CUMBRIA TRUST RESPONSE TO THE DECC CONSULTATION, November 2013.

Review of the Siting Process for a Geological Disposal Facility.

SUMMARY of Key Facts & Recommendations:

1. The Committee on Radioactive Waste Management (CoRWM) asserts that deep disposal of **radioactive waste is far from proven technology.**

2. International guidelines should be followed, as should international best practice.

3. All 'engineered solutions' will fail on geological timescales – **only the best geological solutions should, therefore, be considered.** It must inevitably follow that a national search for the optimum location for a GDF should be undertaken ***BEFORE*** seeking community support for such an undertaking.

4. The geology of West Cumbria has not changed; **the objections expressed by Nirex in March 1997 remain as valid today as they were then.**

5. Other experts confirm the unsuitability of West Cumbria for hosting a GDF. "*This (… Cumbria) is among the most studied and best understood geology anywhere in Britain, and there is nowhere safe for a burial site*," said emeritus professor David Smythe of Glasgow University

6. Whilst it is recognised that the search for an optimum location for a GDF must be a national priority, it is of considerable concern that the more immediate imperative of safe and secure storage and decommissioning, both at Sellafield and elsewhere, is lamentably behind schedule and way over budget – facts not lost on the Public Accounts Committee: ***"Hazardous radioactive waste is housed in buildings which pose "intolerable risks to people and the environment."***

7. The CoRWM makes it quite clear that there needs to be a much greater focus on the safe and secure management of wastes in robust interim stores – not just for the anticipated period of the construction of a GDF but because of the risk of delay or failure in the repository programme.

8. We must urge the government to consider the likelihood that improved interim storage will be required far into the future, if not indefinitely.

9. We believe that better interim storage is an urgent priority, as is a ***national*** geological search for ***suitable*** geology for a GDF.

10. Unsubstantiated claims that **engineered solutions** can be put in place to overcome the unsuitability of geology need to be treated with a great deal of scepticism.

11. *We would wish to know what percentage of respondents to the 'Call for Evidence' exercise specifically requested national geological pre-screening as a prerequisite to moving forward before a call for volunteer communities is made.*

12. The 'informed consent' to proceed with a GDF – or otherwise – must be obtained from as large an area as is practicable.

13. The necessary pre-conditions for proceeding with a GDF will include local, area-wide and county-wide **referenda**

14. County-wide organisations and NGOs should have access to central- government funding in order to be able to seek ***appropriate independent and impartial*** advice.

15. **We strongly disagree** with the proposed changes allowing District Councils to act as the Representative Authority.

16. **We also fundamentally disagree** with the suggestion that the Leader of the Representative Authority should chair the Steering Group.

17. We maintain that the body most competent to act as the representative authority is the county council.

18. We would wish to know what percentage of those responding to the 'Call for Evidence' suggested the downgrading of the role of a county council to a purely consultative one.

19. Any further siting process must include a clear and unambiguous definition of a 'Host Community'.

20. To be credible, any **regulator** must be fully independent, appropriately qualified and able to provide communities with clear information on compliance with safety, security and environmental standards and on other relevant aspects.

21. It must be reiterated that the long-term safety of a GDF depends almost entirely on the geology of the area in which it is placed.

22. The 'representative authority' role should not be delegated to a district council; **a county council must have a participative role rather than merely a consultative one.**

23. **To ensure that there is no real, or *perceived,* conflict of interest,** it must be deemed unacceptable for the final decision about a GDF application to be made by the Secretary of State for ENERGY.

24. We would advocate an agreed period of retrievability to be incorporated into the design of any geological disposal facility.

25. The proposal suggesting that funds would be disbursed only during the construction and early years of operation of a GDF should be extended to cover its entire lifespan.

26. It would be disingenuous to suggest, or even imply, to a community (however large) that its economic future and well-being depended on an agreement to host a GDF. It would also be morally reprehensible to attempt to bribe a community with community benefits.

27. Essentially**, community benefits should be disbursed in perpetuity** to any community hosting the nuclear waste.

28. As for environmental concerns, it would appear to be illogical and entirely counter-productive to attempt to locate a GDF in, under, or where it could adversely affect, any nationally or internationally protected areas (NPs, AONBs, WHSs, SACs, Ramsar Sites, SPAs).

29. There should be a clear separation between environmental and economic issues.

30. We strongly recommend that **a probabilistic risk assessment (PRA**), similar to that carried out by the Government of Ireland, should examine the threat posed to the people of Cumbria and the remainder of North-West England by the current nuclear waste storage methods employed at Sellafield.

CUMBRIA TRUST
A Voice For Cumbria

Response to DECC's Consultation: REVIEW OF THE SITING PROCESS FOR A GEOLOGICAL DISPOSAL FACILITY

Question 1
Do you agree that a test of public support should be taken before the representative authority loses the Right of Withdrawal?

As the CoRWM has already asserted, the general public and specific stakeholders must have complete confidence in the process, and this can be achieved only through a high level of engagement and complete openness and transparency. This was simply not achieved by the MRWS process despite the considerable resources thrown at it. In Sweden, it has taken 20 years to determine the final location of its GDF:

> *"Sweden's nuclear fuel and waste management company decided on 3 June 2009 to build its final repository for spent nuclear fuel at Forsmark." (ENS News, Summer 2009).*

This extended process entailed an involved and patient dialogue with a number of Swedish communities. It is self-evident that there must be a high level of public support for a GDF, and such public support must be tested for continuity at various stages of the process. Attitudes, opinions and choices are affected not only by current conditions and developments; historical events and decisions also directly or indirectly influence people's thoughts and actions.

In this regard, it is a fact that the MRWS process in Cumbria did little to engender trust and confidence among many people.

It must be recognised, from the outset, that disposal of nuclear waste or spent nuclear fuel is not 'merely' a technical or scientific issue; it is also a societal issue with important economic, social, legal and cultural aspects and implications.

Not only must there be clear, **independent** and unambiguous evidence of public support; there must also be enshrined in law the legitimate and democratic **Right of Withdrawal** by potential host communities, including parish councils, district councils and the county council (or unitary authority).

Further, any, or all, of these bodies must be able to demonstrate that it has/ they have an unimpeachable and irreproachable mandate to proceed towards a GDF. These necessary pre-conditions will require local, area-wide and county-wide **referenda** to be undertaken before:

- any authority may express an interest in going forward
- site-specific discussions take place
- the Right of Withdrawal is removed.

It must, therefore, follow that genuine and explicit public support must be informed by ***relevant facts and evidence***. Clearly, this will necessitate the free and unimpeded dissemination of unbiased and unexpurgated information and a much greater emphasis on the integrity of public consultations than was hitherto the case.

However, ironically perhaps, the concept of a 'community' and/or 'defined area' needs, in fact, to be much more clearly defined and agreed.

So, too, do the criteria for the dissemination, without the risk of 'claw-back', of the 'community benefit' and its recipients.

There is considerable evidence that, in other countries (particularly Sweden, France and Finland), engagement with communities was much more proactive and purposeful than has ever been the case in the UK.
It must be accepted that there was an overwhelming lack of credible public support for the MRWS exercise in West Cumbria – and no clear and unmistakable democratic consent to proceed further. It is our belief that the argument put forward by the local MP and the leaders of Copeland and Allerdale about there being a democratic mandate to proceed was completely unfounded.

We also note that Allerdale's vote to proceed to Stage 4 was conditional on Cumbria County Council's continuing support; this did not exist then, and, now, CCC is to be excluded by DECC altogether.

Furthermore, the statement at 1.51 in the consultation paper about "*two local authorities ... voting in favour of continuing the search"* ... and *" recognising the wider benefits" ...* is disingenuous.

Given the relevant facts and statistics, there is no foundation for such a conclusion.

It is deeply worrying that DECC can find such apparent comfort in the ill-advised decisions of these two authorities and use them to draw incorrect conclusions setting the tone for a national debate of such importance.

The determination, construction and operation of a GDF will have considerable scientific, economic, financial, societal and legal implications for a community much wider than that of a district council.

The 'informed consent' – or otherwise – must, therefore, be obtained from as large an area as is practicable.

The suggestion that public support should, and could, be demonstrated only within a relatively small area such as a district council is both irrational and statistically flawed.

Excluding parish or, indeed, county councils from gauging public support would be patently absurd (see Q5). Moreover, any measure of public support would be deemed to be unrepresentative if such a measurement did not account for the opinions of the wider population and the deliberations of the local and regional NGOs as well as many other community-based organisations within a county or unitary authority.

These county-wide organisations and NGOs should thus have access to central-government funding in order to be able to seek appropriate independent and impartial advice.

Question 2
Do you agree with the proposed amendments to decision-making within the MRWS siting process? If not how would you modify the proposed phased approach or alternatively, what different approach would you propose?

We fundamentally disagree with the proposed amendments to decision making within the MRWS-siting process.

We have serious concerns about the motives of DECC in designating district councils as the 'representative authority'. We contend that this change is nothing more than a deeply cynical attempt by the Department to remove obstacles to their predetermined plans to site a repository in Cumbria.

DECC has acknowledged a lack of trust in both itself and the RWMD in the current siting process. However, the proposed new arrangements outlined in the consultation paper make no provision for resolving conflicts of interests, obtaining genuinely independent advice or ensuring impartial oversight of any of the processes involved.

All that this latest consultation document has achieved in Cumbria is a further deepening of the mistrust, on the part of the county's community, of DECC, the NDA and the two Cumbrian District Councils which might register an interest in the process irrespective of the overwhelming opposition by their communities.

Nothing less than a complete revision of the proposed decision-making arrangements will bring any fairness or justice to this process.

Rationale
The Representative Authority

We strongly disagree with the proposed changes allowing District Councils to act as the Representative Authority.

We also fundamentally disagree with the suggestion that the Leader of the Representative Authority should chair the Steering Group.

Such a group, if there is to be one, should be led by an entirely independent, even quasi-judicial, person.

DECC invokes the importance of the principle of subsidiarity in guaranteeing a degree of independence of the lower authority in relation to a higher body. It also quotes the Localism Act, which states how power should be exercised at the lowest possible level, i.e. close to the people.

We agree with these principles and with the proposal that they should be applied in determining the Representative Authority. In fact, de Tocqueville wrote: *"Decentralization has not only an administrative value but also a civic dimension, since it increases the*

opportunities for citizens to take interest in public affairs." To the extent that it promotes involvement at the grassroot level, subsidiarity is to be applauded.

However, there is a glaring anomaly which anyone versed in the structure of local government in England would recognise, namely that a unitary authority (as described in 2.29) is equated with a district or borough council, yet a traditional county council is excluded from being a 'Representative Authority'. **This is wholly illogical.**

For example, Cornwall Council is a huge unitary authority which, when formed, stretched from Saltash to Land's End, a distance of 82 miles, and which embraced six district or borough councils. Likewise, Shropshire Council has embraced five district councils. There are many other examples: Cheshire East and Cheshire West, Northumberland, County Durham, Wiltshire – all of which were created in 2009 as unitary authorities.

It is patent nonsense, therefore, to equate a small district council (such as Copeland or Allerdale) with these huge unitary authorities and conclude that they can both be the legitimate representative authority while simultaneously sidelining the county councils and giving them a consultative role only. In size, expertise and resources, many unitary authorities and district councils are like chalk and cheese.
Similarly, it is quite wrong to assert (in 2.29) that parish councillors are not elected. The vast majority **are** elected – even if some of the members stand and are returned unopposed. A small minority are occasionally co-opted.

It is, therefore, difficult not to arrive at the conclusion that, in its latest consultation, DECC is clumsily redefining the concept of 'representative authority' in order to exclude Cumbria County Council specifically. Such motives must be questioned and cannot go unchallenged. While DECC invokes the principle of subsidiarity, in reality it does nothing more than pay lip service to it in a proposal which is a thinly disguised exercise in central control. The White Paper states:

> ***"In the event that at some point in the future, voluntarism in partnership does not look likely to work government reserves the right to explore other approaches"***

Localism, subsidiarity and, indeed, voluntarism become meaningless when DECC effectively reserves the right to impose a GDF on an unwilling community.

The re-opening of this consultation in Cumbria simply flies in the face of all of these principles. **Voluntarism should mean that a community can say 'No'.**

Parish Councils

The lowest tier of government, that closest to the people, is the parish council. DECC seeks to sideline this whole tier on the grounds that not all parish councillors are democratically elected and that parish councils do not have full-time staff or sufficient resources to manage a process, or project, on the scale of the GDF. Neither does a district council.

The intimation that parish councils are undemocratic is a view we refute most strongly. We accept that, in some parish councils, a minority of parish councillors are co-opted. However, communities do review the performance of their parish councillors and can, and do, remove underperforming or unrepresentative councillors. We do not agree that a lack of full-time staff and resources necessarily leads to incompetence.

We have already seen from the failed MRWS consultation that the overwhelming majority of parish councils in Cumbria are opposed to a GDF. We have also witnessed Allerdale and Copeland District Councils ignoring this demonstration of public opposition. Under the

proposed revised decision-making arrangements, District Councils in West Cumbria can – and, we believe, will – continue to ignore this proper and democratic statement of community opposition.

District Councils

We accept that district councils have full-time staff and more resources than parish councils, but they are significantly fewer than those of a county council.

We also acknowledge that district councillors are elected by the community. We do not, however, accept that this guarantees that district councils will act in a democratic manner in representing, or even taking into account the views of, their communities in their decision making.

In the failed MRWS consultation, for example, Allerdale Council voted to proceed to Stage Four, yet only the council executive (i.e. seven members of the 56-strong council) were allowed to vote. Clearly, anyone in the Allerdale community not represented by an executive member was unable to influence the result and was thus effectively disenfranchised. The executive responsibility of a council's cabinet was enshrined in the Local Government Act of 2000, and, until an amendment is made to this Act, this anomaly will blight the GDF decision-making process.

County Councils

We maintain that the body most competent to act as the representative authority is the county council. In discharging over 820 local-government functions, many of which are of the scale comparable to that of managing a GDF, a county council is clearly better placed than a district council to act as a Representative Body.

We maintain that the impact on the whole of Cumbria of the construction and operation of a GDF, including the inherent risks, would be significant. It follows, therefore, that the County Council as the democratically elected body for the whole of Cumbria must be the Representative Body. This principle applies to any county in the country. We note the inconsistency in the proposals which allow Welsh county councils to act as representative bodies, whilst English county councils are relegated to observers.

Lack of trust

In potentially returning to Cumbria with this revised process, DECC continues to demonstrate its willingness to ignore any evidence that does not support the case for a GDF in Cumbria.

We have read an internal Nirex report from October 2004, which came to light during the failed MRWS process; the report advised that opinion leaders should be recruited and "groomed". It further recommended that organisations such as BGS and the Geological Society of London should be "used" to promote the case for a repository and that MPs supporting Nirex policy should be "recruited" and those against it should be "isolated." It hasn't escaped our attention that some of the people who were involved with Nirex are still involved with the MRWS process today.

DECC proposes that the representative authority chair the steering group, appoint members of the Consultative Partnership and be responsible for looking after the interests of its community. Effectively, then, the Representative Authority would be the investigator, decision maker and arbitrator of all things GDF. This cannot be democratic.

Any committees, bodies or organisations which are likely to oppose a GDF have only advisory powers. They can, and will, be ignored.

We would wish to know, therefore, what percentage of those responding to the 'Call for Evidence' suggested the downgrading of the role of a county council to a purely consultative one.

Question 3
Do you agree with this approach to revising roles in the siting process set out in the White Paper? If not, what alternative approach would you propose and why?

No – the amended approach to the roles within the siting process is not acceptable.

The proposals will allow a body – most likely a Borough or District Council – to express an interest. This body would then be responsible for steering the project and, as Representative Authority (RA), for deciding upon a right of withdrawal.

Advocate, facilitator and arbiter: no one body should be vested with all of these powers, since this would lead to the perception of partiality even if no abuse of power actually occurred.

In addition, the document argues that the RA must be democratically elected. In many cases, Borough or District Councils are required by the Local Government Act of 2000 to delegate this type of matter to a "cabinet" of members rather than debating the issue in full council. Yet, cabinet members are not elected to the cabinet and could be chosen from a cabal of like-minded individuals by a council leader. This is clearly much less democratic than allowing parish councils, with the occasional co-opted member, to make the decision on behalf of a community. The revised approach could thus be seen as espousing double standards.

Another example of double standards is evident in paragraph 2.75. Although the government does not accept that a county council is an appropriate candidate for Representative Authority in England, it agrees that, in Wales, it would be.

In paragraph 1.41, the consultation document acknowledges that the White Paper clearly separates the Decision Making Body from the Host Community**.**

Any further siting process must, therefore, include a clear and unambiguous definition of a Host Community.

A GDF project will call on a wide range of different services, including those involved with ensuring safety and disposing waste, will utilise many highways and minerals and will involve much planning. To reduce the county council purely to a consultative role creates the impression that DECC is intent on removing potential obstacles to their desired conclusion rather than engaging in a democratic process truly based on voluntarism.

It would seem that DECC believes that the feasibility of the construction of a GDF must be examined for each area in isolation. However, it is erroneous to assume that a GDF in one particular area would not affect any of the surrounding communities. The impact on the transport and service infrastructure alone would require a broad overview that is possible

only on a county-wide basis. No single borough or district council has authority to act on the issues affecting the authorities surrounding it.

Equally, to reduce the body that is closest to the community – the parish or town council – to a consultative role without any say in the decision-making process reinforces the view that the process has been designed to provide the outcome the government desires.

Throughout this document, but especially with regard to the role of local bodies, ***there is too much emphasis on consultation on, but not enough on participation in, the decision-making process.***

For the purposes of the siting process, the Radioactive Waste Management Directorate (RWMD) would be the implementing organisation or developer. This would, however, create a conflict with RWMD's leading role in community engagement. Since RWMD would be advocating acceptance, it would not be independent and could not be perceived as unbiased, regardless of its intended role. This would, again, create an impression that lip service was being paid to the principles of voluntarism and transparent decision making by the community. While RWMD would have a role in providing accurate and factual information, any public engagement would have to be balanced and independent.
The consultation document is also contradictory with regard to regulators. In paragraph 1.41, it quotes the White Paper (2008) definition of Independent Regulators as those who "ensure robust, independent regulation in relation to statutory responsibilities for ensuring that national, EU and international legislation and standards are met". In paragraph 2.80, it proposes that external regulators should *"play a more prominent role, engaging with communities"*.

However, the document then proceeds to state that they may operate only *"in a way that does not undermine their independence".* Paragraph 2.81 stipulates that it is *"not for regulators to make judgements on suitability"* of an area. This could be seen to mean that the regulators can say what they like as long as they toe the DECC line.

To be credible, any regulator must be fully independent, appropriately qualified and able to provide communities with clear information on compliance with safety, security and environmental standards and on other relevant aspects. This information should be free from bias regardless of its possible impact upon a siting project. If this is not the case, any trust in the government's commitment to community safety will be eroded.

With regard to the Geological Disposal Implementation Board (GDIB) and External Stakeholder Group, the document has provided some suggestions but no firm guidance. It is, therefore, difficult to draw informed conclusions other than it would appear that DECC sees NGOs, *which should receive from the government some measure of financial support during the process,* as useful for consultation but is unwilling to give them any real authority or powers. We must thus reiterate that, for all the bodies involved, there needs to be less consultation on, but more participation in, the decision-making process. Without such participation, how can the process be seen to be based on volunteerism?

Question 4

Do you agree with this proposed approach to assessing geological suitability as part of the MRWS siting process? If not, what alternative approach would you propose and why?

Selection of the suitable geology for ***geological*** disposal of nuclear waste must be the number one priority, yet DECC has, in this review, chosen to mislead, misrepresent and distort the facts in order to engineer its desired outcome. This cannot go unchallenged.

The idea that a national screening process, equivalent to Stage 4 of the abortive MRWS exercise, would not be feasible for a project of this magnitude and importance to the nation is, quite frankly, ridiculous.

The data already exists and could be analysed and compiled into a national report within a matter of months.

The cost is estimated to be in the region of one million pounds – one-twenty-thousandth (0.005%) of the likely final cost of the project.

Deliberately disregarding such a survey would reinforce the impression that the region or, quite possibly, even the site has been predetermined. The consultation process would then become merely a charade.

When the NDA were challenged about the changes made between the draft and final versions of the screening report (MRWS stage 2), which brought the Solway Plain back into play, they were unable or unwilling to explain how this happened. Similarly, no credible justification was forthcoming for the BGS illustration published in 2006 and purporting to show that, contrary to all international guidelines for a GDF, the burial of nuclear waste beneath mountains of low-permeability basement rock was a favourable geological solution. The only mountains of this rock type in England are in the Lake District.

There is at least an element of truth in the document's suggestion that '*there is no best or most suitable generic type of geology'.* However, to use this argument as justification for not carrying out a national survey is plainly illogical. While it is accepted that there are a number of generic types of geology which are potentially suitable for a GDF, that clearly cannot be taken to mean that all regions are somehow equally suitable.

The role played by the British Geological Survey (BGS) in the abortive MRWS must call into question their role in any future research. We believe that, for a project of this importance to the nation and its communities, an independent international peer review of any future BGS work would be advisable.

The following sentences are of greater concern:

3.9 'Different sites will have different potential advantages, and the engineered elements can be engineered to these. It will not be possible to say, in advance of any work being carried out, that one is 'better' than another'

This demonstrates such a fundamental lack of understanding of the importance of geology and engineering in planning a GDF that it merits a closer examination.

This implies that, with the current level of knowledge, all sites are equal. In other words, one site with an extensive flat-lying and unfaulted deep-clay volume with low-reducing groundwater flow is considered as suitable as a hard-rock site with extensive conductive faults and a fast-oxidising groundwater flow driven by mountains above.

It would take a staggeringly naïve view of engineering to believe that these problems can somehow be fixed and that the proposed solution would endure for hundreds of thousands of years. **Although the authors appear to be out of their depth, they seem to have succeeded in influencing DECC policy by putting voluntarism over national geological screening.**

The idea of a high-level visualisation of the geology of England, Scotland and Wales, while modest, appears to be a positive step, yet it falls far short of advocating a detailed survey of the country, equivalent to MRWS Stage 4. We believe that such a survey is essential and that it would be far more informative than the proposed GB3D visualisation, since it would enable regions to make an informed choice before they consider volunteering.

As has been acknowledged by the NDA, DECC would be obliged to conduct such a detailed national survey should a potential site be identified within a protected area such as a National Park, AONB, SAC or SSSI (or be in a position to impact on it). In this situation, should even a single unprotected potential site be found nationwide – and there would be hundreds of such sites – then developing a protected site would be unlawful.

It is worth noting that, during the failed MRWS process, more than 80% of the search area in West Cumbria was within at least one of these protected designations.

Even Nirex, which got so much wrong with site selection, had excluded environmentally sensitive sites at an early stage – a Nirex action, one of very few, endorsed by the Planning Inspector.

If DECC are determined to ignore the repeated and widespread advice to conduct this national survey, then it stands to reason that they must, from the very start, exclude protected areas, and those adjacent to them, from the search area. Failure to do this would result in the voluntarism model breaking down.

It remains deeply concerning that DECC appears reluctant to learn from the two previous failed attempts to impose its will on West Cumbria other than to engineer ways of removing democratic obstacles.

It must be stressed that the Nirex Inquiry inspector recommended moving the search to an area of simple geology.

We are also concerned that most of the scientific information from Nirex has now been removed from official websites in what appears to be a blatant attempt to rewrite history.

The MRWS process disintegrated when its own geologist advised that the probability of finding a suitable site in West Cumbria was low. Yet this new process appears to be tailor-made for Copeland and Allerdale, enabling them to volunteer once again.

It must be reiterated that the long-term safety of a GDF depends almost entirely on the geology of the area in which it is placed.

By continuing to downplay the importance of geology, DECC demonstrates a fundamental misunderstanding of science, a willingness to rely on untested, and untestable, engineering solutions or a blatant disregard for the safety of future generations – and possibly all three.

Question 5

Do you agree with this proposed approach to planning for the geological disposal facility?

Many will view the proposal to remove the planning responsibilities from the county council (cf. unitary authorities) as a centralist and elitist approach by a government which is purportedly espousing 'localism'. If a county council is effectively excluded, a significant

population of England will be disenfranchised and have little, or no, recourse to democratic methods through which to express their concerns. Any diminution of democracy, anywhere in the UK, is a retrograde step and thus reprehensible.

Nonetheless, whilst it can be accepted that a development of this magnitude should be overseen by a nationally significant infrastructure-planning authority (the Planning Inspectorate), with the Secretary of State being the final arbiter, the Waste and Emissions Trading Act 2003 (WET Act) requires local authorities in two-tier areas to have a joint municipal waste-management strategy and gives waste disposal authorities the power to direct waste collection authorities.

The government's current position is that authorities in two-tier areas should work together towards mutually advantageous common goals and should be strongly encouraged to produce a joint strategy for the management of their municipal waste. **Clearly, such expectations must apply also to the disposal, control and monitoring of dangerous nuclear waste.**

Whilst the Act does not cover HLW and ILW radioactive waste, it follows that, with its strategic remit, a county council (or unitary authority) must have regard to the type and the volume of nuclear waste which will be generated and to the timing of its disposal.

The construction of a GDF (and its subsequent operation) will have a huge impact on the local and wider infrastructure and services (especially highways; housing; fire, rescue and other emergency services; schools, public health, etc.) of the region for which a county council (or unitary authority) has a statutory responsibility.

To ensure efficient and cost-effective coordination of these responsibilities, it will not be sufficient for a higher-tier authority to simply present its analysis and conclusions at a public inquiry chaired by a planning inspector. Given the long lead-in time for a GDF, many environmental and infrastructure problems, many of them unpredictable, will undoubtedly arise, and the authority must be in a position to be able to react to them promptly.

It is axiomatic, therefore, that the impact of a GDF would extend far beyond the boundaries of any district council, which is **why:**

The 'representative authority' role should not be delegated to a district council; a county council must have a participative role rather than merely a consultative one.

In addition, under the Town and Country Planning (Applications) Regulations 1988, planning permission may be required for a range of activities associated with geological exploration (including drilling exploratory bore holes), such as erection, extension, installation, rearrangement, replacement, repair or other alteration. In all cases, a written confirmation of planning permission must be sought from the Minerals Planning Authority before proceeding with any development.

In a two-tier system of local government, the Minerals Planning Authority is the county council (or, where appropriate, unitary authority). How, then, is this statutory duty and responsibility to be reconciled with the decisions of the national planning inspectorate or, indeed, the Secretary of State?

So, whilst the Secretary of State may be the highest authority, it will be important to ensure, or even enshrine in a new Act of Parliament, the operational jurisdiction and statutory responsibilities of the higher-tier authority.

To ensure that there is no real, or *perceived,* conflict of interest, it must be deemed unacceptable for the final decision about a GDF application to be made by the Secretary of State for ENERGY.

It would be difficult, if not impossible, to convince local communities and the wider public that such a role would not be prejudicial and that the decision would be impartial. It should be noted that, where necessary, other planning appeals are adjudicated on by the Secretary of State for DCLG. It is thus our contention that, if the application to develop a GDF were not to remain with the Development Control Committee of a county council or unitary authority, it should fall within the remit of the Secretary of State for DCLG.

Question 6

Do you agree with this clarification of the inventory for geological disposal – and how this will be communicated with the volunteer host community? If not, what alternative approach would you propose and why?

DECC appears to be ignoring the government's Committee on Radioactive Waste Management (CoRWM) recommendations by including waste from a new-build programme in the revised Baseline Inventory.

The proposed upper limit of 16GW would significantly increase the size of the GDF required, potentially to three times the size of a GDF for legacy wastes alone.

CoRWM recognises that, with its high levels of radioactivity, this new-build waste presents political and ethical challenges and goes on to recommend a process separate from that for disposing of the existing wastes. Yet DECC has ignored this advice.

Why set up an advisory committee if you choose to ignore inconvenient conclusions?

We believe that the revised process is a blatant attempt to move the goal posts: DECC had assured us that the three-green-lights approach (district, county and government approval needed) was binding. Yet, when one of the lights turned out to be red, DECC simply decided to ignore it by proposing to change the process. **It should come as no surprise that trust was, and is likely to remain, a major issue**. Limiting the inventory to existing wastes would go some way towards rebuilding this trust.

We would also advocate that the design of any geological disposal facility should allow for an agreed period of retrievability. This would help to remedy any errors of implementation and, as technologies develop over the decades of operation, might allow certain categories of waste to be utilised. *(However, we recognise that, if spent fuel is retrievable, then it is also potentially retrievable through theft. Such material – unless effectively immobilised – could be used for terrorist activities.)*

There is a significant societal benefit from adopting such measures, and enshrining retrievability in statute would undoubtedly assist with building trust.

Question 7

Do you endorse the proposed approach to community benefits associated with a GDF. If not what alternative approach would you propose and why?

The proposed approach raises more questions than it answers, not least in relation to the size of the community benefits and the frequency of their disbursement. References to an as-yet-undefined host community can also be misleading.

As community benefits could be disbursed from the focusing phase, and a volunteer community could come forward at that stage, it follows that they could be offered to a community in an area with unsuitable geology. Needless to say, any retrieval of benefit by the government would be hugely disadvantageous to both the community and the representative authority. This would be yet another example of the drawbacks of putting volunteerism before geology rather than vice versa. In addition**, it is important that a proportion of a 'community fund' should be available to other organisations, including NGOs, to encourage independent critique and support participation**.

Community benefits should not, therefore, be considered as a single fund; far more appropriate would be a number of strands. There should be a separate fund administered not through a principal authority but through a properly constituted body, such as a parish council, and available for local projects and improvements within a relatively small area of the “host community”.

Whilst we strongly disagree with the exclusion of county councils in two-tier areas, we do support the idea of a modest fund for the local district council. We also support a much bigger fund aimed at transforming the social and transport infrastructure of the wider area administered by the county council or unitary authority and at supporting the projects determined by this authority. We would thus welcome some guidelines on acceptable uses of such a fund *(e.g. capital projects only)*. If necessary, the communities, both the host and the wider community, should be given access to cost-benefit-analysis expertise.

The proposal suggesting that funds would be disbursed only during the construction and early years of operation of a GDF should be extended to cover its entire lifespan.

The Cumbria Trust has very little confidence that community benefits will not be used to bribe economically disadvantaged authorities into “volunteering” to host a GDF in less than suitable geology.

We note that 4.16 suggests that payments would cease during the 'early years of underground operations'. This is not acceptable. The host community and surrounding area will be burdened with the GDF, and the country's nuclear waste, well into the foreseeable future and beyond. **The 'community benefits' should, therefore, be conceived as a regional equivalent of a 'Sovereign Wealth Fund' to be disbursed annually as a recompense for shouldering the burden of the country's nuclear waste**; this should be enshrined in legislation.

It would be disingenuous to suggest, or even imply, to a community (however large) that its economic future and well-being depended on an agreement to host a GDF.

Similarly, every care must be taken to ensure that community benefit is not seen simply as a bribe or an inducement to host a GDF.

It would be morally reprehensible to attempt to bribe a community with community benefits.

We believe that the Local Enterprise Board (LEP) should play an important role in developing an alternative economic plan freeing the community from reliance on hosting a GDF.

Essentially, community benefits should be disbursed in perpetuity to any community hosting the nuclear waste.

Question 8

Do you agree with the proposed approach to addressing potential socio-economic and environmental effects that might come from hosting a GDF? If not, what alternative approach would you propose and why?

The commitment to widening the scope of the Strategic Environmental Assessment (SEA) beyond the current statutory minimum is encouraging. However, there remains the issue of deep-rooted mistrust, already mentioned here. The consultation document, with its attempt to group together socio-economic and environmental impacts under a broad umbrella, clearly shows that the government's approach is questionable.

The government seems to think that environmental damage is acceptable where money is used to sweeten the pill and that a community will be more compliant if it is suffering economic hardship. **It is our contention, however, that there should be a clear separation between environmental and economic issues.**

In order not to be put under pressure to accept a GDF as a way of alleviating its economic hardship, a community should be offered unbiased and factual socio-economic information by an independent body. Equal, if not greater, importance should be attached to health, safety and transport issues, with advice on these matters being offered separately and independently. However, we consider the RWMD to be neither independent nor fit to present this information in a way allowing a community to make a fully informed decision.

As for environmental concerns, it would appear to be illogical and entirely counter-productive to attempt to locate a GDF in, under, or where it could adversely affect, any nationally or internationally protected areas (NPs, AONBs, WHSs, SACs, Ramsar Sites, SPAs).

It is our position that the National Policy Statement (NPS) must be released in advance of any launch of a siting process. **The NPS should be clear that no expression of interest would be accepted from such protected areas; that's what Nirex did in its own search.** However, it is important that the NPS should not dismiss, or minimise, the possibility of undesirable effects, such as the effects of radiation on health.

In addition, to prevent waste of time and public money, screening should take place immediately after any area has expressed an interest in hosting a GDF to ensure that no environmentally protected sites are considered. Such screening would take place in addition, and prior, to any Strategic Environmental Assessment (SEA), Environmental Impact Assessment (EIA) and Habitats Regulations Assessment (HRA).

While the consultation document discusses ways of identifying, and providing information on, the potential socio-economic and environmental effects of hosting a GDF, it provides no suggestions for addressing them. In the second paragraph, it clearly states that *"... the UK Government continues to believe that geological disposal, preceded by safe and secure*

interim storage, is the right policy". However, nowhere else in the document is the safe and secure interim storage mentioned.

It is essential that safe and secure interim storage is considered to be an integral part of any search for a GDF.

We believe that an SEA for the existing storage facility should be completed immediately and any interim storage issues which may arise out of any future siting processes identified.

We strongly recommend that a probabilistic risk assessment (PRA), similar to that carried out by the Government of Ireland, should examine the threat posed to the people of Cumbria and the remainder of North-West England by the current nuclear waste storage methods employed at Sellafield.

Question 9
Do you have any other comments?

BACKGROUND AND ANALYSIS

Cumbria Trust is not alone in believing that voluntarism to host a GDF will work only after it has been established that the area being considered is geologically suitable and safe.

Unfortunately, the absolutely safe geological disposal of long-lived nuclear waste can never be tested because of the quasi-geological timescales, stretching over many generations.

The Committee on Radioactive Waste Management (CoRWM) asserts that deep disposal of radioactive waste is the technology which is far from proven.

Peter Wilkinson – an independent Environmental Policy Advisor to a number of government departments, including the CoRWM – stated:

> ***"There is no compelling evidence anywhere that disposal of radioactive waste is safe. Nuclear Waste Advisory Associates trawled through a lot of European Union documentation, a lot of Environment Agency documentation, and came up with 101 uncertainties, technical and scientific uncertainties, which we put to the NDA which they are now going through. I don't know how many people in West Cumbria understand, but a repository is designed to leak."***

As several have, in fact, testified, it is currently not possible to demonstrate with *complete* confidence and scientific credibility that radiation doses emanating from a GDF will, in future, be of an acceptably low level.

In addition, confidence in engineered encapsulation techniques (KBS-3 in Sweden) has plummeted, since the method appears to have inherent fundamental weaknesses associated with corrosion and pitting. The Swedish safety case assumes that copper canisters 5cm thick will contain the wastes for 100,000 years, but there are now serious question marks about the assumptions that have been made about the low corrosion rate of copper (1).

It is disconcerting that it is apparently proposed to adopt KBS-3 encapsulation in the UK.

However, in view of the fact that the international scientific community asserts that geological disposal is the only foreseeable long-term solution *(International Symposium, Toronto Conference, September 2012),* geological disposal must clearly be considered – albeit with considerable caution.

International guidelines should be followed, as should international best practice.

All 'engineered solutions' will fail on geological timescales – only the best geological solutions should, therefore, be considered.

UK-specific work in this area has already been carried out; for instance, we already know that Eastern and South Eastern areas of England show greater potential than West Cumbria.

Given Scotland's complete rejection of geological storage and the autonomy and discretion afforded to both the Welsh and Northern Ireland Assemblies (as well as the decision making ceded to both countries' county councils), it seems apparent that only England is likely be considered.

This seems somewhat bizarre, if not absurd, in that, for over 60 years, the other countries of the UK have enjoyed whatever benefits the UK's nuclear industry has brought to our islands (as well as being adversely affected by its disbenefits).

Nonetheless, it must inevitably follow that a national search for the optimum location for a GDF should be undertaken *BEFORE* seeking community support for such an undertaking.

The argument that costs would prohibit such a venture is specious given the urgency of the problem and the quite extraordinary amounts expended (not least, on the Nirex study) over many years in what has proved, thus far, to be a combination of futile and fruitless endeavours.

A national search should conclude with ***an independent***, definitive and objective assessment of the national geological framework of the UK, not dissimilar from the assessment undertaken in the late 1980s by the BGS and Pieda (2), when 537 potential sites were initially identified.

Having been examined against various criteria, the initial list was then whittled down to just 12 sites. Interestingly, and somewhat inexplicably – and, indeed, irrationally, according to the Nirex planning inspector – the Sellafield area of West Cumbria, whilst not included in the original list but added later, was chosen by Nirex.

This led to the Nirex application for a Rock Characterisation Facility at the Longlands Farm site near Sellafield, which Nirex had chosen because they considered it to be the best geological site in West Cumbria.

This site was found to have been irrationally chosen (over more promising geological sites elsewhere in the country) and was rejected by the planning inspector, who highlighted 19

objections, including unsuitable geology, as grounds for rejecting the application, a decision subsequently upheld by the then Secretary of State.

The geology of West Cumbria has not changed; the objections remain as valid today as they were in March 1997.

> *"This (… Cumbria) is among the most studied and best understood geology anywhere in Britain, and there is nowhere safe for a burial site," said emeritus professor David Smythe of Glasgow University, showing slide after slide of rock fractures, aquifers and porous strata." (The Guardian, 28th November 2012)*

In 1986, a desk-top study (Chapman & McEwan) did identify several regions of the UK which might be suitable for nuclear waste. *(Cambridge to Norfolk along the A11; Newcastle to Middlesbrough; Bridlington to Kings Lynn; Harwell in Oxfordshire* – all appear to be **technically** more appropriate than West Cumbria.*)*

In 1997, the NIREX/Longlands Farm planning inspector stated:

*"… There are strong indications that there may be a choice of sites in different parts of the Earth's crust **in the UK** with **greater potential** to meet legal and regulatory requirements..."*

These findings, as well as the failure to meet international guidelines for a geological disposal facility, should immediately rule out both Allerdale and Copeland areas as potential hosts for a GDF.

However, whilst it is recognised that the search for an optimum location for a GDF must be a national priority, it is of considerable concern that the more immediate imperative of safe and secure storage and decommissioning, both at Sellafield and elsewhere, is lamentably behind schedule and way over budget – facts not lost on the Public Accounts Committee:

- *"To date, the performance of some of the major projects at Sellafield has been poor." and*
- *"It is unclear how long it will take to deal with hazardous radioactive waste at Sellafield or how much it will cost the taxpayer. Of the 14 current major projects, 12 were behind schedule in the last year and five of those were over budget*." *(3)*

The Chairman of the National Audit Committee is more forthright:

- *"Hazardous radioactive waste is housed in buildings which pose "intolerable risks to people and the environment"." (4)*

Amyas Morse, head of the National Audit Office, said:

- *"Owing to historic neglect, the authority faces a considerable challenge in taking forward decommissioning at Sellafield." (Daily Telegraph, 7th November 2012.)*

These deeply worrying opinions and assertions – from credible and respected sources – are not lost on the populations of Cumbria, the NW of England, Ireland and indeed NW Europe, all of whom need reassurances and credible forward-looking plans for safe storage now. There has been a long history of neglect of the issue of nuclear waste in the UK, along with the poor handling of the matter by successive governments and the responsible agencies since concentrating on the problem.

It could be argued that this has created a legitimacy and credibility deficit too big to be effectively tackled by any future policy or law. And that could be a major handicap in moving forward.

The CoRWM makes it quite clear that there needs to be a much greater focus on the safe and secure management of wastes in robust interim stores – not just for the anticipated period of the construction of a GDF but because of the risk of delay or failure in the repository programme.

The Cumbria Trust completely endorses the CoRWM's assertion.

> *"The (CoRWM) committee says such stores could take several decades to develop. This may happen because technical problems arise in their construction, or simply because public agreement on the best locations is impossible to achieve.* ***CoRWM says this means a robust interim storage strategy is absolutely essential.*** *These "temporary" storage facilities must be safe and secure, particularly against terrorist attacks; and they* ***should be built with the prospect of being used for many decades."*** (BBC news channel, April 2006).

Others, such as **Cumbria County Council** – especially during the MRWS process – have also argued, persistently and consistently, for much greater focus on safe and secure surface and near-surface storage.

> ***"The surface storage of nuclear waste at Sellafield needs considerable enhancement and investment. Such commitment would bring far more jobs in the foreseeable future than either Stage 4 or even Stage 5. We plead for such commitment but have received no assurance from DECC that it will happen." (Letter to the SoS, 7th Feb. 2013 from the Leaders of CCC)***

Yet, there appears to be nothing but scientific and technical silence from DECC and the NDA, which has severely eroded confidence and trust in the increasingly sceptical public. Indeed, it has been suggested by some cynics that, rather than genuinely seeking to address scientific and technical concerns, the nuclear industry has been actively engaged in a national public relations exercise focused on the claim that no major issues remain to be resolved. (*See Daly Telegraph, Business Section of 24th October 2013.)* This, however, does not appear to be unique to the UK. One example of such subterfuge is a web-based communication system funded by the Japan Nuclear Safety Organisation to seek 'social consensus' on high-level waste disposal. (5). After Fukushima, such publicity may be less credible.

DECC, the NDA and their labyrinthine multiplicity of nuclear offshoots have had many years, and almost limitless resources, to put in place a safe and secure interim radioactive-waste-storage facility. Only latterly has this problem begun to be addressed with the urgency it clearly deserves.

Conversely, the Swedish model of interim sub-surface storage at Oskarshamn has considerably more environmental and safety traction with both the general public and the international community than anything which the NDA or DECC has thus far delivered.

We must urge the government to consider the likelihood that improved interim storage will be required far into the future, if not indefinitely.

Given that an agreement has been reached with EDF and its Chinese partner for the construction of two new nuclear power plants at Hinkley Point, with eight more reactors planned, it is self-evident that the nation will be producing significant volumes of new nuclear waste and that there is an even greater imperative for a credible strategy (short, medium and long term) to deal with such waste, as well as with our legacy waste. **It appears that there is no such strategy.**

In West Cumbria, we already have much of the nation's legacy waste, which is the result of 60 years of national nuclear power and defence activities.

Given the concerns over current storage of such waste, as well as new nuclear waste, it is in the national interest that we squander no more time in basing our entire national nuclear-waste strategy around seeking a geological disposal solution in entirely unsuitable geology. This point was made by the Nirex planning Inspector in 1996 and restated by him in BBC's *Inside Out* programme in October 2012.

We believe that better interim storage is an urgent priority, as is a national geological search for suitable geology for a GDF.

DECC acknowledges that many of the respondents to its Call for Evidence on the failed MRWS process made this point, but the Department's failure to provide satisfactory reasons for not changing its approach seems to suggest that it has learnt nothing.

By persisting with the failed strategy, DECC is, in our view, acting irrationally.

Indeed, we believe that the thinking behind the MRWS and the 2008 White Paper (which places voluntarism first, that is ahead of geological suitability) is flawed, and the sooner it is recognised that such a strategy is not in the national interest the better. We note that Germany has, this year, introduced legislation to this effect.

This is especially important in a country as small and geologically complex as the UK, where (i) most of geology is not suitable (unlike, say, Canada's or Scandinavia's), (ii) the areas traditionally associated with nuclear sites (and, therefore, more likely to volunteer) have inappropriate geology and (iii) the areas with suitable geology do not currently host nuclear facilities (although, arguably, the whole country has benefitted from nuclear power and deterrence).

No responsible community is likely to volunteer for a geological disposal facility unless they know their geology is suitable. If they do, then any such search is likely to fail when it is realised that the geology is unsuitable. Unsubstantiated claims that engineered solutions can be put in place to overcome the unsuitability of geology need to be treated with a great deal of scepticism.

We re-iterate that, pending such a long-term geological solution, or the advent of new technology, significant investment in interim storage is essential.

We understand that the views and opinions of the learned members of the CoRWM are based on international scientific research, and it is right, therefore, that the Committee should undertake the task of assiduously scrutinising the Government's delivery of nuclear-waste-disposal policies so long as the process remains open to the possibility that other solutions may also need to be considered to ***take account of specific local circumstances and public opinion,*** the importance of which simply cannot be overstated.

We would wish to know what percentage of respondents to the 'Call for Evidence' exercise specifically requested national geological pre-screening as a prerequisite to moving forward before a call for volunteer communities is made.

Members of the Cumbria Trust would be pleased to discuss this response further with members of the government, DECC, NGOs or, indeed, local/area communities.

Signed:

The Cumbria Trust Board of Directors:
October 2013.

E.T.Martin (Chairman)

John Wilson

Geoff Betsworth

Fiona Goldie

Roger Parker

Colin Wales

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