

CABINET	Paper No. 29
Meeting date: 30 March 2010	
From: Cabinet Member for Transport and Environment and Corporate Director – Environment	

PROGRESS WITH GEOLOGICAL DISPOSAL FACILITY SITING ISSUES

PART A - RECOMMENDATION OF CABINET MEMBER

1.0 EXECUTIVE SUMMARY

1.1 This report updates Cabinet on progress with the West Cumbria Managing Radioactive Waste Safely Partnership. It briefly summarises recent Partnership work, identifies key issues for the coming year, and concludes that the Partnership is capable of delivering robust recommendations to the three local authorities in 2011 about continued participation in the GDF siting process.

2.0 STRATEGIC PLANNING AND EQUALITY IMPLICATIONS

2.1 County Council policy supports deep geological disposal of higher activity radioactive wastes, subject to monitoring and retrievability of wastes should circumstances require it.

2.2 The County Cabinet, on behalf of the Council, has made an Expression of Interest for the Copeland and Allerdale areas in the Government's geological disposal facility siting process.

2.3 County Council policy supports engagement with any District about the Government's implementation framework to site a geological disposal facility.

2.4 This issue relates to the Wealthier and Greener themes of the Council Plan.

2.5 There are no equality implications.

3.0 RECOMMENDATION

3.1 That the report be noted

Tim Knowles, Cabinet Member for Transport & Environment

PART B – ADVICE OF CORPORATE DIRECTOR - ENVIRONMENT

4.0 BACKGROUND

Introduction

- 4.1 Government needs to find a disposal route for approximately 500,000 cubic metres of 'legacy' high (HLW) and intermediate (ILW) level radioactive wastes that are too toxic for disposal to the LLWR at Drigg, and too long-lived to be managed safely above ground indefinitely. About 70% of this waste is stored at Sellafield.
- 4.2 In 2003 Government appointed the Committee on Radioactive Waste Management (CoRWM) to undertake a public and stakeholder (PSE) programme to identify a way forward. After three years CoRWM concluded geological disposal of legacy wastes is the safest option. It recommended that a siting process be pursued by Government through a transparent, voluntarist, approach that provided benefits to any community willing to accept a geological disposal facility (GDF). In June 2008 Government translated CoRWM recommendations into policy with the publication of the White Paper *Managing Radioactive Waste Safely: A Framework for Implementing Geological Disposal*. This White Paper invests in the relevant local authorities the right to decide whether to proceed, or withdraw from, this 'MRWS' process at any point prior to construction.
- 4.3 To date, the three authorities for West Cumbria alone have expressed an interest in the government's 'offer' and they have formed a Partnership with key local stakeholders that is tasked to understand key issues and test community opinion about the costs and benefits of hosting a GDF.

West Cumbria Managing Radioactive Waste Safely Partnership ('the Partnership')

- 4.4 The Partnership is now one year into its work and, on the current timescale, will report by Mid-2011 with "...recommendations to Allerdale Borough Council, Copeland Borough Council and Cumbria County Council on whether they should participate or not in the Geological Disposal Facility siting process, without commitment to eventually hosting a facility." (*Partnership Terms of Reference: Aims*).
- 4.5 Agreement on 2 October 2009 between the County, Copeland and Allerdale, on a Memorandum of Understanding that established the principles of co-operative working, paved the way for full Partnership participation by County

Council officers and members. Currently the County Council is represented in the Partnership by Cllrs Knowles, Markley, Humes and Southward.

- 4.6 The Partnership work programme is structured around six key issues: safety; geology; community benefits; repository design; site selection process; and PSE to evidence public support. The Partnership will seek to satisfy itself on all key issues before making recommendations to the three local authorities for West Cumbria about continuing to engage with Government and the Nuclear Decommissioning Authority (NDA) in a siting process for a GDF at depths between 200m and 1,000m.
- 4.7 The Partnership meets on a 6 weekly cycle with Steering Group meetings in between to manage business. Recent full Partnership meetings have received presentations from the Environment Agency on GDF regulatory issues and the NDA on retrievability of wastes. The most recent Partnership meeting on 23 February received a presentation from the County's Head of Environment on GDF impacts, and from the NDA on the process of moving from a broad area that may be potentially geologically suitable to specific sites that the NDA can thoroughly evaluate, above and below ground, for potential development.
- 4.8 In parallel with Partnership meetings is a PSE programme that has been managed by officers with appropriate experience from the three authorities and CALC. Public opinion in West Cumbria has been tested via a telephone survey to identify the current level of public awareness. The survey found a surprisingly high level of awareness across Cumbria (52%) in the possibility of a GDF in West Cumbria. 70% awareness was recorded in Copeland and 61% in Allerdale. Perhaps unsurprisingly, far fewer respondents understood the GDF siting process and that it is founded on a voluntary principle (all Cumbria 20% Copeland 36% and Allerdale 25%).
- 4.9 Other PSE activities have included distribution of an explanatory leaflet to almost 80,000 households in West Cumbria; presentations to all neighbourhood forums in Copeland and Allerdale (though this was disrupted last November by flooding); and initiating a randomly selected residents panel to find out which issues are of priority concern and what forms of engagement they believed would best encourage greater public participation in Partnership work. Feedback from this engagement will inform the development of further work including a further round of PSE using British Geological Survey results (see below).
- 4.10 Process transparency is supported by a website (www.westcumbriamrws.org.uk) that archives all Partnership documentation. The Partnership convenor produces a regular electronic newsletter (currently with 300+ subscribers). A communications adviser (former BBC editor) has also been appointed to further raise the Partnership's profile in West Cumbria.

British Geological Survey

- 4.11 The next key stage of the MRWS process is work by the British Geological Survey to screen out geologies that are deemed unsuitable for GDF

development either because of the potential to affect the hydrogeology of West Cumbria or because of the potential for future mineral extraction. The Partnership will ask DECC to instruct the BGS to begin its survey by the end of March. The survey itself will be desk based, drawing on existing data, and take about 6 weeks. There will be no intrusive field work. A further three weeks has been earmarked for BGS draft report review by the Partnership, regulators and the Committee on Radioactive Waste Management (which continues to perform a 'scrutiny' function within the MRWS process). Publication of a final BGS report is expected by mid June.

Key Issues in 2010

4.12 Looking ahead, there are a number of issues which will be considered by the Partnership through the MRWS process in the coming year:

- Capacity issues: The workload on the Partnership is increasing as it 'unpacks' the key issues that will inform a decision on future MRWS participation. The Partnership was stretched to deliver the first round of PSE work. The next round is likely to be more demanding. The capacity of the Partnership and of the three authorities will need to be reviewed to ensure the rigour of the process is maintained without slippage in the timetable. Government will need to invest more heavily in Partnership work. The three authorities with the Partnership convenor are committed to work up a budget for FY2010/11 before the end of March.
- NDA budget: The Partnership has relied quite heavily on the NDA (the prospective developer) to provide technical support. Whether the NDA will sustain the same level of support in future that it has to date is not assured. Substantial reductions in overall NDA expenditure are expected and its Radioactive Waste Management Directorate (RWMD) may not escape. The Partnership needs to impress on DECC (and DECC on the Treasury) that any funding reductions do not impact on the Partnership timetable as it could be more costly for the NDA if the RWMD is effectively left 'marking time' while the Partnership and local authorities continue their deliberations about GDF siting.
- New government: So far as can be determined there appears to be cross party agreement about the MRWS process and it will be important to maintain the momentum after a General Election. Change of Government potentially creates uncertainty and this may be felt by the Partnership.
- Community benefits: The mechanism for ensuring a community is recompensed for accepting a GDF in its area has not been clarified by Government. The three authorities are likely to be reluctant to move to the next stage of MRWS on the strength of Government's White Paper commitment alone. Some concrete mechanism capable of securing community confidence about the scale and timing of community benefits, and their delivery across many terms of Government office, will need to be identified.

- Site assessment: The Partnership will be considering now how a siting process will work if the local authorities step forward to the next stage of the MRWS process. The partnership will want clarity about the NDA process of moving from a large area (West Cumbria) to one or two promising sites for development of head workings (occupying approx. one square mile) and a geological repository. Discussion on this subject began at the last full Partnership meeting but more work will be needed in the coming year. Intermediate stages of site selection (getting from a 'long list' to a 'short list') raise significant potential for 'blight' and concern in the West Cumbrian community (as witnessed at Kirksanton and Braystones following nominations for new nuclear build).
- GDF impacts: As referred to above, the County Council is leading on this work and a sub group to identify positive and negative impacts of GDF development in West Cumbria has been established. It will draw on work soon to be published by the NDA and it will 'dove tail' with research to be commissioned by BECWC Board on the socio economic impacts of the updated Sellafield 'lifetime plan' when it is published in the Spring. It will take account of the priority concerns identified during the first round of Partnership PSE, and it will review other major non nuclear infrastructure projects e.g. Channel Tunnel to see what lessons may be relevant to GDF development.
- IPC role: Government has not decided whether a GDF will be a defined nationally significant infrastructure project for the purposes of the Planning Act 2008. Clarity will be needed on how decisions about GDF development will be taken, should there be a willingness on all other grounds to continue to cooperate in GDF site identification.
- Partnership process: Concerns have been expressed within the Partnership that it is biased towards recommending further engagement in the MRWS process or worse, that the Partnership is 'window dressing' for a 'done deal' on GDF development in West Cumbria. It is crucial to the credibility of the Partnership that these views do not gain traction. Positioning the GDF siting process outside existing near term development plans for West Cumbria is key to maintaining public confidence. Building greater critical challenge into the current Partnership will also increase confidence in the balance and objectivity of its work.
- Scottish policy: Scottish Government is consulting on committing its intermediate level radioactive wastes (ILW) to shallow disposal 'at a few tens of meters'. Its low level waste goes to the LLWR at Drigg and its spent fuel goes to Sellafield for reprocessing where highly active residues are conditioned and packaged for storage pending disposal to a GDF. DECC has said it will consider shallow burial in England or Wales if wastes can be segregated and there is a cost benefit. This could actually result in a significant volume of wastes coming out of a GDF inventory or, if no cost benefit is demonstrated, ILW being disposed to a deep repository whilst in Scotland similar wastes are disposed to a shallow repository. The inconsistency in approaches between DECC and the Scottish Government will likely impact on future public

confidence in long term radioactive waste management on both sides of the Scottish border. If it is determined that ILW at Sellafield (or elsewhere) could be committed to shallow disposal then it raises the prospect of another siting process in Cumbria or transportation of Sellafield ILW for disposal elsewhere in England or Wales. Of course, Scottish Government policy, or Westminster policy, could change over the timescales involved, but the present stance in Scotland tends to confuse rather than clarify approaches to long term radioactive waste management.

- New build: Whilst ILW could come out of the current GDF inventory, significant volumes of spent nuclear fuel from a new nuclear programme could go in. Government estimates 10GW of new generating capacity could require a GDF 50% larger than for legacy wastes alone. The above uncertainties, together with indecision about whether stockpiled reprocessed uranium and plutonium should also be committed to a GDF, make the 'inventory' a highly elastic concept. It makes it impossible for a community to know at this stage what it is committing to. Therefore a key area of work, before a decision is taken on future participation in MRWS, will be to understand and agree a 'change control mechanism' to be applied and to understand and agree in whose hands control of a 'change control mechanism' will rest.
- Plan B: Cumulative uncertainties could put the Partnership under substantial pressure. Government says its 'Plan B' is to make 'Plan A' work. But it cannot abrogate its responsibility for safe and secure long term radioactive waste management and it has said it will identify an alternative approach if the current MRWS process fails to deliver a GDF.

5.0 OPTIONS

- 5.1 This report is not for decision.

6.0 RESOURCE AND VALUE FOR MONEY IMPLICATIONS

- 6.1 The County Council's partnership work involves expenditure that DECC has undertaken to reimburse via funding to the Partnership. There are no immediate financial issues arising from this report however, the future funding of the partnership is a key risk.

7.0 LEGAL IMPLICATIONS

- 7.1 No direct legal implications have been identified. No prescriptive legal process has yet been put in place following the processes and partnership approach recommended in the White Paper "Managing Radioactive Waste Safely". As indicated the siting process will be robust and transparent which should minimise the scope for any legal challenge.

8.0 CONCLUSION

- 8.1 The care taken by the Partnership convenor, Partnership members, and Partnership advisers to ensure a rigorous and transparent siting process should not be underestimated. All parties demonstrate real commitment to understanding all the key issues so that final recommendations to the three local authorities about continuation with, or withdrawal from, the Government process are fully evidenced and fully justified.
- 8.2 However, external risks exist and concerns have been raised from within about whether the Partnership is optimally structured to deliver most value for the community in West Cumbria. Risks can be minimised and concerns are to be expected as everyone's expectations will differ. One year in, and with one year to go, the Partnership currently appears capable of fulfilling its advisory remit and of ensuring the three councils are provided with sufficient information to make an informed decision about whether to proceed with or withdraw from further stages of the GDF siting process.

Marie Fallon
Corporate Director - Environment

March 2010

APPENDICES

Appendix A: Glossary

Electoral Division(s): All

Executive Decision	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No
Key Decision	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No
If a Key Decision, is the proposal published in the current Forward Plan?	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Is the decision exempt from call-in on grounds of urgency?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No
If exempt from call-in, has the agreement of the Chair of the relevant Overview and Scrutiny Committee been sought or obtained?	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Has this matter been considered by Overview and Scrutiny? If so, give details below.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No
Has an environmental or sustainability impact assessment been undertaken?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No
Has an equality impact assessment been undertaken?	<input type="checkbox"/>	<input type="checkbox"/>	N/A

PREVIOUS RELEVANT COUNCIL OR EXECUTIVE DECISIONS

County Council policy as reflected in its agreed submission to the Consultation on Managing Radioactive Waste Safely by letter to DEFRA, 1 November 2007

County Council policy as determined by decision of the full County Council meeting on 26 June 2008

County Council policy as determined by decision of the County Cabinet meeting on 9 December 2008

County Council policy as expressed in the Minerals and Waste Development Framework, Core Strategy, adopted April 2009

CONSIDERATION BY OVERVIEW AND SCRUTINY

Not considered by Overview and Scrutiny

BACKGROUND PAPERS

Managing Radioactive Waste Safely: A Framework for Implementing Geological Disposal. A White Paper by DEFRA, BERR and the Devolved Administrations in Wales and Northern Ireland, June 2008

RESPONSIBLE CABINET MEMBER

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Glossary of Terms

Blight Negative impacts on property values and economic activity caused by a proposed development that will dominate and is perceived to adversely affect the character of an area.

Britain's Energy Coast (West Cumbria) The masterplan developed to regenerate West Cumbria over 20 years to 2027

Community Benefits A set of measures to enhance the social, economic or environmental well-being of a community that hosts a geological disposal facility, to recognise that a community is performing an essential service to the country.

Disposal Emplacement of waste in an appropriate facility without the intention of retrieving it.

Existing wastes Radioactive waste that have already arisen or will arise because of existing practices

Expression of Interest (EoI) A notification to Government by a community that it is interested in entering discussions about involvement in the geological disposal facility siting process, without commitment.

Geological disposal Generally, emplacement in the Earth's crust with no intent to retrieve. Used specifically in the MRWS programme to mean "disposal" of radioactive waste in an underground facility, where the geology (rock structure) provides a barrier against escape of radioactivity and where the depth, taken in the particular geological context, substantially protects the waste from disturbances arising at the surface.

GDF inventory A list of types and volumes of radioactive wastes materials that have been earmarked for geological disposal.

Gigawatt (GW) One gigawatt is one billion (10^9) watts, or one million kilowatts

Government's implementation framework (see *Managing Radioactive Waste Safely*)

High Level Radioactive Waste (HLW) Highly radioactive material arising from nuclear fission which is heat generating. It can be what is left over from reprocessing used fuel, though some countries regard spent fuel itself as HLW. It requires very careful handling, storage and disposal.

Head workings Surface buildings and facilities at an entrance to a geological disposal facility

Higher activity radioactive wastes (HAW) Combined HLW and ILW (see definitions)

Infrastructure Planning Commission (IPC) The body created under the Planning Act 2008 that is charged with deciding on applications for development consent for nationally significant infrastructure projects...

Intermediate Level Radioactive Waste (ILW) Comprises a range of materials from reprocessing and decommissioning. It is sufficiently radioactive to require shielding but is not heat generating.

Low Level Radioactive Waste (LLW) Mildly radioactive material that can be handled safely without shielding.

Low Level Waste Repository (LLWR) The facility near Drigg village in West Cumbria which provides a disposal route for nationally arising low level radioactive wastes.

Managing Radioactive Waste Safely (MRWS) The process of implementing government policy set out in the White Paper: *Managing Radioactive Waste Safely: A Framework for Implementing Geological Disposal*. DEFRA, BERR and the Devolved Administrations in Wales and Northern Ireland, June 2008.

Monitoring An arrangement for surveying, testing and sampling waste packages and their surrounding environment to provide reassurance that radioactive wastes that have been disposed of remain in a safe and secure condition.

Reprocessing Chemical treatment of 'spent' (used) reactor fuel to separate uranium and plutonium from the small quantity of fission products, leaving a much reduced quantity of high-level waste.

Retrievability An ability to withdraw wastes from a disposal facility that is achieved by means designed into the facility other than simply reversing waste emplacement.

Sellafield Lifetime Plan (LTP) The plan developed by the Nuclear Decommissioning Authority to identify when and at what cost different facilities on the Sellafield site will be dismantled, packaged and disposed through to eventual site closure around 2130.

Spent nuclear fuel (SNF) Used fuel assemblies removed from a reactor after several years use and then either stored pending reprocessing or directly disposed of as waste.

Voluntarism An approach to siting geological disposal facilities that involves communities voluntarily expressing an interest in holding discussions with Government, then deciding whether to participate any further.