommendations in the future? How might stakeholders find out about your progress?
6. If you are not addressing or proposing to address these recommendations, can you please indicate the reasons why?

We are committed to produce a report back to the BNFL National Stakeholder Dialogue members by 31 March 2005, and would appreciate your responses (to the extent possible) by 11 March. If you require further clarification or assistance, please contact Rhuari Bennett on the details below, or any of the members of the group (below).

Yours

Rhuari Bennett
Dialogue Coordinator
rhuarib@envcouncil.org.uk 020 7632 0134

Members of the Recommendations Monitoring Group:

Fred Barker	Independent Nuclear Policy analyst
Grace McGlynn	BNFL
David Bonser	BNFL
Gregg Butler	University of Manchester
Helen Ashley	The Environment Council
Richard Griffin	DTI
Rupert Wilcox-Baker	BNFL ALFA
Pete Wilkinson	Wilkinson Environmental Consulting
Peter Kane	General Municipal Boilers
Peter Addison	Nuclear Installations Inspectorate
John Kane	General Municipal Boilers
Sunil Shastri	University of Hull
Rosie Mathisen	Westlakes Renaissance
Steve Jones	Westlakes Scientific Consulting

Appendix 6. Note from 22-12-04 meeting, 1400-1530 at No. 10 Downing Street

Present:

Geoffrey Norris (No.10 Policy Directorate)
Peter Waller (DTI)
Richard Griffin (DTI/NDA Team)
Peter Kane (GMB Union)
Grace McGlynn (BNFL)
Gregg Butler (Manchester University)
Richard Harris (The Environment Council)
Rhuari Bennett (The Environment Council)
David Bonser (BNFL)

Apologies:

Pete Wilkinson (Wilkinson Environmental Consulting)
Peter Addison (Nuclear Installations Inspectorate)

1 – Introduction. Meeting requested by Geoffrey Norris to discuss overview of the BNFL National Stakeholder Dialogue and its recommendations, including any outstanding concerns that the group may have. People present are a delegation from the group that has had responsibility for coordinating the Dialogue for the last 6 years, now trying to draw the work to a close in such a way that prevents any of the work 'falling between the cracks'.

Ran through the appended presentation, taking questions/discussion throughout.

2 – Early work in the Dialogue, especially around waste and discharges, was focussed on agreeing baseline information that had traditionally been in contention. A by-product of this early work was increased levels of trust and cooperation between stakeholders that enabled more highly contentious work to be tackled later in the process, such as spent fuel and plutonium management.

3 – Joint Fact Finding emerged as a key element of the work, especially around socio-economic impacts of BNFLs business options in West Cumbria. This represented a significant and positive shift towards a jointly-agreed research project whereby its outputs were not undermined by questions about their provenance and methodology as all parties had been directly involved in the defining of the ToRs, appointing the consultants and steering the research.

4 – Multi-Attribute Decision Analysis (MADA) was used in assessing different management options for spent Magnox Fuel. This tool was useful in terms of generating clarity around what people's views were on different options and where people disagreed, but did not provide a way forward for managing the difference of values that existed between those stakeholders that prioritised jobs over environmental concerns and *vice versa*, for example.

5 – Strategic Action Planning was successfully used as a logical step to follow MADA, in order to manage the uncertainties inherent in all of the scenarios under exploration. The framework defines the uncertainties associated with each scenario and then identifies actions to carry out, as well as contingency plans that would need to be put in place if any of the assumptions being made prove to be wrong. This

approach highlighted some key recommendations that were not only common to all scenarios, but all stakeholders could agree on. An example of this is the emphasis placed on research to assess immobilisation of Pu, and also the planning of contingencies for Magnox fuel management if B205 were to irreparably break down before 2012 (current planned closure date).

6 – Disagreements, where they existed, were handled by exploring the boundary of the disagreement and subsequent clarification of why specifically people had different views. Where the disagreement could not be resolved, participants were able to express the differing views openly and clearly in the final reports.

7 – BNFL were stakeholders in the discussions, in addition to supporting the whole process with funding. This was possible via the use of The Environment Council as independent convenor of the process, so that a level playing field was created as far as possible.

8 – There is a need for the coordination of the different stakeholder engagement processes within the nuclear sector. This is a difficult task. It also raises the question of where does one stop in casting the net wider and wider for processes to coordinate when the field is already very complex?

9 – Benefits of stakeholder engagement are wide but focus mainly on managing both political and technical uncertainty around difficult issues. This is partly about understanding people's views but also allowing the complexity and difficulty of a policy area to be shared with stakeholders. The BNFL Dialogue explicitly didn't attempt to engage the general public in a demographically representative way, rather it was a response to contention around specific issues that stakeholders wanted to discuss and progress. **The challenge for future engagement work in complex policy areas is how to integrate intensive stakeholder engagement with extensive public engagement.**

10 – Progressing the Recommendations. BNFL and NDA have committed to progressing the recommendations and providing an update to the Recommendations Monitoring Group (RMG) who are writing a report for the Main Group in Spring '05 on the take-up of the recommendations. The RMG will ask all identified organisations to give a similar update for incorporation within this report where appropriate. Peter Waller agreed to take the recommendations relevant to the DTI back to be dealt with accordingly.

Presentation to No10 Policy Unit, 22.12.2004

Handing on the Baton

An Overview of the National Stakeholder Dialogue

Update to No10 Policy Unit
from the Co-ordination Group, December 2004

Background

- **The BNFL National Stakeholder Dialogue has run from 1998 to 2004**
- **The most intensive and extensive stakeholder examination of the UK nuclear fuel cycle**
- **Worked with a Main Group of around 70 organisations including Company, regulators, local authorities, trades unions, Green NGOs, academics, RDAs, Government Depts, customers**
- **Main Group mandated a succession of Working Groups, looking at issues of increasing complexity and contention**
- **Working Groups used expert inputs and commissioned joint fact-finding studies**

Products

- **Working Groups produced reports detailing their work and findings, and these were approved by the Main Group**
- **Although the initial aim was to 'inform BNFL's environmental performance', the Dialogue has adopted a wider remit and provided advice on a range of nuclear policy aspects.**
- **In particular, there has been increasing interaction with the process of establishing the NDA**

Products

- **Waste Working Group Report – February 2000**
- **Discharges Working Group Report – February 2000**
- **Discharges Working Group First Update Report – October 2000**
- **Waste Working Group First Update Report – October 2000**
- **Magnox Task Group and Report – November 2000**
- **Socio-Economic Study of West Cumbria - November 2001**
- **Waste Working Group Second Update Report – January 2002**
- **Discharges Working Group Second Update Report – January 2002**

Products

- **Spent Fuel Management Options Working Group Report – January 2002**
- **Business Futures Working Group 1st Interim Report containing Principles for Liability Management – November 2002**
- **Plutonium Working Group Report – March 2003**
- **Socio-economic Report Update - August 2003**
- **Business Futures Working Group Report – November 2004**
- **Security Working Group Report – November 2004**

In total, some 300 recommendations and responses in the course of the 6 years of the Dialogue

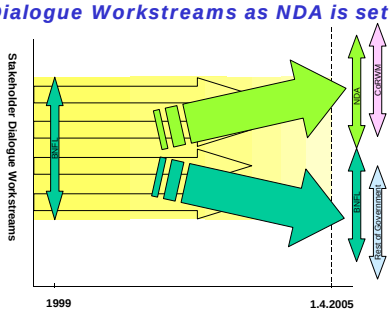
Consolidation – Way Forward

- **The recommendations have been consolidated into 11 subject areas:**

1. **Thorp programme**
2. **Magnox reprocessing programme**
3. **Cleanup programme**
4. **Socio-economic impacts**
5. **Vitrification performance**
6. **Discharges**
7. **Waste**
8. **Plutonium**
9. **Security**
10. **Other BNFL Sites**
11. **Ongoing use of reports, methodology – the way forward**

- **The recommendations were allocated to the organisations responsible both now and post-April 2005 (and to named individuals for BNFL)**

Transition of BNFL National Stakeholder Dialogue Workstreams as NDA is set up



Consolidation – Way Forward

- At the last Main Group Meeting in October 2004 Ian Roxburgh, Mike Parker and Gordon MacKerron received the recommendations falling to NDA, BNFL, and CoRWM
- In addition Ian Roxburgh offered to pass on other recommendations falling to Government to the relevant Departments
- The Main Group Meeting also mandated the establishment of a Recommendations Monitoring Group (RMG), which will compile a report on progress for April 2005

Consolidation – Way Forward

- The key question is how these recommendations will be progressed and taken account of in the stakeholder engagement processes of the relevant organisations

Outstanding Concerns

The Need for Coordination

- The UK nuclear area is confronting numerous issues which demand stakeholder involvement e.g. NDA cleanup, commercial plant operation, CoRWM, Magnox, ISOLUS, Safegrounds, regulatory policy making, energy policy
  - This involves many Government departments who do not naturally coordinate well
  - Will be costly, ineffective, potentially counter-productive and lead to 'Stakeholder Overload'

Outstanding Concerns

Learning the lessons

- The BNFL Dialogue over 6 years has demonstrated an approach to tackling one of the most contentious and complex areas of UK policy
- As well as the ***products*** of the Dialogue, significant ***process*** learning and ***capacity building*** has been achieved
- This process learning is both useable within the nuclear sector but also easily transferable to other challenging policy areas

Key Messages

- *Progress the recommendations*
- *Coordinate stakeholder engagement processes within the nuclear sector*
- *Transfer the process lessons from the Dialogue both within and between departments*
- *Encourage the application of the learning to other policy areas*

Appendix 7. Letter from Business Futures Working Group to NDA

Dr Ian Roxburgh
Chief Executive Officer
Nuclear Decommissioning Authority
Pelham House
Calderbridge
Cumbria
CA20 1DB.

Dear Ian,

I am writing on behalf of the Business Futures Working Group (BFWG) which, as you know, is one of the working groups of the BNFL National Stakeholder Dialogue.

You will recall that the BFWG submitted a draft report to the Main Group Meeting in Manchester which you attended. The Group has now amended its report in the light of the comments it received from Main Group stakeholders in Manchester and the final version will be circulated in due course. In advance of publication of the BFWG's final report, the Group has asked me to draw the following issues to your attention:

(1) First and foremost, the Group wanted to express it's gratitude for the fact that you devoted so much of your time to the event in Manchester and for the clear statements you made about no link between the NDA and new nuclear build and the importance of engaging with stakeholders to the success of the NDA. Although they may seem obvious points to you, the Group felt that such clear messages and the fact that they had been repeated in other fora has led to an improved level of confidence that the NDA will deliver.

(2) The Group recognised that a large number of the recommendations made in it's report are directed at the NDA and therefore thought it may be useful to try and prioritise them. Obviously, the Group believes that all it's recommendations are important. However, it would also be true to say that some issues are causing more concern than others and on that basis, the BFWG has tried to inject a form of prioritisation to it's conclusions that it hopes will be helpful to you and your team.

(a) **Funding** – the BFWG remain concerned about the funding arrangements for the NDA. In particular, the absence of a long-term (i.e. beyond the spending review envelope) funding commitment to the NDA's work by Government and a lack of transparency around the detailed arrangements in the event of an increase or decrease in the commercial income the NDA expects to receive. The BFWG recognises (but does not agree with) the reasons behind the decision to choose segregated account over segregated fund. However, the decision itself is not the end of the process. The White Paper made clear that "…*the Government is determined to establish funding arrangements which help to promote*

(b) *public confidence in clean up and build confidence in the size and continuity of the market and enable the LMA to deliver*". Since the announcement that the way forward was to be a segregated account (April 2003), stakeholders heard nothing until the spending review announcement in July of this year and this did not address any of the issues set out above.

(c) **Contractorisation/Competition** – as you may be aware, this has caused some concern among stakeholders. In particular, the potential negative impact on safety. While the BFWG is not against competition itself, it continues to be concerned that the current proposed contracting model will not be able to deliver safe and effective clean up.

(c) **Stakeholder Engagement** - At DTI's request, the BFWG spent a great deal of time analysing the White Paper and developing a set of principles for liabilities management (included as Annex 1 to the BFWG Final Report). It is not clear to the Group how much, if any, notice the DTI, has taken of this report. BFWG feels that this is disappointing as it does represent a significant piece of work by a cross-section of the NDA's stakeholders and is a useful starting point for many of the issues that you and your team now face.

On a positive note, the Group was pleased with the response given to its input on the stakeholder engagement framework and looks forward to contributing to the development of the NDA's arrangements over the coming months.

The BFWG recognises that it does not have all the answers. However, it strongly believes that it is important for all stakeholders to work together with the NDA to ensure that it is a success. To that end, the BFWG would welcome the opportunity to meet with you and your team to discuss the issues raised in this letter and in the Group's Report and to see if there are any areas where members of the Group may be able to assist you going forward. Please let me know if you would find this helpful or if you have any queries on the above.

Yours sincerely

Rhuari Bennett
Team Coordinator, Stakeholder Involvement Unit
020 7632 0134 rhuarib@envcouncil.org.uk

cc. David Hayes, DTI
David Bonser, BNFL
Graham Turnock, Treasury

Appendix 8. Response from British Nuclear Fuels plc (BNFL)

BNFL response to the Consolidated Recommendations from the National Stakeholder Dialogue

11 March 2005

Introduction

The October 2004 Main Group Meeting of the BNFL National Stakeholder Dialogue agreed that the recommendations from the various Working Groups, which had met through 1998-2004, should be consolidated to make them transparent and accessible. The outputs from the Dialogue provide a "baseline" of agreements, areas of continuing uncertainty and recommendations which need to be built upon as the UK Government, the Nuclear Decommissioning Authority, the nuclear industry, the regulators and other national and local stakeholders enter a period of great change. The October meeting also saw the formal transfer of recommendations to their "new owners", for example the Nuclear Decommissioning Authority (NDA), the Committee on Radioactive Waste Management (CoRWM) and nominated BNFL Executive Directors to respond to recommendations falling within their area of responsibility. This will continue to provide the context for ongoing work and future reporting of progress.

To report on the progress of recommendations falling to BNFL, this document uses the updated topic headings developed by the Recommendations Monitoring Group (RMG) which has been established in accordance with the Main Group's mandate.

These are:-

1. Thorp programme
2. Magnox Reprocessing programme
3. Clean-up and Decommissioning programme and programme delivery
4. Socio-economic Impacts and Planning
5. Vitrification performance
6. Discharges
7. Waste
8. Plutonium
9. Security
10. Other BNFL sites
11. Ongoing use of reports and methodologies

The BNFL responses are given in the form of a narrative under each section with the exception of section 9 where the responses are given in the tabular format produced by the Security Working Group. The responses to the recommendations have been collated centrally. In future, however, responsibility for progressing and updating stakeholders on the recommendations will be undertaken by the various BNFL Executive members who have been identified as being responsible for the topic areas. The relevant Business Groups or functional areas will decide how best to inform stakeholders on progress in discharging the recommendations. For example, future engagement frameworks will align with those being developed by the Nuclear Decommissioning Authority (NDA) so that information will be available to Site Stakeholder Groups. The recommendations will also be reported on as part of the Business Groups' Corporate Social Responsibility (CSR) reporting.

Consolidated Recommendations and Continuing Responsibilities

1. Thorp Programme Barry Snelson – Managing Director, Management Services Sellafield.

1.1	Thorp Programme - Thorp performance against 2004/5 target of 725 tonnes	Barry Snelson	

BNFL Update

As reported at the October 2004 Main Group meeting, Thorp is expected to operate to fulfil contracts with existing customers (anticipated around 2010). The "Managing the Nuclear Legacy" White Paper considered current and future Thorp business and specified that existing contracts would be honoured to avoid breaking contractual commitments and Government undertakings. As stated in the Energy Act 2004, when the Nuclear Decommissioning Authority assumes ownership of the operational plants at Sellafield (Thorp and Sellafield MOX plant) profit from commercial contracts will contribute towards clean up costs.

Responsibility for Thorp's operational performance remains with Barry Snelson, Managing Director Management Services, Sellafield. Management Services is part of British Nuclear Group, the decommissioning and clean up arm of BNFL.

Meeting the 2004/05 target required high levels of both plant availability and performance. The plant operated successfully until early December when a problem with the effluent evaporation system resulted in an unscheduled plant shutdown. Production was restarted over Christmas but currently continues to be constrained by issues associated with downstream plants. This has had an adverse impact on the annual production figure. To 10 March 2005, Thorp had processed 546 tonnes of fuel against the year's target of 725 tonnes.

Stocks of irradiated fuel in the Thorp Ponds remain high, but there have been no constraints to either ongoing receipts from UK or overseas customers. The key factor in achieving the programmed completion of all existing business in Thorp remains the improvements to the operational performance of the vitrification facilities which will facilitate reductions in the amount of High Level liquid waste held in storage on the Sellafield site. Details of vitrification performance are given in section 5 of this document.

2. Magnox Programme Mark Morant Managing Director, Reactor Services and Barry Snelson, Managing Director, Management Services Sellafield.

No	Reporting Issue	Future Responsibility	Key Dates
2.2	Progress on defuelling reactors	Mark Morant	To 2012
2.3	Fuel delivery strategy and performance	Mark Morant	To 2012
2.4	B205 performance against 2004/5 target of 800 tonnes	Barry Snelson	2004/5
2.5	B205 performance – 'reprocessing envelope diagram'	Barry Snelson	Updates to 2012
2.6	Projected Magnox reprocessing throughput before 2012 B205 closure, assuming that Magnox stations continue to operate to declared lifetimes	Barry Snelson	Updates to 2012

BNFL Update

The closure dates for the Magnox reactor programme were published on 23 May 2000 and continues to be implemented. Responsibility for endorsing or amending the programme will lie with the NDA after April 2005. Progress against that programme is the responsibility of Mark Morant, Managing Director Reactor Sites, within British Nuclear Group.

The Magnox Lifetime programme implementation has continued. Closure of the Chapelcross station was announced in June 2004, adding to the previous closures of Bradwell, Hinkley Point and Calder Hall. The remaining four operational stations, i.e. Sizewell A, Dungeness, Oldbury and Wylfa, continue to generate electricity, and their programmed closure dates are unchanged. Wylfa is the final reactor scheduled to close on 31 March 2010.

Hinkley Point defuelling was completed ahead of schedule in 2004, having removed the whole of the initial stock of 470 tonnes. Bradwell defuelling has continued but at a lower rate. The remaining Bradwell fuel stock is currently 230 tonnes compared with the initial 460 tonnes. Calder Hall and Chapelcross defuelling is scheduled to start in 2006 and 2007 respectively. Stocks of fuel within station ponds awaiting transport to Sellafield are all well within their target range.

The total Magnox fuel delivery to Sellafield during 2004/5 to date is 800 tonnes compared with a financial year target of 1002 tonnes. Although this rate is below the annual target, this is partly a feature of the high achievement in 2003-04. Fuel deliveries over the two year period 2003-05 matches the programme required to achieve the Magnox operating strategy.

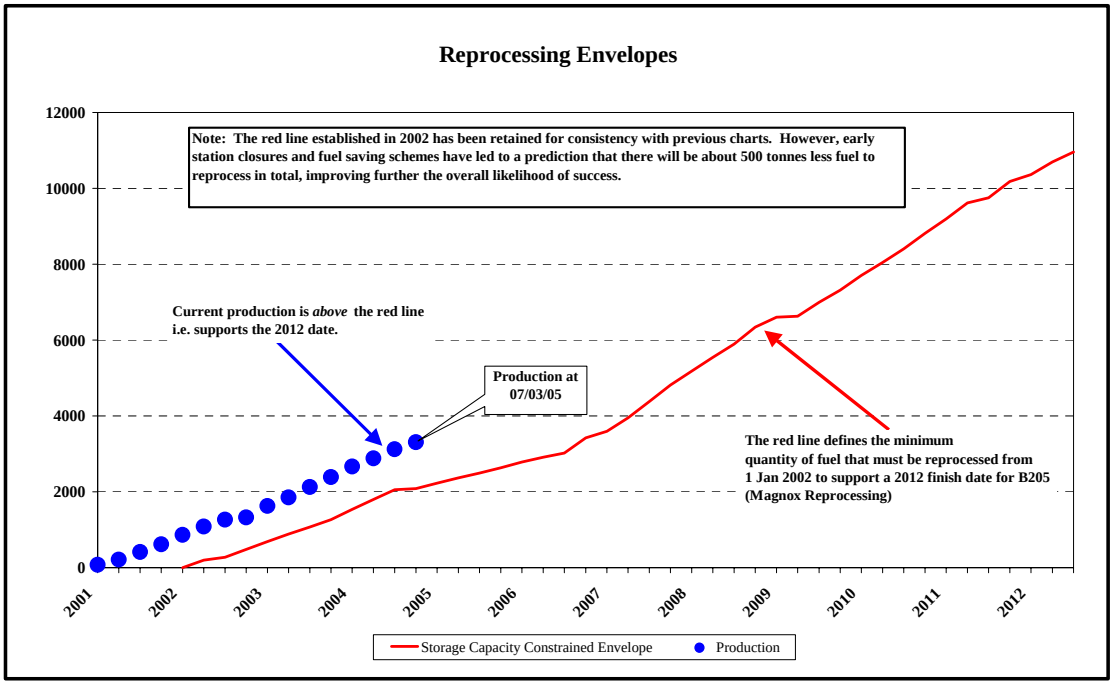
Responsibility for delivering the Magnox reprocessing programme remains with Barry Snelson, Managing Director Management Services, Sellafield. As of 10

March, 949 tonnes of Magnox fuel has been reprocessed against the 1000 tonnes target for 2004/05.

At Sellafield a stock of lower yield Magnox fuel is in pond storage awaiting reprocessing. This fuel has been stored for prolonged periods which has led to fuel corrosion and associated increases in total alpha discharges. Of the Magnox fuel reprocessed to date, 131 tonnes of this fuel has been reprocessed. For a variety of technical reasons this legacy fuel is slower to process.

As previously recommended by Dialogue Working Groups, the Magnox "reprocessing envelope diagram" has been updated and is reproduced below. The red "minimum required" delivery line on the envelope diagram has been retained for consistency with previous reports. However, earlier station closures and fuel savings schemes have led to a prediction that there will be about 500 tonnes less fuel to reprocess before closure of the Magnox reprocessing plant at the end of 2012.

The amount of Magnox fuel to be reprocessed before the end of the reprocessing programme is some 7,000 tonnes requiring a reprocessing rate of around1000 tonnes per year in a full twelve month operating period. Magnox reprocessing remains on schedule for completion of reprocessing operations by the end of 2012.



Should the Magnox reprocessing plant be unable to process fuel, and there were significant quantities of wetted fuel remaining to be processed, one option recommended by the Spent Fuel Management Options Working Group (SFMOWG) was the possibility of using Thorp to process Magnox fuel. Research and development has been evaluated which indicates that processing Magnox fuel through Thorp was feasible, although at a lower rate than might have been

anticipated. However, significant technical risks have also been identified, including controlling the chemical processes and the logistics of transferring the Magnox fuel to Thorp. These risks would require detailed assessment, together with further development work, before the Thorp option could be considered to be a practicable alternative option to the existing Magnox reprocessing plant. BNFL therefore intends to continue to use the existing Magnox reprocessing facility.

An alternative contingency option for Magnox fuel which is already wet, is to encapsulate intact fuel elements in drums for interim surface storage. Research has concentrated on the thermal and corrosion effects of a range of encapsulants. But significant issues remain around the long term storage of Magnox fuel.

BNFL has also examined the potential of dry storing Magnox fuel which has not been wetted and forms the bulk of the remaining fuel inventory. The engineering and technical issues associated with the temporary storage of fuel in reactor cores: dry transport and interim storage in a surface store were investigated and no major technical "show stoppers" have been identified. However, as with the encapsulated option discussed above, there are wider associated regulatory and other stakeholder issues which would need to be addressed.

3. Cleanup and Decommissioning Programme and Programme Delivery- Lawrie Haynes Chief Executive, British Nuclear Group

No	Reporting Issue	Future Responsibility	Key Dates
3.1	What information can BNFL make available? Needs to be linked with the current review of Life Cycle Baseline	Lawrie Haynes	September 2004
3.2	What would BNFL want to see as a product from stakeholders in this area?	Lawrie Haynes	April 2005
3.4	Review of Life Cycle Baseline planning and prioritisation	Lawrie Haynes	LCBL2s and ongoing
3.5	How are stakeholders being involved in this review process?	Lawrie Haynes	Ongoing

BNFL Update

All civil nuclear sites which will become the responsibility of the NDA have prepared Life Cycle Baseline (LCBL) plans to a specification determined by the NDA Team within the Department of Trade and Industry (DTI). The Baseline plans define what activities are to be done on a site over a period of decades, when these activities are to be done and an assessment of costs. They cover future work to take a site from its current state to an assumed and defined end state. Sites are also required to produce Near Term Work Plans (NTWP) which sets out planned activities for the next 3 years. Both LCBLs and NTWPs are living and evolving processes that are updated annually.

As reported in October, of particular relevance was the Treasury's 2004 Spending Review[3]. The DTI's objective and performance targets in this areas were stated as:-

"Reduce the civil nuclear liability by 10% by 2010, and establish a safe, innovative and dynamic market for nuclear clean-up by delivering annual 2% efficiency gains from 2006-07; and ensure successful competitions have been completed for the management of at least 50% of UK nuclear sites by end 2008."

Funding limits have therefore been set for the next three years and the next versions of LCBLs and NTWPs are against the context of the Spending Review. Work on NTWP 2005 is drawing to its conclusion and is due for submission to the NDA on 15 March. Work on LCBL 2005 (the third plan to be produced) commenced in February.

The LCBLs and NTWPs are of necessity highly detailed technical documents and therefore not very accessible to the lay reader. There are also issues around commercial confidentiality and security that restrict access to the plans. However, examination of these plans is vital to allow stakeholders to identify issues of importance, for example, hazard reduction, discharges, jobs and ultimate use of land and site end points.

As part of the work programme of the Business Futures Working Group (BFWG), a generic template[4] was developed to describe specific projects or potential areas of clean-up work. BNFL produced two examples using this framework to outline the wet silo project and what could be done regarding contaminated land on the Sellafield site. These examples, which were included in the BFWG Final report[5], were not meant to be exhaustive in terms of the information provided but can act as prompts for further questions and enquiries from stakeholders. The examples should enable issues of interest to be identified and therefore be particularly relevant in enabling local stakeholders to engage more effectively with Site Licensees.

BFWG recommended to BNFL that the generic template should be submitted to the NDA for development within its own stakeholder engagement process. As the

[3] 2004 Spending Review, Stability, security and opportunity for all: investing for Britain's long-term future, New Public Spending Plans 2005-2008, Chapter 16 Department of Trade & Industry
[4] Appendix 11 BFWG Final Report December 2004
[5] Appendix 12 and Appendix 14 BFWG Final Report December 2004

Executive Director responsible for British Nuclear Group, Lawrie Haynes has provided the generic template to the NDA's Chief Executive, Dr Ian Roxburgh with a commendation that it provides a useful way that site licensee companies can engage with local stakeholders about plans for site remediation.

This framework process has also been commended by the Site Plans sub-committee of the Sellafield Local Liaison Committee (the group tasked with developing engagement on LCBLs and NTWPs for the West Cumbria nuclear sites). The Site Stakeholder Group has a number of sub-groups established to consider specific topics or issues. The Site Plans sub-committee is using the framework to scope out these single issues as part of its work to develop engagement on LCBLs and NTWPs for the West Cumbria nuclear sites. The framework is also being used to explore transport issues by the Low Level Waste sub-committee.

4. Socio-economic Impacts and Planning - Barry Snelson, Managing Director, Management Services Sellafield

No	Reporting Issue	Future Responsibility	Key Dates
6.1	Report on initiatives and plans to mitigate expected socio-economic effects of Sellafield job reductions	Barry Snelson	NTWP2 March 2005 and ongoing

BNFL Update

Early work within the Dialogue identified the importance of the socio-economic effects of different Sellafield programmes on the West Cumbrian economy. The jointly sponsored ERM Economics study predicted extensive employment effects which had not previously been anticipated. This study has helped to inform BNFL and other local stakeholders as part of the prioritisation of clean-up and operational programmes, in seeking to manage competing demands on funds.

The Energy Act 2004 placed an obligation on the NDA to give encouragement and other support to activities that benefit the social or economic life of communities living near NDA sites. In response to a request from the NDA, British Nuclear Group has provided an initial high level assessment of options that might improve the socio-economic impact around the sites to be operated on the NDA's behalf. The study has focussed on nuclear-related options, and in particular on West Cumbria, where the scale and range of operations at Sellafield offer the greatest opportunities for re-phasing and modifying the scope of wo9rk to be carried out in order to smooth or sustain the socio-economic profiles. Opportunities at each of the reactor sites have also been considered, but the range of nuclear-related options at these sites are far more limited.

In 2004 the Diversification Joint Fact Finding study was also undertaken by ERM which examined potential new business directions for BNFL, including renewable energy options and non-nuclear business in relation to sustaining Cumbrian business economies. The BFWG recommended that the ERM reports produced by the Dialogue process should be shared with the NDA and other individuals and organisations responsible for socio-economic development. BNFL continues to

work closely with the West Cumbrian Strategic Forum, Cumbrian local authorities, trades unions and regional development agencies, such as the North West Development Agency, the West Cumbria Development Agency and Westlakes Renaissance regarding the socio-economic impacts of changes in the operational focus of the Sellafield site.

5. Vitrification Performance - Barry Snelson, Managing Director, Management Services Sellafield

No	Reporting Issue	Future Responsibility	Key Dates
5.1	Vitrification plant progress – production and containers to store against 2004/5 target of 460 containers to store	Barry Snelson	Reporting against NTWP2 March 2005 and ongoing
5.2	Progress on line 3 commissioning	Barry Snelson	Reporting against NTWP2 March 2005 and ongoing
5.3	Progress in the reduction in stocks of High Active Liquid Waste against NII specification curve	Barry Snelson	Reporting against NTWP2 March 2005 and ongoing

BNFL Update

To 10 March 2005, 415 containers have been consigned to store against a target of 460 containers. This remains a significant improved plant performance primarily as a result of the sustained implementation of a 4-year improvement plan. The quantities of high level liquid waste remains within the envelope specified by the NII.

6 Discharges - Barry Snelson, Managing Director, Management Services Sellafield

No	Reporting Issue	Future Responsibility	Key Dates
8.1	Report on discharge reduction – 'within region of optimisation – D1 plus/ D2 minus and D3 plus'	Barry Snelson	Annual discharge reporting – OSPAR 2020
8.2	Progress on technetium discharge reduction	Barry Snelson	Annual discharge reporting – OSPAR 2020
8.3	Progress on reduction of C-14, Sr-90 and Ru-106 discharges	Barry Snelson	Annual discharge reporting – OSPAR 2020
8.4	Progress on modelling of I-129 discharges and use of iodic acid	Barry Snelson	Annual discharge reporting – OSPAR 2020
8.5	Total Alpha discharges	Barry Snelson	Annual discharge reporting – OSPAR 2020

BNFL Update

The Discharges Working Group concentrated their attention on the environmental impacts from the Sellafield site. The Group introduced the concept of "regions of optimisation" where apparently opposing factors could be represented to clarify constraints on, and opportunities for, discharge reduction.

As reported to the Main Group in October, the Environment Agency (EA) published Sellafield's new discharge authorisation for implementation from October 2004. This represented a significant step in bringing up to date the regulation of discharges and disposals and will promote improved environmental performance, against the current work plan for Sellafield. The UK's National Discharge Strategy, published in 2002, recognised the exclusion of discharges from enhanced decommissioning and clean-up of facilities built in the 1950s and 1960s. There remains a real challenge around how to accelerate clean-up, with benefits from earlier hazard potential and environmental risk reduction, whilst maintaining a proper degree of protection for the environment.

Of particular interest to stakeholders have been discharges of technetium 99 to the Irish Sea. The successful implementation of the diversion of Medium Active Concentrate (MAC) from the Magnox reprocessing plant to the vitrification process has reduced significantly the technetium inventory to be processed through the Enhanced Actinide Removal Plant (EARP). The implementation of this treatment process means that all technetium discharges from Sellafield will be reduced by 90%. It will allow the site to reduce technetium discharges to less than 10 Terabequerels well in advance of this target as set by the UK's National Discharge Strategy. Further benefits have included the UK's relations with its OSPAR partners and to the OSPAR process itself. Diversion has had an additional benefit of avoiding discharges to sea that would otherwise have arisen from the processing of the MAC, such as carbon-14, strontium-90 and ruthenium-106.

The successful introduction of the chemical TPP (tetraphenylphosphonium bromide) into the Enhanced Actinide Removal Plant (EARP) also allowed the removal of technetium from stored liquid MAC, enabling it to be converted into a solid waste.

Detailed investigations are continuing to identify whether there are any other practicable means to further reduce aerial discharges of iodine-129, although none have been revealed so far. In contrast, a series of investigations and plant trials has led to some changes to equipment and mode of operation in the Thorp fuel storage pond which together will reduce discharges of cobalt-60.

A substantial effort has been made, and is continuing to be undertaken, to achieve improved environmental performance from the Site Ion Exchange Effluent Plant (SIXEP) and the Fuel Handling Plant (FHP), including performance against total alpha discharges. Processing Magnox fuel is important in this context as a means of reducing environmental risk from actual or potential corrosion of fuel. Further work is underway to secure these improvements in reducing discharges to the environment

7. Waste - *Lawrie Haynes Chief Executive, British Nuclear Group*

No	Reporting Issue	Future Responsibility	Key Dates
7.1	Progress on the definition and achievement of monitorable and retrievable storage	Lawrie Haynes	

BNFL Update

On the 1 May 2004, British Nuclear Group was launched to provide clean-up and decommissioning services to its main customer, the NDA. Management Services within British Nuclear Group covers Sellafield and all the UK's Magnox reactors.

In seeking to address the recommendations from the Discharges Working Group regarding acceptability of waste forms, new joint NII, EA and SEPA guidance has been drafted to address this issue. The guidance clarifies accountability and uses the Nirex "Letter of Comfort" process of deemed suitability of wastes for geological disposal. Discussions with Nirex have reached agreement for the majority of waste forms, although there are still issues around the remaining waste streams.

The Nirex process requires waste owners to undertake a gap analysis for the waste in its current form and the conditions necessary to meet the Nirex criteria, and to then produce an action plan to address any mismatch.

The drive for improved passive, safe, monitorable and retrievable waste forms is a key requirement of Sellafield site remediation, including interim storage options.

As stated in section 3 above, BNFL recognises that stakeholders have a keen interest in plans for the decommissioning and clean-up of nuclear sites. It is vital that proactive engagement continues on issues around prioritisation between projects and sites, what to do with contaminated land, site end points, environmental impacts, local infrastructure and socio-economic effects.

BNFL is therefore committed to engaging with stakeholders having an interest in the Company's activities and will also align future engagement frameworks with those being developed by the DTI on behalf of the NDA. From April 2005, local liaison committees will transform into Site Stakeholder Groups (SSGs). Each SSG will develop its own way of working based upon generic principles outlined in an NDA guidance note produced in December 2004. The NDA will also hold regional stakeholder meetings and a National Stakeholder Group.

British Nuclear Group recognises that some issues (particularly relating to Sellafield) have a broader remit than the SSG forum might allow and therefore will seek to engage with those wider stakeholders having a specific interest. This is in line with recommendations from BFWG that BNFL Business Groups should develop engagement strategies consistent with BFWG proposals[6].

8. Plutonium - Sue Ion, Director Technology, Lawrie Haynes Chief Executive, British Nuclear Group

No	Reporting Issue	Future Responsibility	Key Dates
8.1	Report on forward R&D programme	Sue Ion Lawrie Haynes	2006/7 – see PuWG response and SAP work

BNFL Update

BNFL's Nuclear Science and Technology Services (now named Nexia Solutions) presented to the NDA Team an initial proposal for research and development studies on the principal options for Plutonium disposition i.e. irradiation in reactor and immobilisation. Details of this proposal are given in the Annex to this report. These include a programme of work looking at the use of plutonium in existing and new reactors, either as Mixed Oxide fuel or Inert Matrix fuel, and immobilisation.

Studies have continued on a number of aspects identified in the Strategic Action Planning exercise carried out by the PuWG e.g. theoretical studies on the need for neutron absorbers in the MOX immobilisation product ('low spec MOX') - this work has identified the need for some active trials. BNFL continues to keep a watching brief on the irradiation experiments being carried out on Inert Matrix Fuel and has undertaken its own theoretical studies of fission product diffusion behaviour in the inert matrix materials.

9 Security – Roger Howsley, Director Security, Safeguards and International Affairs

The recommendations from the Security Working Group can be broadly grouped into 7 categories:

- Funding or resourcing activities associated with security

[6] Appendix 10 BFWG Final Report December 2004

- Achieving clarity of accountability and openness and transparency of information where possible
- Establishing a mechanism for stakeholder dialogue with regard to security issues
- Governance and organisational arrangements with respect to the Office of Civil Nuclear Security (OCNS).
- Mechanisms for assessing threats, the testing of the security measures prescribed in the assessment and the forecast consequences of such threats if realised
- The development and application of a Security Hazard Indicator to both assess the security impact of an activity or evaluate the cost/benefit of a proposed security measure
- National arrangements within the remit of HMG

BNFL's commitment to the Dialogue is that

(a) where we agree with a recommendation and can fund it, we will implement it,
(b) where we agree but where it is a matter for others we will support the necessary change, and
(c) if we disagree we will explain why no action is being taken.

On that basis, 21 recommendations are supported for implementation by BNFL, subject to funding (a further 2 require further consideration). BNFL agrees with a further 36 recommendations and will support the need for change with OCNS, NDA or HMG as appropriate. Progress on the recommendations supported for implementation by BNFL will be reported on in an annual report on security issues.

1. Overarching Principles

No.	Cat.	Conclusion	Recommendation	Organisation Responsible	Proposed Implementation Timescale	BNFL response and update
1.1a	A	There is currently uncertainty about future funding for security measures	The NDA to make transparently clear to OCNS and interested stakeholders that the funding for effective security arrangements is available	NDA	This should happen prior to April 2005.	AGREE Matter for NDA
1.1b	B	The current iteration of the OCNS Disclosure Guidance declines to publish security standards on security grounds to prevent possible mis-use. Some members of the Group have commented that the proposed restrictions on the information disclosure on radioactive waste are too tight.	The Group believes that there needs to be continuous examination by relevant stakeholders (including consideration of a two-tier stakeholder engagement framework) of the arguments for and against the withholding of specific types of information. At this stage, OCNS should specifically review the reason for non-disclosure of information on radioactive waste.	OCNS	Ongoing	AGREE Matter for OCNS
1.1c	B	NISR 2003 text does not include dispute procedures – operators/ regulators/NDA	Make sure Amendment to Nuclear Industry Security Regulations (NISR) 2003 includes dispute procedure.	OCNS	Initiated through Government by Dti at the next amendment	AGREE Matter for OCNS
1.2a	B	Need to make transparently clear at all levels how decisions are arrived at, by whom and against what criteria, and how they may be changed or influenced	Finalise Memorandum of Understanding (MoU) between BNFL and UKAEAC to avoid any mis-understanding over accountabilities and decision-making, including the use of force	BNFL	June 2005	AGREE Agreement is in Draft and is expected to be closed out by April
1.2b	B	It is unclear to the Group why information on the MoU re accountabilities and decision-making between BNFL and the UKAEAC is classified.	BNFL needs to explore with the UKEAAC and others the possibility of de-classifying all or releasing parts of this document.	BNFL	June 2005	AGREE We will look at this when complete
1.3a	B	There is insufficient information available from OCNS and BNFL to	Publish civil nuclear classification guides or explain why they are classified.	OCNS	June 2006	AGREE Matter for OCNS

No.	Cat.	Conclusion	Recommendation	Organisation Responsible	Proposed Implementation Timescale	BNFL response and update
1.3a	B	establish whether a balance is being struck between the demands of security and the need for transparency.	BNFL should include a couple of questions on nuclear security on existing public and stakeholder opinion polls and develop a baseline to establish whether the release of more information dealing with nuclear security increases public confidence.	BNFL	December 2004	AGREE MORI poll conducted in December with Business journalists. Results will be made available to stakeholders. Considering follow-up polling.
1.3a	B		OCNS should monitor and report back to stakeholders the number of visits to its Disclosure Guidance document posted on its website to give an indication of interest.	OCNS	Results by the next OCNS annual report (May/June 2005)	AGREE Matter for OCNS
1.3b	B	Freedom of Information Act is as yet untried in relation to security in the nuclear industry and it is not clear whether the rules on disclosure will be successfully challenged by the public	BNFL should evaluate the Freedom of Information Act (FoIA) to determine the extent to which BNFL can go beyond its provisions for restricting information to the public in order to increase confidence and publish how it complies with the Act.	BNFL	Publication of compliance with and evaluation of FoIA by end January 2005.	AGREE Not clear on this recommendation- Annual report on security to be published in June 2005 may help.
1.4	E	Unavailability of DBT makes it impossible for external analysis of any gaps	OCNS should ensure the DBT is dynamic and takes into account as many threat scenarios and consequences as possible.	OCNS	Ongoing	AGREE Matter for OCNS
1.4	E		OCNS to publish as many aspects of the DBT as possible, as is done in the United States, to demonstrate as robust a response as possible and to increase public confidence.	OCNS	April 2005	AGREE Matter for OCNS
1.4	G		Government should seek to reduce the level of terrorist threat by vigilance, but also by trying to understand the views and concerns of adversaries.	Government	Ongoing	AGREE Matter for HMG
1.5	A	The Group and Professional	Appropriate resources should be put into	Government	Ongoing	AGREE

No.	Cat.	Conclusion	Recommendation	Organisation Responsible	Proposed Implementation Timescale	BNFL response and update
		Emergency Planners recognise that there are chronically inadequate national resources to deal with a major emergency.	emergency planning and post-incident response (see 4.4)	NDA		Matter for HMG
1.6a	-	Some of the information necessary to provide justification is sensitive and cannot be made available to all.	See 1.4			
1.6b	G	The law at the moment is totally insufficient in relation to intruders. There is a tension between the right to demonstrate and the need to protect against unauthorised intruders who might present a terrorist threat.	Examine the law in relation to trespassing at airports, the Channel Tunnel and nuclear installations in other countries.	Government	As soon as possible. Target date 2005.	AGREE BNFL has supported this and there is some movement in Home Office views
1.7	F	Any increased costs incurred in the improvement in the security system have to be justified against benefits in terms of reduction of threat.	The development of a Security Hazard Indicator would assist in principle in this task and would enable people to see the cost benefit of spend	BNFL	December 2004	AGREE Work has commenced and is making good progress
1.8	C	There is no formal mechanism for dialogue with a broad cross-section of stakeholders on nuclear security measures.	BNFL should support, expedite and participate in as appropriate the reform of the existing Local Liaison Committee (LLC) system, in conjunction with the Nuclear Decommissioning Authority (NDA), to establish site-based and transport-related engagement processes, which include a security element drawn from some of the LLC stakeholders who will require additional security vetting. OCNS should have active participation in any new arrangement to ensure that the broader national and international security aspects are addressed through this stakeholder process	BNFL	The stakeholder group is established by April 2005.	AGREE Unlikely to be resolved in the near future. Needs clear indication from the NDA that it supports this approach

1.9	A	It is inappropriate to allow economic concerns to override the need for security	BNFL should never allow economic concerns to override security needs and be prepared to provide justification when challenged.	BNFL	Ongoing	AGREE There is no evidence that security standards are being undermined by economic or commercial pressures
1.10a	B	The siting of buildings on nuclear sites has not, in the past, been determined or significantly influenced by security considerations.	BNFL should have formal procedures in place that make an assessment of security implications a prerequisite in its building siting policy	BNFL	January 2005	AGREE Senior design and engineering staff have been made aware of this through briefing sessions. The policy is yet to be formalised.
1.10b	F	Absence of a national analysis and strategy for making decisions on the inevitable dynamic tension between continued onsite storage and centralised storage, which involves transport	Make sure that policy on new building siting and changes in existing buildings are subject to Security Hazard Indicator analysis.	BNFL	Ongoing from January 2005	AGREE A Security Indicator is being developed and looks promising.
1.10b	F		The NDA should inherit and develop the Security Hazard Indicator and apply this to minimise the overall movement of radioactive materials (and hence terrorist risk) which it will be required to manage through its decommissioning programme.	NDA	Ongoing from April 2005	AGREE The Security Indicator is being developed initially for facilities/buildings rather than transport operations. Its use for other activities would be a matter for the NDA.

1.10c	E	Effective security assumes effective safety measures. Doubts have been raised about the effectiveness of the safety regime when it comes to transport containers. The doubts are based on the current sequential testing system for the resistance of shipping flasks to fire, impact and immersion, which may not simulate the concurrent effects of real life accidents and thus offer less than anticipated protection against the effects of actual attacks.	OCNS needs to ensure that the results of the test programme are properly considered by the appropriate safety and security authorities.	OCNS	April 2006	AGREE Matter for OCNS
1.11	E	Security must be adequate to defend against attack that comes without warning and not be subject to political manipulation	OCNS should make the explanation of states of alert publicly available. OCNS should also ensure that states of alert are always based on objective circumstances, should reflect the real situation and not be subject to political manipulation.	OCNS	April 2005	AGREE We believe Alert States are based upon factual information about the threat. Publication of the Alert States is a matter for OCNS
1.11	B		BNFL should make it clear to the potentially affected public what the states of alert mean and their implications on emergency response. BNFL should also commit to regular communication of the state of alert at the facility to the local population by appropriate media.	BNFL	From April 2005	NEEDS FURTHER CONSIDERATION This is dependent upon the recommendation above
1.12	A	Treasury should be fully briefed on the importance of the continued funding of security arrangements As noted in 1.1, the situation post NDA formation needs to be	All appropriate agencies (e.g. NDA, Department for Trade and Industry (Dti), BNFL) should ensure that the importance of this issue is communicated forcefully to the Treasury, including appropriate staffing and resourcing levels within OCNS.	NDA BNFL OCNS	Prior to April 2005	AGREE This is mainly a matter for OCNS who will be reporting on this in their annual report

1.12	D	considered. There is no formal procedure for determining OCNS resources	The governance arrangements for OCNS should include an annual examination of resource needs. The OCNS budget should be published annually.	Government	June 2005 and annually	AGREE This is mainly a matter for OCNS who will be reporting on this in their annual report
1.12	-		See 1.1.			
1.13	E	The way in which exercises are currently carried out relies on the UKAEAC to play too many roles. For example, they would take the role of exercise commander, adversary and defence force. There are only so many things you can simulate using people, for example it is not feasible to simulate mortar attacks except on military ranges.	BNFL should review with OCNS whether completely independent personnel should be used as the simulated adversary.	BNFL OCNS	From April 2005	AGREE This is to be discussed with UKAEAC
1.13	E		Advanced computer simulations should be used to enhance the realism and range of scenarios that can be tested.	BNFL	From April 2006	AGREE There is no funding available for 2005/6
1.14a	E	Security plans should always put the priority on countering potential threat, not on minimizing the potential costs	see 1.9			
1.14b	E	The application of different security standards to similar nuclear shipments without explanation causes confusion and concern	This could be a topic for future stakeholder engagement. Classified information may be assessed in a two-tier stakeholder dialogue process (see 1.8)	Stakeholders BNFL OCNS	After April 2005	AGREE Dependent upon having a two-tier stakeholder dialogue process
1.15	-	Possible infiltration of legitimate protest group not addressed.	See 1.4 and 1.7			
1.16	NO IDENTIFIED GAP					
1.17	NO IDENTIFIED GAP					
1.18	B	The Regulations governing the security of non-nuclear but radioactive hazards (such as sealed sources) are not as comprehensive, e.g. vetting of drivers	OCNS should bring inconsistencies in regulations covering radioactive substances to the attention of policy makers in Government so that regulations are consistent, because it has a direct bearing on the public perception of nuclear security.	OCNS	Current	AGREE Matter for OCNS. BNFL is actively supporting HMG in this area

2. Attributes Relevant to Regulation

No.	Cat.	Conclusion	Recommendation	Organisation Responsible	Proposed Implementation Timescale	BNFL response
2.1	B	The level of public confidence in the security regulations is not known	BNFL and OCNS should take all necessary measures to increase and monitor public confidence in their security systems including a) monitoring responses to all information put into the public domain and b) appending questions to documentation requesting feedback on user friendliness, etc.	BNFL OCNS	 Publication of OCNS annual report (May/June 2005)	AGREE An assessment has been made of the public perception of security arrangements through polling
2.2	NO IDENTIFIED GAP					
2.3	D	The Cabinet Office guidelines on best practice need to be examined.	OCNS should be established along similar lines to the NII to achieve a degree of independence from potential Government pressure. Cabinet Office guidelines on best practice should be adopted in this process.	OCNS	By April 2005	AGREE Matter for OCNS
2.4	B	Governance arrangements and mechanisms for independent review of OCNS are currently too narrowly drawn.	OCNS should make representations to Government to extend the membership of its advisory board to include suitably a qualified representative from a broader base of stakeholders, including Non-Government Organisations (NGOs), in order to provide a range of perspectives to allow for balanced discussion.	OCNS	April 2005	AGREE Matter for OCNS
2.5	-	See 2.3 and 2.4				
2.6	A	It's unclear where, if at all, BNFL's and OCNS's corporate liability currently lies with respect to terrorist incidents	BNFL and OCNS independently should confirm whether, under current legal arrangements and guidance notes, they have clearly identifiable responsibilities and appropriate funds for compensation, in respect of the consequences of terrorist incidents. If not, the situation should be rectified.	BNFL OCNS	July 2005	AGREE The Responsible person under the Nuclear Industries Security Regulations (2003) is the Company Secretary of the Main Board, confirmed by the

No.	Cat.	Conclusion	Recommendation	Organisation Responsible	Proposed Implementation Timescale	BNFL response
						Director, OCNS.

3. Attributes Relevant to Systems

No.	Cat.	Conclusion	Recommendation	Organisation Responsible	Proposed Implementation Timescale	BNFL response
3.1	-	See 1.3, 2.3 and 4.9				
3.2	F	There's always a risk associated with identity management. The debate on this issue is in the public domain.	BNFL should be aware of the latest technology being applied in this area, but should also take into account cost benefits through the Security Hazard Indicator	BNFL	Ongoing	AGREE BNFL has a progressive programme aimed to improve identity management and is working with other organisations on new technology. BNFL is also supporting the Home Office on some of the practical issues associated with the proposed National Identity card.
3.3	-	There is a gap between all possible levels of capability including the most unlikely and those threats which are encompassed within the Design Basis Threat (see Preamble – Section 4.1 of Report)	See 1.4			
3.3	E		As part of its programme of increasing public confidence and understanding of the DBT methodology and the judgments made, OCNS should consider a presentation to the relevant Parliamentary Select Committee (Trade & Industry)	OCNS	July 2005	AGREE Matter for OCNS

No.	Cat.	Conclusion	Recommendation	Organisation Responsible	Proposed Implementation Timescale	BNFL response
3.4	B	With the advent of the NDA and the potential for a much greater degree of contractorisation, additional vulnerabilities in vetting may arise. Potential increases in nuclear transport movements linked to decommissioning may result in the need to have a significantly higher number of personnel, particularly drivers, vetted.	Sufficient information should be provided by OCNS (the vetting agency), following consultation with the vettee, to BNFL to manage any potential risk.	OCNS	April 2005	AGREE Matter for OCNS
3.4	B		As a minimum, vetting agencies should consider making the criteria used for vetting available to BNFL.	OCNS	April 2005	AGREE Matter for OCNS
3.5	E	There's a limitation to what you can realistically exercise on operational sites or on transport The adversaries are usually played by UKAEAC officers and there could be a tendency for them to employ predictable methods and techniques	BNFL and OCNS should keep under review all system testing used by other security agencies, including force-on-force exercises.	BNFL OCNS	Initiate by April 2005	AGREE This has not yet been initiated
3.5	-		See 1.13			
3.6	D	No visible or convincing mechanism for holding OCNS to account for its performance, including the dissemination of relevant intelligence	The OCNS should consider a management statement as recommended by the Better Regulation Task Force (2003) which could potentially be met by the establishment of an authoritative and independent oversight body. See 2.3 and 2.4	OCNS	April 2005	AGREE Matter for OCNS
3.7	-	See 4.3				
3.8	NO IDENTIFIED GAP					
3.9	NO IDENTIFIED GAP					

No.	Cat.	Conclusion	Recommendation	Organisation Responsible	Proposed Implementation Timescale	BNFL response
3.10	B	It is currently not possible for stakeholders to assess whether security arrangements in place have failed a test against an adversary's capabilities.	The results of security exercises should be included in BNFL's formal security assessment systems. Vulnerability assessment should be at the level of individual facilities rather than at a more generic site level.	BNFL	December 2004	AGREE The programme of security assessments has been revised to include the results of security exercises and the assessment team will attend exercises
3.10	B		In order to facilitate stakeholder assessment of the robustness of the system, BNFL should consider making the above available to LLCs or their successors, complemented by dialogue at a national level	BNFL	From April 2005	NEEDS FURTHER CONSIDERATION
3.10	F		The development of a Security Hazard Indicator should be completed as a matter of urgency and it's results used to prioritise the decommissioning of potentially hazardous facilities.	BNFL	December 2004	AGREE As noted above, good progress is being made
3.10	B		BNFL and OCNS should determine and publish the criteria used to judge whether the security system has failed to the extent that leads to the consequence of that operation ceasing.	OCNS BNFL	In OCNS annual report	AGREE Matter for OCNS
3.11	NO IDENTIFIED GAP					
3.12	OUTSIDE OF GROUP'S REMIT					

3.13	E	There are seriously divergent views regarding consequences of terrorist incidents considering hazardous facilities and services. The Group is uncertain as to whether these can ever be reconciled.	BNFL should initiate a Joint Fact Finding programme with LLCs or their successors (funded by the NDA), complemented by dialogue at a national level, to establish whether it is possible to arrive at greater agreement about the range of consequences arising from potential terrorist acts as defined in the DBT. The Group recognises that this is conditional upon the establishment of a two-tier stakeholder engagement process.	BNFL NDA	After April 2005	AGREE Dpendent upon the establishment of a two-tier engagement process
3.14	-	There is opaqueness at the moment because the only stakeholders involved are the industry and policy officials.	See 1.8 and 4.7			
3.15	-	There is ultimately an irreconcilable gap between 'need to know' and 'want to know'. The Group's proposal for extending the remit of the LLC could go some way in narrowing this gap	See 1.8 and 4.7			
3.16	-	NO IDENTIFIED GAP Some Group members believe that there is an outstanding problem with plutonium swaps and refer the reader to Appendix 2 of SWG Report. It is noted that the regulator in this instance is Euratom.				

4. Attributes Relevant to Information Provision

No.	Cat.	Conclusion	Recommendation	Organisation Responsible	Proposed Implementation Timescale	BNFL response
4.1	-	See Preamble (Section 4.1 of the report)	See 1.1b			
4.2	-	NO IDENTIFIED GAP				
4.3	B	Within the matrix the Group has identified a number of information sources that, if released, would enhance public confidence. There is a public and stakeholder perception of non-disclosure and that information is kept within BNFL. It is recognised that this is a difficult area to benchmark.	BNFL should consider publishing its annual report on security performance, with sensitive details removed.	BNFL	From July 2005	AGREE Publication scheduled for summer 2005.
4.3	B		BNFL should make its practice consistent with the recommendations that are going forward to the NDA in respect of the presumption of availability of all documentation, with exemptions being determined by criteria set by stakeholders, including OCNS.	BNFL	April 2005	AGREE
4.3	B		Efforts should be made by BNFL to develop a benchmarking system.	BNFL	April 2005	AGREE No progress to date

No.	Cat.	Conclusion	Recommendation	Organisation Responsible	Proposed Implementation Timescale	BNFL response
4.4	E	The presentation on emergency planning did highlight the difficulties in understanding and communicating events and consequences to the public. Some of the Group members felt that the presentation by Cumbria County Council Chief Emergency Planning Officer failed to reassure them that the pre- and post-incident emergency planning arrangements were adequate for the types of eventualities that some members felt could be a consequence of terrorist activity. Some members of the Group felt that the reference case for the worst credible site accident presented by BNFL and upon which the pre- and post- incident emergency plan is based, and is endorsed by the NII, creates an impression of complacency in light of September 11, 2001. The Group notes that the Chancellor in the latest Comprehensive Spending Review (July 2004) has allocated additional funds to emergency planning and counter-terrorism.	BNFL, OCNS and Nuclear Installations Inspectorate (NII) should re-evaluate the worst case scenario accidents, and the worst case terrorist incidents at its sites resulting in radiation release, in the light of the proposed Joint Fact Finding mentioned above and should undertake to review and rewrite if necessary the emergency plan with relevant local authorities in light of those findings, and communicate it by all media possible.	BNFL	April 2006	AGREE Dependent upon Joint Fact Finding
4.4	A		The adequacy of emergency planning funding arrangements should be reviewed in light of the re-evaluation of the worst case scenario accidents and the worst case terrorist incidents.	Government	April 2006	AGREE Matter for HMG
4.5	-	The Group welcomes BNFL's FoIA 'Publications Scheme' but has not yet seen it.				
4.6	-	The Group restates that it has not had access to the DBT and therefore is not in a position to know if the system of alert states is responsive to changing circumstances.	See 1.4			

No.	Cat.	Conclusion	Recommendation	Organisation Responsible	Proposed Implementation Timescale	BNFL response
4.7	C	There is still uncertainty about NDA's future stakeholder engagement plans, and BNFL's stakeholder engagement plans post-National Nuclear Dialogue. OCNS has no direct consultation process with a cross-section of stakeholders which creates a problem with respect to information disclosure. The Group notes that the Government did not include any statutory commitment upon the NDA to fund and operate stakeholder dialogue in the Energy Act 2004. The provision of stakeholder engagement is a critical element to a security system.	BNFL and OCNS should put pressure on the embryonic NDA to take on board a commitment to continued stakeholder engagement, embracing the views and opinions of stakeholders generated by the Dti consultation process over the last two years, with particular reference to reforming the LLCs, stakeholder capacity building, and adequate funding. See 1.8	BNFL Co-ordination Group of BNFL National Stakeholder Dialogue	Now and ongoing	AGREE BNFL supports the NDA's stakeholder engagement framework and the groups (at site, regional and national level) that have been established.
4.8	A	OCNS recognises the contrast between the traditional security approach & the openness that the NDA are seeking to demonstrate. OCNS pages on the DTI website are not easily accessible	The next OCNS report should specifically include a section addressing NDA priorities for security	OCNS	May/June 2005 (annual report)	AGREE Matter for OCNS
4.8	B		OCNS should review its openness and transparency policy taking regard to NDA's practices and those of similar security organizations, taking into account FoIA requirements	OCNS	January 2005	AGREE Matter for OCNS
4.8	B		BNFL should continue to review its reporting regimes.	BNFL	Annual review from April 2005	AGREE This is being done
4.8	G		Consideration should be given by Ministers to formalising parliamentary oversight of civil nuclear security arrangements and the annual report published by OCNS	Government	July 2005	AGREE Matter for HMG
4.8	B		OCNS should set up its own independent website	OCNS	December 2005	AGREE Matter for OCNS

No.	Cat.	Conclusion	Recommendation	Organisation Responsible	Proposed Implementation Timescale	BNFL response
4.9	C	Uncertainty over the future and resourcing of stakeholder engagement There is no mechanism or protocols for reviewing the quality of stakeholder communications to their constituents	The NDA (and possibly OCNS) should consider how to resource maintenance of links between stakeholders and their constituents, and should bring this issue to the attention of the LLCs or their successors, complemented by dialogue at a national level. Within any future stakeholder process, the NDA should periodically review the quality of stakeholder communication with constituents.	NDA OCNS	Now and ongoing OCNS policy decision by September 2005	AGREE Matter for OCNS and NDA
4.9	C					
4.10	B	There is currently no requirement on OCNS to brief stakeholders in en route countries. The Group believes this can be undertaken within current intergovernmental arrangements. Some Group members have demonstrated that concerns in en route countries are currently unaddressed: e.g. salvagability of a lost cargo, arrangements of emergency port calls, and environmental impact statement regarding the shipment.	OCNS should respond to invitations by foreign states to contribute to the briefing of concerned stakeholder groups in en route countries in connection with international transport of nuclear material. BNFL should promote its willingness to engage with stakeholders in regard to international transport in en route countries, whilst observing diplomatic protocols. UK Government should undertake to address stakeholder concerns regarding salvagability of a lost cargo, arrangements of emergency port calls, and environmental impact statement regarding the shipment.	OCNS BNFL Government	Ongoing Ongoing As soon as possible	AGREE Matter for OCNS Ongoing Matter for HMG

10. Other BNFL Sites. Mark Morant/Steve Tritch

No	Reporting Issue	Future Responsibility	Key Dates
10.1	Use DWG methodology to create strategy and site-specific plans	Mark Morant Steve Tritch	

BNFL Update

Reactor Services (operating, defuelling and decommissioning Magnox sites) and Westinghouse (Springfields site) have not used the “region of optimisation” approach to develop their environmental strategies. However, Reactor Services has committed to a lifecycle programme that results in significant reduction of discharges when its power stations cease generation. There is an ongoing programme of investments in effluent and waste treatment linked to the continuing need for such facilities to operate beyond the cessation of generation. An example is the commitment given to fuel cycle and pond management, together with the installation of a caesium removal plant as representing the best practicable means to reducing caesium discharges.

Springfields completed a review of its site discharge authorisations. Substantial reductions in liquid discharges will occur due to closure of some of the major chemical plants in 2006, particularly the Uranium Ore Concentrate Dissolution and Purification facility which is the principle source of current radiological discharges. It is predicted that beta discharges will reduce to about 5% of current levels, which are already relatively insignificant, whilst total alpha discharges are predicted to fall by about 80%.

Disposition Of The UK Civil Separated Pu Stockpile

- Proposal For A R&D Programme

Author: Bruce Hanson, Neil Gawthorpe

Introduction

Until the early 1990's it had been intended to utilise the UK civil Pu as fuel for fast reactors but, in 1987, the Government decided to terminate the UK's development programme and in 1994, the Prototype fast reactor (PFR) at Dounreay was shut down. As a consequence, there is currently no long-term strategy for the use or management of this material.

Separated plutonium stocks at Sellafield are held in the form of plutonium dioxide powder in specially built stores which are subject to international safeguards and inspection by IAEA and Euratom. While plutonium has been stored safely and securely for many decades, storage itself is not a long term solution and there remain concerns regarding proliferation resistance. A long term management strategy needs to be applied.

This proposal focuses on the options considered for management of the separated Pu stockpile. The total holdings of UK civil separated Pu currently stand at 70 te and, based on anticipated arisings from Magnox and AGR reactors, could rise to about 100 te over the next 10 years.

The three main options for the disposition of separated Pu are (see Figure 1): -

1. Continued storage - this will be necessary until agreement is reached on a long-term strategy
2. Re-cycle as fuel
3. Immobilisation

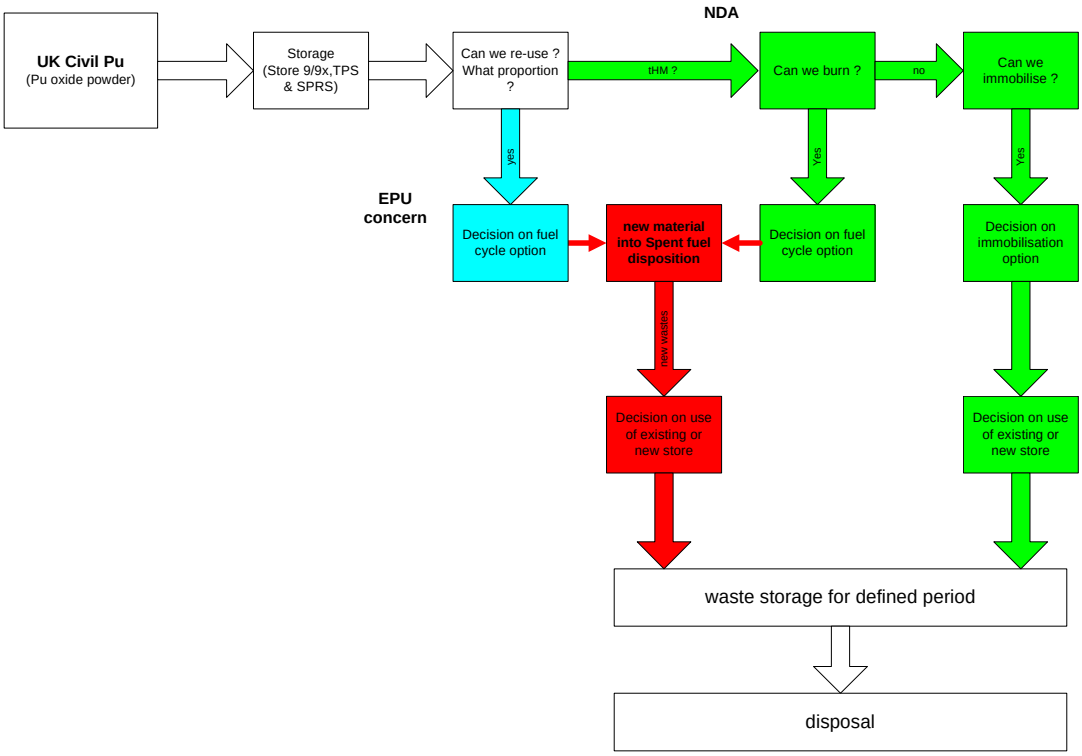
The decision as to which option or options should be implemented, will be based on a consideration of a number of factors including technical feasibility, safety and environmental impact, political and stakeholder acceptance and economic viability.

This proposal describes a programme of work which will provide relevant information to assist the decision makers, in particular, the NDA, who will become the future owner of the stockpile and will be required to carry out Government policy in respect of its future management.

The primary purpose of this paper is to identify the scope and indicative costs of the development work that would need to be carried out to enable a plutonium disposition route to be chosen and implemented. It is based on a proposal made to BNFL ALFA and NDA in October 2004. Although the programme includes elements that are being carried out this financial year, funded by BNFL ALFA, all proposals for future work will be subject to scrutiny by NDA and policy makers who will be required

to prioritise the allocations of funds in the context of the UK's wider nuclear liabilities clean-up strategy.

Figure 1 Strategic Option Selection for Pu disposition



The proposal addresses the concerns and views of various stakeholders, including those expressed in the final report of the Pu Working Group from the BNFL National Stakeholder Dialogue. The proposal focuses on all technical aspects of the options and the development of models that will enable analysis of future disposition scenarios.

Scope of proposal

The following tables (1 to 9) summarise the programme, with the main deliverables and milestones. Some milestones represent hold points where a decision is required on the future direction of the programme; these are indicated on the relevant tables.

The profile of the total project cost is shown below:

FY	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15
Estimate (£k)	377	1217	1631	1036	1672	1380	1213	885	979	623	230

Costs for this financial year are based on a detailed programme already approved and initiated by BNFL ALFA, but costs for next financial year and beyond are estimates, which still require agreement, in detail at an appropriate time.

Note 1: estimates for subsequent years may vary depending on the outcome of technical work, stakeholder dialogue and national timescales for policy development

Risks to delivery

The programme has been generated by NSTS based on a number of assumptions, of which the most significant are:

- Facilities for active experimentation are available at the time required and scheduled in the programme
- Skilled resources are maintained for the duration of the programme
- Funding commitments are linked to programme stages and hold points, not on a financial year basis

Impacts to the programme should any of these assumptions prove invalid include:

- Delays to active experimentation, resulting in delays to selection of immobilisation matrices and/or fuel testing
- Erosion of the skill base and the associated delays required for re-training
- Any links with external organisations (national and international) will be at risk without long term commitments.

While the above risks are unlikely to stop the programme completely, they could cause significant delays to an already lengthy programme.

Link to stakeholder recommendations

The programme has been constructed to deliver technical information on possible options for Pu disposition in order assist the decision makers, in particular, the NDA, who will become the future owner of the UK civil Pu stockpile. In developing the programme, NSTS has been guided by the concerns and views of stakeholders as expressed in the final report of the Pu Working group from the BNFL National Stakeholder Dialogue. The specific recommendations addressed are listed below:

Recommendation 5: Use of Sizewell B, Heysham 2 and Torness for MOx burning

Initial tasks concentrate on the technical feasibility of using Sizewell B. This work can be extended to cover Heysham 2 and Torness if necessary. Examination of the wider issues associated with the use of existing reactors such as licensing, fuel handling, safeguards etc would only commence after the initial tasks are completed. This work is intended to determine the feasibility of burning Pu containing fuels in these reactors. Any subsequent implementation of a plutonium burning strategy in these reactors would only be carried out with the agreement and participation of British Energy.

Recommendation 6: Use of new build reactors

There are a number of possible reactor systems that could be used for new nuclear power stations in the UK. Leading contenders include AP1000, European Pressurised Water Reactor (EPR) and PBMR. The tasks related to this recommendation focus initially on examining the technical feasibility of using the AP1000, as an example of a next generation PWR design that is well characterised. Some work is also being carried out on the alternative PBMR system.

1.1. Recommendation 6: Use of IMF in existing and new reactors

Tasks have been included that will investigate and compare the use of MOX, IMF and UO_2 fuel in both existing and new reactor types as identified in 4.1 and 4.2 above.

1.2. Recommendation 7: Pu Immobilisation

Recommendations to initiate prompt undertaking of immobilisation research and development, process development and design studies leading to better understanding of the optimum technology for Pu immobilisation have been addressed with tasks that will provide underpinning research on:

1. Pu loading and use of neutron absorbers in the wasteform
2. Product forms against waste specifications
3. Process optimisation
4. Storage MOX
5. BPEO of immobilisation options
6. EIA of immobilisation options

Commencement and continuation of work against this recommendation is particularly important in order to provide a better understanding of the options available to the NDA and policy makers for the future management of the UK's plutonium stockpile.

Table 1– Summary of programme review points			
Programme area	**Description of Deliverables**	**Major Milestones**	**Date**
Strategic	Summary Tech report – specific topics	Interim re-use work complete	Mar 2007
Scenario Modelling	Model development	Production of results of design and prototyping	Dec 2005
	Input &Analysis of Options	Analysis of initial model output	Mar 2007
Pu re-use	Assess Fuel/Reactor Options	The production of the irradiation options assessment report	Mar 2007
Immobilisation	Evaluation workshop	Assessment of developed options against wasteform criteria and choice of preferred options to progress.	Aug 2008

Table 2– Summary of strategic tasks					
Task	**Description of Task**	**Issues to be Addressed**	**Technical Requirement for Task**	**Start / Completion date**	**Estimate (£k)** Note 1
Strategic planning	Provide NDA/ALFA with a disposition plan for the separated Pu stockpile. This plan will be the equivalent of a LCBL. Disposition plans will be updated annually.	NDA/ALFA will need to monitor key dates resulting from site NTWPs and LCBLs. Any effects on future decisions points for disposition plans will need to be identified and assessed for their impact on delivery dates in the programmes (see scenario modelling)	The disposition plans will provide the focus for programme targets.	Nov 04 / May 09	337

Table 3– Main deliverables and milestones for strategic tasks		
Description of Deliverables	**Major Milestones**	**Completion Date**
Disposition plans for the separated Pu stockpile	Update for the separated Pu stockpile	March 2005 - Annual thereafter
Stakeholder dialogue	Annual review	Feb 05 onwards - Annual thereafter
Summary Tech reports - programme		March 2005 - Annual thereafter
Summary Tech report – specific topics	Interim Immobilisation work complete	Nov 2006
	Interim Re-use work complete	**March 2007 (review point)**
	Immobilisation options complete	August 2008

Table 4 – Task Summary for scenario modelling					
Task	**Description of Task**	**Issues to be Addressed**	**Technical Requirement for Task**	**Start / Completion date**	**Estimate (£k)** Note 1
Scenario modelling - toolbox development	Development of models for comparison at strategic level of different disposition scenarios. Collaboration with national and international organisations	A generic set of software and methodologies are required to perform the Scenario modelling tasks. To ensure access to national and international projects involved in this area	Existing internal and external software packages and hardware; experienced and qualified personnel.	Jan 05 / Apr 10	485
Modelling design & prototyping	The initial stage will be to produce prototype modelling methodologies and establishing which data are required.	The improvement of the overall technical modelling process by setting out the methods and data to be used.	Experienced and qualified personnel. Input from other data generating task in the project.	Feb 05 / Nov 05	83
Obtain required input to the modelling process.	Production of a database of process steps and parameters required for each disposition route	Ensure that sufficient data is available to produce an initial model of the disposition routes.	Experienced and qualified personnel. Input from other data generating task in the project.	Nov 05 / Mar 09	125

Table 4 – Task Summary for scenario modelling					
Task	**Description of Task**	**Issues to be Addressed**	**Technical Requirement for Task**	**Start / Completion date**	**Estimate (£k) Note 1**
Initial model of potential disposition routes	Production of a model to give results for the agreed environmental, economic and societal indicators	Production of a full system model of each disposition route.	Existing internal and external software packages and hardware; experienced expertise	Jan 06 / Sep 09	166
Analysis of model output	Collation of model output; assign ranges of uncertainty to the model input and sensitivity to the model output. Deliver recommendations for subsequent model iterations	Ranking of various disposition routes in the areas of economic, environmental and societal impact and establishment of the requirement of iterating the modelling.	Experienced and qualified personnel.	Jun 06 / Feb 10	80

Table 5– Main deliverables and milestones for scenario modelling		
Description of Deliverables	**Major Milestones**	**Completion Date**
Model development	Production of results of design and prototyping	**Dec 2005 (review point)**
Input &Analysis of Options	Analysis of initial model output	**Mar 2007 (review point)**
Input &Analysis of Options	Analysis of complete model output	Feb 2010

Table 6 – Task Summary for Pu re-use					
Task	**Description of Task**	**Issues to be Addressed**	**Technical Requirement for Task**	**Start / Completion date**	**Estimate (£k) Note 1**
Assessment for Sizewell 'B' - MOX	Fuel and core safety analysis of Sizewell 'B' using MOX fuel. Report issued assessing the performance and safety analysis of MOX fuel in Sizewell 'B'	Capability of Sizewell 'B' to irradiate Pu in MOX fuel, including throughput of Pu and impact on fuel cycle	Knowledge of design details of Sizewell 'B', MOX fuel reactor physics and fuel performance Analysis tools for MOX reactor physics and fuel performance in LWRs	Dec 04 / Jun 05	68
Assessment For Sizewell 'B' using Inert	Fuel and core safety analysis of Sizewell 'B' using Inert Matrix Fuel (IMF)	Fundamental analysis of physics of IMF, including determining Pu loadings of IMF.	Knowledge of design details of Sizewell 'B', IMF fuel reactor physics and fuel performance	Jul 05 / Jan 06	62

Table 6 – Task Summary for Pu re-use					
Task	**Description of Task**	**Issues to be Addressed**	**Technical Requirement for Task**	**Start / Completion date**	**Estimate (£k)** Note 1
Matrix Fuel	Report issued assessing the performance and safety analysis of IMF in Sizewell 'B'	loadings of IMF. Capability of Sizewell 'B' to irradiate Pu in IMF fuel, including throughput of Pu and impact on fuel cycle	and fuel performance Analysis tools for IMF reactor physics and fuel performance in LWRs		
Modify ENIGMA to Model IMF	Extend ENIGMA fuel performance code to cover IMF (currently covers MOX and UO2 in LWRs).	The code will be used to perform safety analyses for IMF	Existing data on IMF will be obtained and reviewed. This data will be coded into fuel performance models.	Apr 05 / Jun 06	23
Development of MOX Analysis for new build LWR	Initially based on AP1000, extended if necessary to cover EPR. Development of the nuclear design of MOX fuel in potential PWR designs for new UK build. Report issued assessing the developments of MOX fuel design for AP1000. Includes design performance and safety analysis.	Issues for each reactor type will be: • Performance limitations (and therefore Pu loadings) of MOX • Capability to irradiate Pu • Throughput of Pu • Impact of MOX on fuel cycle.	Knowledge of design details of AP1000 Knowledge of MOX fuel reactor physics and fuel performance Analysis tools for MOX reactor physics and fuel performance in LWRs	Jan 06 / Jun 06	35
Assessment for new build LWR using Inert Matrix Fuel	Initially based on AP1000, extended if necessary to cover EPR. Fuel and core safety analysis of AP1000 using Inert Matrix Fuel (IMF) Report issued assessing the performance and safety analysis of IMF in AP1000	Capability to irradiate Pu Throughput of Pu Impact of IMF on fuel cycle	Knowledge of design details of AP1000 Knowledge of IMF fuel reactor physics and fuel performance Analysis tools for IMF reactor physics and fuel performance in LWRs	May 06 / Aug 06	40
Assessment for PBMR	Fuel and core safety analysis of PBMR using MOX or PuO_2 fuel. Report issued assessing the performance and safety analysis of MOX or PuO_2 fuel in PBMR	Capability of PBMR to irradiate Pu in MOX or PuO_2 fuel. Throughput of Pu through PBMR. Impact of MOX or PuO_2 fuel in PBMR on fuel cycle.	Knowledge of design details of PBMR Knowledge of MOX fuel reactor physics and fuel performance Analysis tools for MOX or PuO_2 reactor physics and fuel performance in High Temperature	Aug 06 / Mar 07	80

Table 6 – Task Summary for Pu re-use					
Task	**Description of Task**	**Issues to be Addressed**	**Technical Requirement for Task**	**Start / Completion date**	**Estimate (£k)** [Note 1]
			Reactors (HTRs)		
Review of Fuel Fabrication Technology	Obtain available open knowledge on PBMR fuel manufacture Obtain available open knowledge on IMF	Determine which facilities are available for lab work with these fuels Consider whether SMP could be modified to manufacture the different fuel options.	Determine what modifications might be required in order to carry out work in this area	Apr 05 / Jun 05	31
Test Design	Produce overall design and testing plan for experiment Develop burn-up target and fuel enrichment Develop fuel specification	Match testing requirements with facilities available at test reactor	Need neutronics and fuel performance codes adapted for use with IMF	Apr 07 / Sep 07	25
Manufacture Test fuels	Manufacture of test fuel Characterisation report – inc. SEM/EPMA	Optimise fabrication process to meet fuel specification. Develop sample preparation and analysis methods to permit IMF examinations	The manufacture of fuel samples is a necessary part of an irradiation testing programme Establish process conditions to meet fuel spec Manufacture fuel batch according to spec	Jul 07 / Nov 08	213
Transport of un-irradiated fuel for testing	Test samples moved from manufacture site to test site	Obtain export licenses and package approvals as required	Fuel inventory consistent with package approval	Mar 08 / Sep 08	75
Irradiation of test samples	Manufacture test rig Irradiate fuel in test rig to a series of burnup targets Record data on fuel temperatures/ pressures etc.	Instrument fuel rods to provide data required Achieve burnup targets in the expected way. Reliability of instrumentation	Demonstrate suitability of fuel for irradiation Gather data for design code validation and development Generate a stock of irradiated samples for future testing – e.g. : leaching	Sep 08 / Jan 13	2263

Table 6 – Task Summary for Pu re-use					
Task	**Description of Task**	**Issues to be Addressed**	**Technical Requirement for Task**	**Start / Completion date**	**Estimate (£k)** Note 1
Transport of Irradiated fuel for PIE	Test samples moved from manufacture site to test site	Obtain export licenses and package approvals as required	Fuel inventory consistent with package approval	Aug 12 / Feb 13	179
PIE of test samples	Examinations of fuel after irradiation using non-destructive and destructive methods	Suitability of existing apparatus for testing work on new fuels.	Demonstrate good performance of fuel through off-line methods Provide data for code development and validation Perform leaching tests and other experiments to show acceptability for disposal	Aug 12 / Aug 14	986
Fuel Disposal	Placement of test fuels into interim storage, followed by disposal	It is most likely that this fuel will ultimately be placed into long term repository storage.	Test fuels meet CFA for interim store plus repository	Aug 14 / To be determined	To be determined
Modelling Support	Develop fuel performance models based on test results.		Fuel performance code suitable for modification. Good quality data	Dec 08 / Aug 14	97

Table 7– Main deliverables and milestones for Pu re-use		
Description of Deliverables	**Major Milestones**	**Completion Date**
Assess Fuel/Reactor Options	The production of the irradiation options assessment report	**Mar 2007 (review point)**
Fuel Manufacture	Production of in-spec test fuel samples	Nov 2008
Fuel Irradiation	Complete irradiation	Jan 2013
PIE Testing	Complete final PIE.	Aug 2014

Table 8 – Task Summary for Pu immobilisation					
Task	**Description of Task**	**Issues to be Addressed**	**Technical Requirement for Task**	**Start / Completion date**	**Estimate (£k)** [Note 1]
Establish wasteform assessment criteria	Establish wasteform specification (assessment criteria), using NSTS best judgement.	Target criteria against which options can be assessed	A range of target requirements for waste loading, durability etc need to be agreed in order to allow assessment of options to take place. Security and safeguards issues need to be addressed	Nov 04 / Apr 07	55
Review of Immobilisation options	Review of immobilisation options	Pre-existing R&D relevant to UK plutonium immobilisation programme	Review of international R&D programmes required to assess best candidates to take forward for evaluation.	Nov 04 / Apr 05	20
First stage evaluation - ceramics	Fabrication of ceramic samples	To facilitate choice of best host matrix	Fabrication of a range of single and multiphase ceramics suitable as plutonium hosts	Jul 05 / Jul 07	236
	Characterisation of samples	as above	Physical and chemical characterisation of host matrices.	Jan 06 / Jan 08	50
	Performance testing	as above	Selection of appropriate leach testing procedures and application to host matrices	Apr 06 / Apr 08	259
	Processing routes	To establish most appropriate fabrication options for chosen host matrices	Fabrication of matrices using alternative processing techniques	Jul 06 / Jul 08	295
	Natural analogues (Cambridge Univ)	Exploration of the natural mineral record to establish analogues which may support the case for choice of host matrix	Characterisation of analogues	Apr 04 / Apr 08	320

Table 8 – Task Summary for Pu immobilisation					
Task	**Description of Task**	**Issues to be Addressed**	**Technical Requirement for Task**	**Start / Completion date**	**Estimate (£k)** Note 1
First stage evaluation – glasses **(included as fallback to ceramics and to underpin auditable decision)**	Does vitrification offer a technically viable alternative for plutonium immobilisation	Determine appropriate glass compositions	Fabrication and characterisation of a range of glasses suitable for Pu immobilisation.	Jul 05 / Jul 07	146
	Leach testing	Does performance of vitrified wasteform meet required criteria	Selection of appropriate leach testing procedures and application to host matrices	Feb 06 / Jul 07	47
	Glass processing	Can glass wasteforms be safely and economically produced	Development of melter technology to address criticality concerns	Jul 06 / Aug 08	63
First stage evaluation - others	Do other technologies offer a viable alternative for plutonium immobilisation	Are there other suitable materials other than ceramics and glass.	Assessment of suitability of cementitious systems	Jul 05 / Jul 07	28
Storage MOX	Storage or immobilisation MOX	Is Storage MOX appropriate wasteform.	Leachability testing on Storage MOX and compatibility with neutron absorbers	Nov 04 / Jan 06	83
Pu re-use: spent fuel evaluation	Determination of the durability of candidate spent fuels as a wasteform	Need to compare with engineered wasteforms	Durability testing of MOX, IMF and PBMR options to compare with engineered wasteforms	Apr 05 / Apr 07	128
Active trials	Initial active trials on matrices, for first evaluation	Establish integrity of aged samples of ceramics and glass containing plutonium	Characterisation and durability of stored ceramics and glass samples	Nov 04 / Jul 05	98
Active fabrication	Establish active fabrication and characterisation facility	Work with active material needed to verify inactive studies.	Establish equipment required to support an active facility carrying out fabrication, characterisation and performance testing of active wasteforms	Apr 05 / Oct 06	27

Table 8 – Task Summary for Pu immobilisation					
Task	**Description of Task**	**Issues to be Addressed**	**Technical Requirement for Task**	**Start / Completion date**	**Estimate (£k)** Note 1
Computational modelling	Modelling to support empirical R&D in wasteform development and performance	Fabrication issues such as waste loading and performance issues such as durability and wasteform stability	Modelling support to manufacture of a ceramic based plutonium oxide containing wasteform Modelling of the long-term storage of ceramic plutonium oxide containing wasteform	Jul 05 / Jul 08	414
Workshops	Interim First stage evaluation workshop	Need to downselect options for further in depth studies	Assessment of wasteform properties against selection criteria and recommendation of options	Nov 06	36
	First stage evaluation workshop			Aug 08	
Second stage evaluation – initial testing	Stage 2 baseline option evaluation (inactive)	Need to underpin selected option(s)	Optimisation for waste loading and process throughput of chosen options	Aug 08 / Sep 11	963
Second stage evaluation – active testing	Stage 2 baseline option evaluation (active)	Need to verify selected options using Pu	Validation of inactive task (above) by the use of plutonium	Aug 08 / Sep 11	963
Flowsheets	Process Flow sheet for preferred option	Need to outline process for chosen option	**Identification of key process conditions** **Development of process flowsheet** **Development of off-gas & effluent flowsheets**	Sep 05 / Mar 07	143

Table 8 – Task Summary for Pu immobilisation					
Task	**Description of Task**	**Issues to be Addressed**	**Technical Requirement for Task**	**Start / Completion date**	**Estimate (£k)** Note 1
Cost Estimates	Cost Estimates for Plutonium Immobilisation Plant using the preferred technology	Assessment of the availability and suitability of preferred equipment, and cost of deployment, is required.	**Identification of key processing equipment** **Optimisation of equipment layout and configuration** Identification of supporting services and infrastructure	Apr 06 / Apr 09	300

Table 9– Main deliverables and milestones for Pu immobilisation		
Description of Deliverables	**Major Milestones**	**Completion Date**
Technology Evaluation	Report outlining technologies available, state of maturity and applicability to UK plutonium immobilisation	April 2005
Evaluation workshop	Assessment of developed options against wasteform criteria and choice of preferred options to progress.	**Aug 2008 (review point)**
Develop Baseline Options	Complete inactive/active testing.	Sept 2011

Appendix 9. Response from Nuclear Decommissioning Authority (NDA)

March 11, 2005

Rhuari Bennett
Dialogue Coordinator
The Environment Council
212 High Holburn
London WC1V 7BF

NDA RESPONSE TO CONSOLIDATED RECOMMENDATIONS

Dear Rhuari,

Attached to this letter is the NDA response to the BNFL National Dialogue consolidated recommendations. You will see that we have been unable to complete the table within your deadline and therefore undertake to produce a fuller response for publication on our website by the end of April. During the course of this exercise, it has become clear to me that NDA colleagues could benefit from a face-to-face discussion on some of the recommendations and I hope that other members of the RMG will be able to oblige us if this proves to be the case.

As a new organisation, it has been difficult to identify in every case who the best contact for follow up should be. So, for the time being, stakeholders should address any questions and concerns to me. Hopefully, by the time we publish the fuller response on the website, we will have identified the appropriate contact.

Finally, I should clarify that I have added three recommendations to the list you sent to us. These are taken from your letter concerning the Prioritisation Working Group. I hope this is acceptable.

Regards

Richard Griffin
Stakeholder Relations Manager

T: 019467 87722
E: richard.griffin@dti.gsi.gov.uk

BNFL National Stakeholder Dialogue: NDA Response to Consolidated Recommendations

No	Recommendation	Action or Event	Reporting Point	Responsibility (NDA)	How are we addressing the recommendation?	NDA Contact
1	BNFL should use SFMOWG work as a basis for ongoing work *(BNFL agreed)* and should examine any alternative use for Thorp after whichever scenario unfolds. *This will be monitored by BFWG*.	Arrive at decision on future Thorp programme based on throughput, contracts, pond storage capacity, and vitrification plant performance.	Decision on future Thorp programme	Annual review	We believe we do understand this recommendation and it is addressed to the right organisations (BNFL and NDA), but it is not clear that stakeholders fully understand Government's role in decisions on current and future THORP business. As the site M&O contractor for Sellafield, British Nuclear Group will be expected to manage THORP on behalf of the NDA. The precise targets and plans for THORP will be set out in the NTWP which will be annexed to the contract and in the public domain. As an asset of the NDA, a review of THORP performance will be included in the Authority's Annual Report and Accounts. The commitments in the White Paper (Managing the Nuclear Legacy) on future THORP business stand, so existing contracts will be honoured. The White Paper also set down criteria for the consideration of any potential new business for THORP. Since the White Paper was published, the Government has made the additional commitment to undertake a public consultation ahead of any decision on new business. It is therefore worth emphasising that ultimately, decisions on any possible new business or strategy for THORP are for Government to take on the basis of advice from the NDA. This would include proposals to put a new head end on to THORP in order to reprocess Magnox Fuel. All that can be added to this is to confirm that the NDA's consideration of a change to the use of THORP or of any new reprocessing business would be conducted in accordance with our principles of openness and transparency and stakeholder engagement.	
		Thorp reprocessing completed – current orders only	Completion by 2011	Annual review		
2	The NDA should use the SFMOWG work relating to AGR fuel arisings and the associated Strategic Action Plan scenarios to inform its own policy development and as background to its stakeholder engagement on development of programmes and options					

No	Recommendation	Action or Event	Reporting Point	Responsibility (NDA)	How are we addressing the recommendation?	NDA Contact
3	The Magnox announcement (23/5/00) firmed up the programme for reactors and B205, including Calder closure in March 03 which was later implemented. The throughput of B205 etc covered in SAP and fed into SFMOWG and covered by SAP		Progress against Magnox reactor closure programme, include financial year date 2009/10 for Wylfa	Annual report to 2009/10		
	The Magnox announcement (23/5/00) firmed up the programme for reactors and B205, including Calder closure in March 03 which was later implemented. The throughput of B205 etc covered in SAP and fed into SFMOWG and covered by SAP		Develop contingency plans for wetted fuel and dry fuel in reactor cores	Report progress		
			Technical issues of dry transportation of fuel from Magnox stations to Sellafield – technical issues resolved, regulatory aspects?	Report progress		
			Progress on Interim Safe Storage (ISS) of fuel in purpose built stores	Report progress		

No	Recommendation	Action or Event	Reporting Point	Responsibility (NDA)	How are we addressing the recommendation?	NDA Contact
4	The NDA should establish, adopt and publish, before 1 April 2005 and in co-operation with its stakeholders, a set of principles to guide its management of nuclear liabilities			01.04.05	Understood. However, this deadline is obviously not going to be met. The NDA has not yet decided whether or not the development of a set of principles similar to those developed by the BFWG is the way forward for the Authority. Nevertheless, as a point of principle, stakeholders have been and will continue to be involved in all aspects of the NDA's work. Indeed, stakeholder engagement is one area where the NDA does have a set of principles set out in the Stakeholder Charter (www.nda.gov.uk) One of the first actions that the NDA will take after 1 April 2005 is to host a round of regional events for stakeholders to feed views into the development of our five year strategy.	
5	The NDA should ensure that their principles on the management of nuclear liabilities are reviewed by their stakeholders within 12 months of publication			by 01.04.06	Understood. Should it be decided that the development of such principles is the way forward, then they would be regularly reviewed and developed and we would have no problem with an annual review by stakeholders.	
6	The NDA should develop the Key Issue Summaries as suggested by the DTI, before April 2005			01.04.05	Understood. Again, a deadline that will not be met. However, we will develop a few examples of these Key Issue Summaries and put them on our website for comment by stakeholders. If they prove to be useful, then we will develop more examples. This is also an issue we can discuss with participants in the National Stakeholder Group (NSG).	
7	The DTI and NDA should arrange for cross-sectoral stakeholder scrutiny of the NDA's contractorisation. The outcome should be reported to the first meeting of the NSG			by 01.04.06	Understood. Competition is a key part of the mandate that Government has given to the NDA and the contractual structure has been developed with stakeholder involvement, particularly from the regulatory authorities. No such review/scrutiny is planned for the immediate future. If the NSG decided this was an area it wanted to discuss/review, then the NDA would facilitate such work.	
8	The NSG should review the NDA's contracting principles, procedures and subsequent contracts against the BFWG Principles before the first contracts are competed			by first contract competition	Understood. We have made it clear from the start that we will not be dictating the NSG's agenda. The NDA will set up the NSG and facilitate it, but the members will decide what issues it focuses on. However, there are a number of recommendations that make reference to the NSG, so we will put them into a single document and circulate it to the NSG members. It will then be up to them to decide which issues to focus on.	

No	Recommendation	Action or Event	Reporting Point	Responsibility (NDA)	How are we addressing the recommendation?	NDA Contact
9	The NDA should establish arrangements for the NSG to regularly review whether the implementation of the NDA's model of contractorisation is effectively delivering the NDA's cleanup functions and responsibilities as set out in the Energy Act 2004			by 01.04.06	Understood. We have made it clear from the start that we will not be dictating the NSG's agenda. The NDA will set up the NSG and facilitate it, but the members will decide what issues it focuses on. However, there are a number of recommendations that make reference to the NSG, so we will put them into a single document and circulate it to the NSG members. It will then be up to them to decide which issues to focus on.	
10	The NDA should, by March 2005, set out how it will resource and deliver the White Paper commitments on openness and transparency and stakeholder engagement.			by 01.04.05	Understood, but impossible to meet this deadline as it predates the launch of the NDA. The Annual Plan (which should have been published by the time this note is circulated) sets out the resources that will be devoted to stakeholder engagement for the next 12 months. The Stakeholder Charter sets out the high level commitment from the NDA to openness and transparency and stakeholder engagement and, as a public body, the NDA must comply with the Freedom of Information Act and Environmental Information Regulations and any other relevant legislation. A "transparency" policy is being developed and will be published on the NDA website once the NDA Board has given approval.	
12	The NDA should ensure that its corporate culture respects and meets stakeholder expectations of high quality engagement with consistency, openness and transparency as stated in the White Paper			by 01.04.06	Understood and under no illusions about the high expectations stakeholders have of the NDA in this area. All new members of staff have to attend a mandatory induction course which emphasises that the NDA has been created as an open, transparent and approachable organisation that engages with all stakeholders as a matter of course. On top of this, the Chairman has nominated himself as the stakeholder champion on the NDA Board.	
13	The NDA should ensure that the Strategic Issues Register is developed in a way which takes account of stakeholder views and concerns			by 01.04.06		

No	Recommendation	Action or Event	Reporting Point	Responsibility (NDA)	How are we addressing the recommendation?	NDA Contact
14	The NDA should be aware of the level of stakeholder engagement capability available to it from other established stakeholder engagement programmes including the BNFL National Stakeholder Dialogue and its Working Groups			by 01.04.05	Understood. The NDA is fully aware of the enormous pool of knowledge and expertise that is available from other engagement programmes such as the BNFL National Dialogue. This has been evident through the inputs made to the DTI on various consultation documents, as well as the final reports produced by the working groups themselves. As has been made clear in public statements by both the NDA Chair and CEO, we will take every opportunity to utilise and learn from this wealth of experience. We will also bring the outputs of the BNFL National and Magnox Dialogues to the attention of the NSG.	
17	The NDA should ensure that the programme of research and evaluation on plutonium disposition is reported to the NSG within the first year of the NDA's creation, and invite the Group to consider how it wishes to be involved			By 01.04.06	Understood. We have made it clear from the start that we will not be dictating the NSG's agenda. The NDA will set up the NSG and facilitate it, but the members will decide what issues it focuses on. However, there are a number of recommendations that make reference to the NSG, so we will put them into a single document and circulate it to the NSG members. It will then be up to them to decide which issues to focus on.	
19	The NDA should continue to develop a programme to derive methodologies, tools and measures for the justification and prioritisation of cleanup activities through prompt, effective and broad based stakeholder involvement			By 01.07.05		
20	The NDA should include optimisation of discharges in its methodologies and measures for the justification and prioritisation of clean-up as addressed above			By 01.07.05		
21	The NDA should adopt the Hazard Indicator as one of a suite of tools by which to help measure and justify its prioritisation clean-up operations			By 01.07.05		

No	Recommendation	Action or Event	Reporting Point	Responsibility (NDA)	How are we addressing the recommendation?	NDA Contact
24	On its formation, the NDA should give urgent consideration as to how stakeholders may best be engaged in decisions about site endpoints on a case by case basis.			01.04.05	Understood. We will write to the new independent chairs of the Site Stakeholder Groups and ask them to let us have their views on how they would like to be engaged about the endpoint for their site. This is also another issue that the NSG may wish to consider at the "principle" level, so we will include it on the list of issues for the NSG to consider.	
25	Studies should be carried out on the discharge impacts of decommissioning		What information can [*NDA]* make available? Needs to be linked with the current review of Life Cycle Baseline	By 01.07.05		
			What would [*NDA]* want to see as a product from stakeholders in this area?	By 01.07.05		
26	Specific examples of increased priority by the Company were R+T investment, HAL stock management, the Historic Waste Management Project, and Drigg PCM retrieval. Scenarios and framework have been taken up by SFMOWG and PuWG. BFWG should look at passivity measurement		Work on the hazard indicator	By 01.07.05		
			Review of Life Cycle Baseline planning and prioritisation	By 01.07.05		
			How are stakeholders being involved in this review process?	By 01.07.05		

No	Recommendation	Action or Event	Reporting Point	Responsibility (NDA)	How are we addressing the recommendation?	NDA Contact
27	SFMOWG asked for more time (10/11/01) to complete its work *and this was approved, with comments (86) by Main Group (83).* When published (Summer 2001) the Group commended the report and the Strategic Action Plans to BNFL and other decision makers in role development of LMA and possible funding for early closure scenarios. The overriding need is to be transparent in taking conflicting needs of environment and socio-economic into account. *BNFL responded to SAPs.*					
29	Socio-economic, cost and safety may produce pressure against discharge reductions and suitable studies should be commissioned. The ERM study was welcomed, was being used by in planning by local and regional Government, and went a long way to fulfilling the need, while having no direct impact on DWG recommendations. Socio-economic data for Ireland and Norway was to be supplied					

No	Recommendation	Action or Event	Reporting Point	Responsibility (NDA)	How are we addressing the recommendation?	NDA Contact
31	Mitigation plans are required whichever option is involved, and the ERM report is being updated	Significant Sellafield job reductions begin 2012	Report on initiatives and plans to mitigate expected socio-economic effects of Sellafield job reductions			
33	The NDA, with local and regional partners, should update and extend ERM's Socio-Economic Study as soon as the NDA's strategy for the nuclear sites in West Cumbria is developed, to allow the results to be shared with the West Cumbria Strategic Forum at the earliest opportunity.					
34	The NDA should undertake regular reviews and updates of the Socio-Economic studies as an ongoing commitment of The West Cumbria Strategic Forum					
39	The NDA, as part of its socio-economic commitments, should encourage its M&O contractors to develop and use similar processes (for example joint fact finding and work with stakeholders) to explore potential opportunities for diversification					

No	Recommendation	Action or Event	Reporting Point	Responsibility (NDA)	How are we addressing the recommendation?	NDA Contact
42	Discharges – indicative reduction programmes were a good start though details of OSPAR implementation not agreed. BNFL should 'strive to the utmost for reductions over and above pre-OSPAR plans with clear commitment to plant timescales.	Sellafield site to comply with OSPAR requirements as defined	Report on discharge reduction – 'within region of optimisation – D1 plus/ D2 minus and D3 plus'	For Defra annual discharge reporting – OSPAR 2020		
53	A future group should study prolonged dry storage of Magnox – plus feedback into Magnox programme and discharge reductions, and this was taken on by SFMOWG.			NDA		

No	Recommendation	Action or Event	Reporting Point	Responsibility (NDA)	How are we addressing the recommendation?	NDA Contact
54	WWG urges all to accept its agreed principles ●Package waste in passively safe monitorable retrievable form in shortest possible time ●Interim storage (with suitable performance and safety review) offers a feasible option for >50 years – but the Company must involve itself in research on long term storage and the possibility of disposal ●Changing values of stakeholders within 50 years will necessitate revisiting all assumptions, factors and standards, with different timescales being considered in MADA/SAP work in SFMOWG. ●The Company must successfully embrace change, and should use the 9 scenarios adopted elsewhere in Stakeholder Dialogue which has occurred.		Progress on the definition and achievement of monitorable and retrievable storage			

No	Recommendation	Action or Event	Reporting Point	Responsibility (NDA)	How are we addressing the recommendation?	NDA Contact
56	The 'plutonium owner' should ensure that the development of detailed proposals for the management of separated plutonium, the associated decision making, incorporate stakeholder engagement is an integral part of the process. Where appropriate, this should extend to the associated investigations.					
57	The 'plutonium owner' should disregard use of MOX in the Dungeness B, Hunterston B, Hinkley B, Hartlepool and Heysham 1 reactors as options for the management of separated PU			NDA BE		
58	In the interests of fully establishing the practicability or otherwise of using MOX fuel in Sizewell B, Heysham 2 and Torness, and before any decisions on implementation are taken: ●The 'plutonium owner' and BE (as the 'plutonium user') should enter into initial discussions to explore the financial basis for this option (NB This recommendation may change depending on outcome of current restructuring of BE). ●The availability of capacity in SMP should be reviewed, taking account both of the duration and timing of fulfilling contract commitments to overseas					

No	Recommendation	Action or Event	Reporting Point	Responsibility (NDA)	How are we addressing the recommendation?	NDA Contact
	customers and the feasibility of a life extension for the plant. ●Should these explorations indicate that using plutonium in Sizewell B or either of the AGRs may be attractive from liability management point of view, the 'plutonium owner' and 'user' should undertake a comprehensive environmental assessment including the evaluation of transport, reactor safety, environmental discharge, public safety (including the risks from extreme core disruption events), and waste form storage issues. This assessment should be conducted in consultation with stakeholders at national and local levels.					
59	To explore the feasibility or otherwise of utilising plutonium, in the event that any programme of new build reactors were to proceed, we recommend that before any decision are taken: ●The financial basis on which plutonium might be utilised in new build reactors should be explored at an early stage between the 'plutonium owner' and the likely developer of any new build reactors. The existing collaborative agreement					

No	Recommendation	Action or Event	Reporting Point	Responsibility (NDA)	How are we addressing the recommendation?	NDA Contact
	on new build between BNFL and BE may be a suitable vehicle for this. ●The availability of capacity in SMP should be reviewed, taking account of the feasibility of a life extension for the plant. ●Should these explorations (and the outcome of the energy review) be favourable to plutonium use in new build, the prospective developer should undertake a comprehensive environmental impact assessment on the proposal including the evaluation of transport, reactor safety (including the risks from extreme core disruption events), environmental discharge, and waste form storage issues. This assessment should be conducted in consultation with stakeholders at national and local levels. ●A detailed comparison of MOX, Inert Matrix Fuel (IMF) and conventional uranium fuels should be undertaken prior to deciding which fuel type to use					
60	In the light of long lead times, the 'plutonium owner' should commit promptly to an immobilisation research, process development and design study to more fully					

No	Recommendation	Action or Event	Reporting Point	Responsibility (NDA)	How are we addressing the recommendation?	NDA Contact
	establish the optimum technology for plutonium immobilisation. This should include: ●Underpinning research on ceramic immobilisation matrices ●Consideration of possible plutonium loadings, inclusion of neutron absorbers, safety and safeguards requirements ●Assessment of possible product forms against waste specification requirements ●Design studies for process optimisation ●Consideration of low spec MOX as an immobilised plutonium product ●A Best Practicable Environmental Option (BPEO) analysis, conducted with stakeholder involvement, which brings together findings of the above in order to establish the optimum process and waste form ●A comprehensive environmental impact assessment on the proposal including the evaluation of plant safety, environmental discharge, and waste form storage issues. This assessment should be conducted in consultation with stakeholders at national and local levels.					

No	Recommendation	Action or Event	Reporting Point	Responsibility (NDA)	How are we addressing the recommendation?	NDA Contact
62	In order to ensure the option of using SMP immobilised plutonium as low-spec MOX is not foreclosed, the 'plutonium owner' should before final decisions about plutonium management are made: ●Undertake a more detailed assessment of the suitability of low spec MOX as a form of immobilised plutonium product, including consideration of security, safety, safeguards, waste form qualification and other relevant issues. ●Undertake a design study to establish whether SMP could feasibly be modified to produce a more 'optimised' plutonium waste form, either in current or newly added production lines. ●Review the use of SMP in the light of the above investigations and those of the other options as recommended above, once the future contractual commitments of SMP for overseas and domestic customers become clearer. ●Include the 'SMP option' in the BPEO for immobilisation options recommended in respect of new build plant.					

No	Recommendation	Action or Event	Reporting Point	Responsibility (NDA)	How are we addressing the recommendation?	NDA Contact
63	Research and process development for plutonium immobilisation should concentrate on those options which do not involve an added external radiation barrier. However other means of increasing the intrinsic security of the product should be explored.					

No	Recommendation	Action or Event	Reporting Point	Responsibility (NDA)	How are we addressing the recommendation?	NDA Contact
64	At this stage, it is important to keep options open so that contingencies are available for each plutonium disposition option. In order to ensure this: ●All the actions and explorations indicated above should be carried out to the point at which the 'plutonium owner' can make informed decisions (with stakeholder involvement) on the contribution each option should make to management of the plutonium stockpile. ●In reaching these decisions, consideration should be given to: maintenance of contingency in the longer-term, community views on the long-term storage onsite of plutonium waste forms, social-economic factors including employment, and the impact of plutonium stockpile management options on the wider Sellafield clean-up programme ●The 'plutonium owner' should then develop a more detailed plan which shows how the options could be used to convert the current and projected future stockpile of separated plutonium into a passively safe form suitable for long-term storage and, potentially, ultimate disposal. ●Such a plan should aim to achieve conversion to a timescale which would render construction of new plutonium dioxide stores, or refurbishment of					

No	Recommendation	Action or Event	Reporting Point	Responsibility (NDA)	How are we addressing the recommendation?	NDA Contact
65	The NDA to make transparently clear to OCNS and interested stakeholders that the funding for effective security arrangements is available.			This should happen prior to April 2005.	Understood, but there seems to be some confusion as to what drives the funding for security arrangements. NTWPs are developed by the sites and would include any and all actions and operations that need to be carried out as a result of a regulatory requirement or in order to be compliant with the regulatory regime. If additional regulatory requirements prove necessary during the course of the year, then the NTWP would be amended accordingly.	
66	Appropriate resources should be put into emergency planning and post-incident response			Ongoing	There is no question of any short cuts being taken by the NDA or contractors with regard to **any** requirements set by **any** of the nuclear regulators.	
68	All appropriate agencies (e.g. NDA, Department for Trade and Industry (Dti), BNFL) should ensure that the importance of this issue is communicated forcefully to the Treasury, including appropriate staffing and resourcing levels within OCNS.				If the point being made here is that OCNS lacks resource, then that is a matter for DTI as the Government Department responsible for OCNS.	
100	The NDA (and possibly OCNS) should consider how to resource maintenance of links between stakeholders and their constituents, and should bring this issue to the attention of the LLCs or their successors, complemented by dialogue at a national level. Within any future stakeholder process, the NDA should periodically review the quality of stakeholder communication with constituents.				Understood. This is a key issue, particularly for the NSG whose membership will consist of individuals who represent national bodies. At the local level, the Site Stakeholder Groups are being encouraged to allow the general public to participate in their meetings. Nevertheless, it is an important issue and we will bring it to the attention of the Chairs of all the NDA's SSGs and add it to the list of issues for possible consideration by the NSG. Alongside the work that is currently going on in order to create the NSG, we are preparing the scope of an ongoing evaluation exercise. We will include this issue, at both the local and national level in the scope of that evaluation.	

No	Recommendation	Action or Event	Reporting Point	Responsibility (NDA)	How are we addressing the recommendation?	NDA Contact
113	BNFL should initiate a Joint Fact Finding programme with LLCs or their successors (funded by the NDA), complemented by dialogue at a national level, to establish whether it is possible to arrive at greater agreement about the range of consequences arising from potential terrorist acts as defined in the DBT. The Group recognises that this is conditional upon the establishment of a two-tier stakeholder engagement process.			After April 2005	Understood. We have made it clear from the start that we will not be dictating the NSG's agenda. The NDA will set up the NSG and facilitate it, but the members will decide what issues it focuses on. However, there are a number of recommendations that make reference to the NSG, so we will put them into a single document and circulate it to the NSG members. It will then be up to them to decide which issues to focus on.	
117	The NDA should inherit and develop the Security Hazard Indicator and apply this to minimise the overall movement of radioactive materials (and hence terrorist risk) which it will be required to manage through its decommissioning programme.			Ongoing from April 2005		
123	BNFL should use the methodology from its report to create strategy and site specific plans for all other BNFL sites. The announced closure dates will affect reactor sites plus fuel supply from Springfields		Use DWG methodology to create strategy and site-specific plans			

No	Recommendation	Action or Event	Reporting Point	Responsibility (NDA)	How are we addressing the recommendation?	NDA Contact
127	The NDA should take account of the findings of the Magnox Decommissioning Dialogue				Understood. The NDA is going to take account of the findings of the Magnox Dialogue and has a representative on the Recommendations Monitoring Group to ensure that this happens. As has already stated, the outputs of both the BNFL National and Magnox Dialogues will be recommended to the NSG.	
128	The NDA and BNFL should incorporate best practice sustainability appraisal in all strategy and programme development					
129	The NDA should set up methodology and procedure for implementing the BFWG Principles relating to continued operation of commercial plants					
Prioritisation						
	Concern that the membership of the Prioritisation Working Group (PWG) does not cover all stakeholder groups, specifically not socio-economic issues. BFWG offers some candidates to join PWG.				Understood. Recognise and agree that this is the case, but would point out that the PWG was not set up to be representative of all stakeholder groups. Nevertheless, it is important that all views are fed into the process and understand that a local authority representative has recently joined the Group. Next steps for the PWG include meetings with representatives of those stakeholder groups not on the PWG and the preparation of a report on the work to date, which will be published for comment.	
	Recommendation that the PWG adopt a more open and transparent and interactive style of engagement.					
	Seek reassurance from Chair of NDA that prioritisation process will be open, transparent and subject to regular review and refinement.					

Appendix 10. Response from Department of Trade and Industry (DTI)

You will see that [this response] addresses recommendations 11, 59, 66 and 70. Of the remaining recommendations initially attributed to me, 32 and 37 (West Cumbria Strategic Forum) fall to my regional colleagues who I assume will respond to you direct.
Recommendation 101 is being picked up by OCNS.

Peter McDonald

11. DTI has seen and commented on a draft NDA stakeholder engagement strategy. In his introductory meeting with Jonathan Phillips, the NDA Communications Director, Andy Layton set out the reassurances DTI is seeking to satisfy itself that a satisfactory process is in place.

59. Before any plutonium management decisions are taken, account will be taken of the financial basis on which plutonium might be utilised in any new build programme. Similarly any implications for SMP capacity will be reviewed.

To inform future discussions, as the owner of the plutonium stockpile from 1 April 2005, the NDA will as part of its overall R&D programme, wish to consider what research it requires to determine the best technical and cost effective solution for recycling plutonium as reactor fuel and for its immobilisation. Input from a range of stakeholders will be required in shaping the final form of such a programme.

66. All licensed sites are subject to a site licence condition requiring that they maintain adequate emergency preparations. This is regulated by the NII who approve the plans subject to adequate demonstrations of the on-site response annually and the multi-agency off-site response to an accidental release of activity every three years. These plans are based on authoritative guidance issued by the Nuclear Emergency Planning Liaison Group (NEPLG) which is a multi-agency committee chaired by the DTI. Major sites are also subject to the Radiation (Emergency Preparedness and Public Information) Regulations 2001.

The NEPLG reviews the outcome of the off-site exercises in order to determine if any lessons of national importance were learned. These are fed back to the Group and incorporated into future issues of the guidance.

The NDA will make funding available for actions taken in an emergency. It will expect such actions to be taken ahead of any change control approval procedures. NDA have undertaken NOT to question the operators' decisions on proportionality of response.

70. The scale of emergency preparations is historically based on the worst reasonably foreseeable accident. For an operating Magnox reactor this is a breached circuit co-incident with burning fuel. For these sites this reactor fault is more serious than any reasonably foreseeable terrorist attack. Site security is under constant review and significant improvements have been made in the light of the increased scale of terrorist events.

Appendix 11. Response from Committee on Radioactive Waste Management (CoRWM)

Rhuari Bennett Esq
Co-ordinator,
BNFL National Stakeholder Dialogue
The Environment Council
212 High Holborn
London WC1V 7BF

3 March 2005

Dear Rhuari,

Thank you for your 2 February letter about the Dialogue and the recommendation for CoRWM arising from the plutonium study.

We found the report a useful contribution to our work. For example, we have considered it as part of our report on the inventory of UK materials that may eventually have to be managed as wastes. We acknowledged this link in our initial report published last November in our first round of public engagement. You will find this on our website at http://www.corwm.org.uk/PDF/Inventory.pdf.

We shall soon be consulting on, among other things, the long-term waste management options that should be assessed in detail during the third phase of our programme starting in the autumn.

As part of this, though not as an option by itself, we shall be looking at how to deal with plutonium. The National Dialogue report provides a great deal of information, and this is invaluable because our programme is essentially one of reviewing rather than undertaking original work.

One of our key tasks is to assess the impact that plutonium management could have on the long term waste management options. So I am happy to confirm that we shall take account of the study in our work.

Yours sincerely,

GORDON MACKERRON

Appendix 12. Response from Environment Agency (EA)

Our ref
Your ref

Date 15 March 2005

Rhuari Bennett
Dialogue Co-ordinator
The Environment Council
212 High Holborn
London
WC1V 7BF

Dear Rhuari

RESPONSE TO RECOMMENDATIONS ARISING FROM BNFL NATIONAL STAKEHOLDER DIALOGUE

Thank you for your letter of 2 February, and apologies that this reply is slightly later than your requested date for responses.

Of the compiled recommendations, there is one that specifically refers to the Environment Agency, namely:

"47. Government departments and agencies with regulatory functions (principally Defra, DoH, HPA, SEPA, EA, HSE) together with the NDA, take account of CERRIE's work and develop a coherent approach to taking account of uncertainty in the risks both from radioactivity and from other sources in regulation and in the prioritisation of clean-up."

The Environment Agency's response to this recommendation is as follows:

- We note that CERRIE is not recommending changes to the central values of radiation risk factors and dose coefficients. We consider there is no immediate requirement for change to our current approach to regulating radioactive discharges from nuclear establishments and other sites. Our radiation dose assessments are based on a critical group of the most exposed members of the public; this approach is conservative and precautionary.

- In view of the greater uncertainties over assessments of doses from internal emitters, in future we will consider presenting separately our assessments for internal and external exposure.

- We are members of the National Dose Assessment Working Group which will be considering the implications of the CERRIE and COMARE reports.

- One area where radiation protection needs further development is the effect of radioactive discharges on living organisms other than humans. The reports have little to say on this – however the Agency is taking a leading role in this field.

I hope this response will be helpful.

Yours sincerely

DR CLIVE WILLIAMS
Policy Development Manager, Radioactive Substances Regulation

Appendix 13. Response from Scottish Environment Protection Agency (SEPA)

Our Ref: CG/ENV27-H04
Your Ref:

Rhuari Bennett
Dialogue Coordinator
212 High Holborn
LONDON
WC1V 7BF

07 March 2005

Dear Rhuari

RECOMMENDATIONS ARISING FROM BNFL NATIONAL STAKEHOLDER DIALOGUE

Thank you for providing Scottish Environment Protection Agency (SEPA) with the opportunity to respond to the *Recommendations for Organisations other than BNFL or NDA*.

Due to workload pressures we have restricted our response to those recommendations in which SEPA, either by name, or as a relevant agency, has been specifically identified as a responsible organisation. These are Recommendation Numbers 22, 47 and 52.

Our responses are tabulated overleaf in the format requested in your letter of 02 February 2005.

As a public body committed to openness and transparency, SEPA feels it is appropriate that this response be placed on the public record. If you require further clarification on any aspect of this correspondence, please contact Andrew Whittall, SEPA Corporate Office, at the address shown below.

Yours sincerely

Campbell Gemmell
Chief Executive

No.	Recommendation	Are the right organisations identified?	Do we understand the recommendation or is further clarification needed?	How are we addressing the recommendation?	How are we proposing to report progress?	If we are not addressing these recommendations, what are our reasons
22	The responsible UK agencies and Government departments should jointly develop policy on contaminated land, taking account of previous and ongoing stakeholder engagement, by the end of 2005.	Yes, but would suggest NRPB and HSE are also relevant	Understood	SEPA understands that legislation regarding radioactively contaminated land is at an advanced stage of drafting, and is expected to come into force early in 2006, following public consultation by Defra. NRPB has been requested by Government to develop guidance on, *inter alia*, suitable criteria for radioactively contaminated land. This guidance will be subject to public consultation together with the draft legislation. A similar timetable is envisaged for implementation in Scotland. Note that contaminated land on Nuclear Licensed Sites is subject to regulation by HSE under the Nuclear Installations Act 1965 and HSE is currently developing its de-licensing criteria.	N/A	N/A
47	Government departments and agencies with regulatory functions (principally DEFRA, DoH, HPA, SEPA, EA, HSE), together with the NDA, take account of CERRIE's work and develop a coherent approach to taking account of uncertainty in the risks both from radioactivity and from other sources in regulation and in the prioritisation of clean-up.	Yes, but would suggest NRPB and NDAWG (National Dose Assessment Working Group) are also relevant	Understood	NDAWG is addressing the issue of uncertainty in assessing radiation exposure through its *Sub-group on Uncertainty and Variability in Dose Assessments*. Though SEPA does not sit on this sub-group, we will appraise the sub-group's outputs when they are submitted to the main Working Group. The timescale for delivery of this work is currently not known to SEPA. This work will not address uncertainty in the health risks arising from a given exposure, however, only in the assessment of radiation exposure. The regulators look to bodies such as NRPB and ICRP for guidance on health risk, and we endorse Recommendation 48, that ICRP makes clearer the degrees of uncertainty in radiation risk.	Progress on the Sub-Group's work is reported on the website www.ndawg.org. Once a methodology for assessing uncertainty in radiation risk and for presenting it to the public has been agreed between the regulators, it will be incorporated into the annual RIFE reports.	N/A

No.	Recommendation	Are the right organisations identified?	Do we understand the recommendation or is further clarification needed?	How are we addressing the recommendation?	How are we proposing to report progress?	If we are not addressing these recommendations, what are our reasons
52	Government and regulators should set criteria for acceptability of waste forms.	Yes, but would suggest that RWPG, CoRWM & NIREX are also relevant.	Clarification on this recommendation would be welcome. Crucially, for which waste streams are these criteria required?	The Government's Managing Radioactive Waste Safely consultation, launched in 2002 is being taken forward under the auspices of The Committee on Radioactive Waste Management (CoRWM). CoRWM is due to report in June 2006 on management options for Low Level Wastes (LLW) that cannot be disposed of at Drigg, Intermediate Level Wastes (ILW) and High Level Wastes (HLW). RWPG is addressing management options for the increased quantities of LLW and high-volume low-activity wastes that are expected to arise as the UK's nuclear decommissioning programme progresses. Until Government responds to these bodies' recommendations with a developed national management & disposal strategy for these various waste streams, regulators are somewhat limited in their ability to set definitive criteria for waste forms. In spite of this background of uncertainty, work is being addressed by the regulators, for Intermediate Level Waste, through recently implemented improved regulatory arrangements. These formalise joint-working arrangements between HSE, EA & SEPA in the scrutiny of NIREX's Letters of Comfort process.	Recently, SEPA responded to the Phase 1 CoRWM consultation on its stakeholder engagement process. This response is available on our website. Guidance explaining the regulatory processes associated with ILW conditioning on nuclear licensed sites will be made available soon	

Appendix 14. Response from Office of Civil Nuclear Security (OCNS)

No	Recommendation	Response
68	All appropriate agencies (e.g. NDA, Department for Trade and Industry (Dti), BNFL) should ensure that the importance of this issue is communicated forcefully to the Treasury, including appropriate staffing and resourcing levels within OCNS.	Accepted. OCNS keeps its staffing needs under constant review. The Director comments directly on this issue in his Annual Report
69	BNFL and OCNS independently should confirm whether, under current legal arrangements and guidance notes, they have clearly identifiable responsibilities and appropriate funds for compensation, in respect of the consequences of terrorist incidents. If not, the situation should be rectified.	Rejected. Not in OCNS's control. OCNS is a part of DTI and is bound by Government's broader approach to this issue.
71	The next OCNS report should specifically include a section addressing NDA priorities for security.	Accepted. The most recent OCNS report referred specifically to the NDA. Given the major impact NDA will have on the industry, it is likely to feature in all future reports.
72	The Group believes that there needs to be continuous examination by relevant stakeholders (including consideration of a two-tier stakeholder engagement framework) of the arguments for and against the withholding of specific types of information. At this stage, OCNS should specifically review the reason for non-disclosure of information on radioactive waste.	Accepted. OCNS is examining how best to engage with stakeholders on an ongoing basis. It is a basic principle not to deny access to more information than is necessary in the interests of security: to do so can be costly and inconvenient. "Radioactive waste" covers a wide range of materials, forms, and storage arrangements. Some information could be of assistance to terrorists and others wishing to do harm.
73	Make sure Amendment to NISR 2003 includes dispute procedure.	Rejected NISR(2003) provide for the security regulation of the industry. It is not the right vehicle for an appeals process: it would risk giving the false impression that compliance with the regulations is negotiable. There are procedural mechanisms in place for appeals.

No	Recommendation	Response
76	Publish civil nuclear classification guides or explain why they are classified.	Rejected OCNS is committed to openness as a matter of principle as well as needing to meet the requirements of the FoIA. The classification guides are highly detailed procedural documents covering all eventualities and aimed at establishing a common security standard for all users of nuclear material. They contain some information that may be of assistance to anyone wishing to overcome security arrangements but reviewing them all for the detail would not be a trivial task. Nor are they the sole prerogative of OCNS. 'Finding a Balance' published by OCNS covers similar territory and explains why it is necessary to withhold some information. 'Finding a Balance' also makes it explicit that the underlying principle is one of disclosure. OCNS believes that this is a more appropriate document than the Classification Guides for explaining why or why not information should be released. OCNS is committed to keeping 'Finding a Balance' current.
78	OCNS should monitor and report back to stakeholders the number of visits to its Disclosure Guidance document posted on its website to give an indication of interest.	Accepted in principle 'Finding a Balance' is currently available as a link through the DTI's overall website. It does not count the number of times the specific link is used. However, OCNS recognises the importance of monitoring public interest in its activities and will take this forward as a general principle.
82	OCNS should bring inconsistencies in regulations covering radioactive substances to the attention of policy makers in Government so that regulations are consistent, because it has a direct bearing on the public perception of nuclear security.	Accepted OCNS will continue to require appropriate levels of security for all radioactive materials at nuclear facilities
83	BNFL and OCNS should take all necessary measures to increase and monitor public confidence in their security systems including a) monitoring responses to all information put into the public domain and b) appending questions to documentation requesting feedback on user friendliness, etc.	Accepted

No	Recommendation	Response
84	OCNS should make representations to Government to extend the membership of its advisory board to include suitably a qualified representative from a broader base of stakeholders, including Non-Government Organisations (NGOs), in order to provide a range of perspectives to allow for balanced discussion.	Accepted in principle but final decisions are not in OCNS control
85	Sufficient information should be provided by OCNS (the vetting agency), following consultation with the vettee, to BNFL to manage any potential risk.	Rejected OCNS understands why the point is being made. However, OCNS must comply with Cabinet Office guidance on confidentiality of personal information within the vetting process
86	As a minimum, vetting agencies should consider making the criteria used for vetting available to BNFL.	Accepted
88	BNFL and OCNS should determine and publish the criteria used to judge whether the security system has failed to the extent that leads to the consequence of that operation ceasing.	Accepted subject to not disclosing information that would itself prejudice security
92	OCNS should review its openness and transparency policy taking regard to NDA's practices and those of similar security organizations, taking into account FoIA requirements.	Accepted Within its resources and the priority it must give to nuclear security, OCNS is committed to practical transparency.
94	OCNS should set up its own independent website.	Accepted subject to the resources being made available
95	OCNS should respond to invitations by foreign states to contribute to the briefing of concerned stakeholder groups in en route countries in connection with international transport of nuclear material.	Accepted subject to it being agreed diplomatically and to it being understood that OCNS is likely to decline most such invitations on grounds of security and resource priorities.
100	The NDA (and possibly OCNS) should consider how to resource maintenance of links between stakeholders and their constituents, and should bring this issue to the attention of the LLCs or their successors, complemented by dialogue at a national level. Within any future stakeholder process, the NDA should periodically review the quality of stakeholder communication with constituents.	Accepted

No	Recommendation	Response
102	OCNS should be established along similar lines to the NII to achieve a degree of independence from potential Government pressure. Cabinet Office guidelines on best practice should be adopted in this process.	Not in OCNS control
103	The OCNS should consider a management statement as recommended by the Better Regulation Task Force (2003) which could potentially be met by the establishment of an authoritative and independent oversight body. See 2.3 and 2.4.	Accepted in principle but without commitment to the specific proposal which is not in OCNS control
104	OCNS should ensure the DBT is dynamic and takes into account as many threat scenarios and consequences as possible.	Accepted: it is, it does
105	OCNS to publish as many aspects of the DBT as possible, as is done in the United States, to demonstrate as robust a response as possible and to increase public confidence.	Rejected The underlying premise is incorrect. No country to OCNS's knowledge publishes its DBT although some limited aspects of the US DBT have been. OCNS is studying the possibility of publishing a version of the DBT to encourage confidence in the process. However, it will not contain the sort of detail implied in the recommendation.
106	OCNS needs to ensure that the results of the test programme are properly considered by the appropriate safety and security authorities.	Accepted
107	OCNS should make the explanation of states of alert publicly available. OCNS should also ensure that states of alert are always based on objective circumstances, should reflect the real situation and not be subject to political manipulation.	Not under OCNS control
108	BNFL should review with OCNS whether completely independent personnel should be used as the simulated adversary.	Accepted
110	The application of different security standards to similar nuclear shipments without explanation causes confusion and concern, this could be a topic for future stakeholder engagement. Classified information may be assessed in a two-tier stakeholder dialogue process	Accepted

No	Recommendation	Response
111	As part of its programme of increasing public confidence and understanding of the DBT methodology and the judgments made, OCNS should consider a presentation to the relevant Parliamentary Select Committee (Trade & Industry).	Accepted
112	BNFL and OCNS should keep under review all system testing used by other security agencies, including force-on-force exercises.	Accepted
113	BNFL should initiate a Joint Fact Finding programme with LLCs or their successors (funded by the NDA), complemented by dialogue at a national level, to establish whether it is possible to arrive at greater agreement about the range of consequences arising from potential terrorist acts as defined in the DBT. The Group recognises that this is conditional upon the establishment of a two-tier stakeholder engagement process.	Accepted

Appendix 15. Response from Department of Health (DoH)

Dear Rhuari Bennett,

Thank you for your letter and report to David Harper CBE, DH Chief Scientific Officer dated 2 February.

1. Could you please change your contact details to Hilary Walker, Branch Head, Toxicology & Radiation, Room 683D, Skipton House, London Road, London. SE1 6LH?
2. Please add Hilary Walker for DH actions
3. We understand the recommendations and have responded to the relevant DH responsibilities below:-
4. No 48. The Department of Health continues to support the functions that NRPB undertakes and will continue when the NRPB becomes part of the Health Protection Agency from April 2005.
5. No 50; DH are aware of the research requirements recommended by COMARE and these are being constantly reviewed and considered together with other priorities.
6. No 51; DH are aware of the various successes with the stakeholder process and are using them in other areas in the Department and we will continue to foster the use of this concept together with the Health Protection Agency and other government departments.
7. We could consider with other stakeholders how we could electronically share this progress.

I apologise for the late response and please do not hesitate to contact me if you have any further queries.

Yours sincerely,

Ian Chell MSc

Appendix 16. Response from Health and Safety Executive (HSE)

From Acting HM Chief Inspector of Nuclear Installations
and Director, Nuclear Safety Directorate
Mike Weightman

Mr Rhuari Bennett
Dialogue Coordinator
The Environment Council
212 High Holborn
London WC1V 7BF

Your Ref:

Our Ref: NIN 140/358

Date: 7 March 2005

Dear

Recommendations Arising from BNFL National Stakeholder Dialogue

Thank you for your letter dated 2 February 2005. My Inspectors have reviewed the document 'Recommendations for Organisations other than BNFL or NDA' dated January 2005, and found two recommendations, numbered 47 and 52, addressed directly to the Health and Safety Executive (HSE). As you are aware the Nuclear Safety Directorate (NSD) has for many years participated on behalf of HSE in the BNFL National Stakeholder Dialogue. This participation has been entirely in accord with the role of HSE to act in an information dissemination role in addition to its enforcement role, which is underpinned by one of NSD's goals, as expressed in our Annual Plan, *"To further public confidence in the UK nuclear regulatory system by providing information to our stakeholders, seeking their views and responding to them as appropriate."*

I am therefore pleased to be able to provide a response on behalf of HSE to the two recommendations as follows:

> ***47 Government departments and agencies with regulatory functions (principally DEFRA, DoH, EA, HSE), together with the NDA, take account of CERRIE's work and develop a coherent approach to taking account of uncertainty in the risks both from radioactivity and from other sources in regulation and in the prioritisation of clean-up.***

We understand that this recommendation was derived from the report of the Business Futures Working Group published in 2004.

In considering CERRIE's work HSE is aware that some experts, in particular various members of the Health Physics Association in the USA, have suggested that very low doses of radiation are harmless, and may possibly be beneficial. On the other hand other experts argue that there is an underestimation of radiation risk by current models because of genomic instability, minisatellite radiosensitivity, and the

bystander effect. The International Commission on Radiological Protection (ICRP) is understood to take a wealth of research, including such views, into account when they review radiation risk estimates from time to time. ICRP is expected to publish revised recommendations in 2006, but we understand that it is unlikely to change the radiation risk estimates given in ICRP 60 (1990).

Radiation protection is a matter covered by the Euratom Treaty and is the subject of a directive, the Basic Safety Standards Directive. All Member States of European Union implement this directive into national law. The United Kingdom does this in the main through the HSE's Ionising Radiations Regulations and its associated Approved Code of Practice. Any changes to these Regulations would only be implemented after negotiations at the EU level to revise the Basic Safety Standards Directive, and subsequently consulting at a national level on implementing the Directive. Following the publication of new ICRP recommendations it is likely that the European Commission will consider the need to revise the Basic Safety Standards Directive. It is anticipated that HSE would lead for the UK, and would involve interested parties in preparing its negotiating position, in particular the NRPB who have a statutory role to provide information and advice to persons (including Government Departments) with responsibilities in the UK in relation to the protection from radiation hazards.

In relation to nuclear licensed sites, the uncertainties in radiation risk estimates are part of the overall uncertainties in the risk presented in safety cases for nuclear facilities. In recognition of these uncertainties HSE's assessment of such safety cases uses an appropriately conservative approach.

HSE will continue to seek duty holder's compliance with the relevant law (e.g. Ionising Radiations Regulations, nuclear site licence conditions) and bring duty holders to account for non-compliance in a way that is proportionate to any risks to health and safety, or to the seriousness of any breach, which includes any actual or potential harm arising from a breach of the law.

52. Government and regulators should set criteria for acceptability of waste forms. (Discharges Working Group, 2000-02).

We understand that this recommendation was derived from the report(s) of the Discharges Working Group published from 2000 - 02.

The HSE, the Environment Agency (EA) and the Scottish Environment Protection Agency (SEPA) have produced joint guidance on intermediate level waste (ILW) conditioning that will be published on their respective websites in the very near future.

I hope that these responses are sufficiently comprehensive to provide you with the assurance that HSE has taken account of the recommendations of the BNFL National Stakeholder Dialogue and that NSD remains committed to our goals of stakeholder engagement.

Yours

Mike Weightman

Appendix 17. Response from North West Development Agency (NWDA)

SB/amc/03-03/01/dw

Steven Broomhead
Chief Executive

3 March 2005

Rhuari Bennet
Dialogue Co-ordinator
The Environment Council
212 High Holborn
London
WC1V 7BF

Dear Rhuari

RECOMMENDATION 38 OF THE BNFL NATIONAL STAKEHOLDER DIALOGUE REPORT

Thank you for your letter and attachment regarding Recommendation 38. The following response is provided:

Question	Answer
1	The recommendation is correctly addressed to the NWDA
2	The recommendation should be addressed to my Executive Director for Enterprise and Inovation, Mark Hughes.
3	The recommendation is fully understood.
4	The recommendation is being considered as part of our Nuclear Strategy development and as such will be discussed with cluster managers. Nuclear is a key component of our Corporate Plan and normal project monitoring procedures will track progress.
5	The Enterprise and Innovation Directorate of the NWDA will provide the Environment Council with an update in January 2006.
6	Not applicable.

Please contact David Sales on 07881 852597 if you need further information.

Yours sincerely

STEVEN BROOMHEAD
Chief Executive

Appendix 18. Response from Ministry of Defence (MoD)

"Dr Rutter has asked me to reply on his behalf. Thank you for sight of the report and the opportunity to respond to the recommendations. The MOD is very supportive of initiatives such as the BNFL stakeholder dialogue which it sees as a valuable contribution to involving wider society in the decision making process. Mr Simon Clark was tasked by DSC MOD to participate in the BNFL dialogue in order to share experience and learn. As I am sure you are aware the MOD is engaged in a stakeholder dialogue about the future options for the interim storage of decommissioned nuclear submarines (ISOLUS) and the experience of the BNFL stakeholder dialogue has been useful in this process.

The recommendations in the report are clear and concise, the MOD will raise with DEFRA at the Radioactive Waste Policy Group how the recommendations for Government are being taken forward. The report contains no specific recommendations for the MOD but does contain recommendations for "other government Departments"

Recommendation 50 relating to COMARE and the funding of research
MOD recognises the important role science plays in furthering our understanding of the effects of radiation and through the other Government Departments responsible for sponsoring COMARE will encourage the provision of adequate funding for further research.

Recommendation 51 CERRIE.

MOD recognises the need to resolve disagreements between stakeholders and the need at the start of any dialogue to establish the scope of the dialogue and to agree rules. The MOD in the context of projects such as ISOLUS values the use of independent expert facilitators and has actively participated in dialogues such as the UKCEED's Consensus Conference on Radioactive Waste in 1999, Safegrounds Learning Network conference on "Managing contaminated land on nuclear and defence sites – driving good practice" sponsored by UKAEA, BNFL, Defence Estates and AWE 10 March 2005. The MOD is also participating in the workshop on the management of low level waste being run by the RWPG DEFRA Steering Group on low level waste to be held in April 2005. The MOD is also actively supporting the work of CoRWM which is seeking a way forward on the long-term options for the management of the Nations radioactive wastes.

Fred Dawson, Health Physics Assistant Director & Team Leader
Directorate of Safety & Claims
6-D-30 MOD Main Building
Whitehall, LONDON SW1A 2HB

Appendix 19. Response from National Radiological Protection Board (NRPB)

This is in response to your letter and enclosures of 2 February 2005 inviting response to the recommendations.

There are two recommendations which name NRPB or HPA. Our response to these is as follows.

Recommendation number 47
This recommendation names HPA among the government departments and agencies 'with regulatory functions' in connection with the development of 'a coherent approach to taking account of uncertainty in the risks both from radioactivity and from other sources in regulation and in the prioritisation of clean-up'. HPA has no regulatory function in this respect and we would therefore ask that HPA is removed from the list of responsible organisations.

Recommendation number 48
This recommendation, requiring ICRP to consider and act upon the recommendations of the CERRIE report, names as responsible ICRP and John Cooper (through DH and NRPB). It is not appropriate to name John Cooper as an individual. It is appropriate to name ICRP.

NRPB/HPA will, through staff representation on ICRP, bring the CERRIE report to the attention of ICRP. However, ICRP is an organisation with international representation and it will be for the Commission to decide how it wishes to act and on what timescale. We suggest that for further information on this in the future your point of reference should be the ICRP secretary Jack Valentin (email jack.valentin@ssi.se).

We would, however, point out that NRPB/HPA have a statutory responsibility to advise UK government on ICRP recommendations, and we will take into account the recommendations of CERRIE in formulating this advice.

I hope this response is helpful to you. If you have any further questions please do not hesitate to ask.

Kind regards

Stephanie Haywood

Appendix 20. Response from International Commission on Radiological Protection (ICRP)

Dear Rhuari Bennett,

Thanks for your earlier message to ICRP in response to our consultation on the draft Recommendations, and your two letters to Roger Clarke.

Stephanie Haywood's message from NRPB is spot on. Of course we are well aware of all developments at CERRIE - after all, Roger Cox is the chairman of ICRP Committee 1 and soon the Vice-Chairman of ICRP, and Colin Muirhead is the secretary of ICRP C1 - and you can rest assured that we are taking account of all relevant contents. This is particularly true of our 'foundation document' on biology, which has not yet been released for public consultation (it will be, hopefully within a month). However; as an independent international organisation we need to be very careful with respect to documents from national committees or organisations, particularly when they are not original research but reviews or evaluations. Thus, while we are quoting many of the original references used by CERRIE, we are unlikely to quote CERRIE as such.

Yours sincerely,

Dr Jack VALENTIN, Scientific Secretary
International Commission on Radiological Protection
ICRP

Appendix 21. Response from British Energy (BE)

BE is currently considering the recommendations made by the group and will be taking them forward with the NDA as part of its review of liabilities strategy. BE will respond formally on the recommendations to the Environment Council once the review is complete, which is expected to be by September 2005. This response will be available to be published on the Environment Council website."