## Lists of contextual points raised in response to the Partnership's formal consultation

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The lists below have been compiled from all consultation responses to the West Cumbria MRWS Partnership's formal consultation. They cover areas mentioned by respondents but not specifically asked about during the consultation. The lists are not intended to be exhaustive but to list the main points raised by respondents in each case.

## **Comments about specific organisations**

#### CoRWM

- Peer review by independent experts and other expert organisations such as CoRWM gives confidence.
- CoRWM described as a 'nuclear-industry-orientated quango'.
- Original support for the CoRWM recommendations and, more generally, trust, has been eroded due to the way in which the Government has taken them forward.
- CoRWM's recommendations were contingent on there being much more research into the uncertainties associated with deep geological disposal as well as robust interim storage before proceeding to a site selection process.
- CoRWM said that a new nuclear programme raises different political and ethical issues when compared with the consideration of legacy waste.

#### **DECC/the Government**

- DECC doesn't seem to have allowed itself an opinion on the scale of the excavation work entailed.
- The statement from DECC about the Community Benefit Principles being 'a basis for negotiation' is not encouraging.
- DECC/NDA right to point out that design will be site specific.

- DECC do not give any assurance about the inventory, only presumption/DECC not clear enough about what would be included and whether it might be added to over time.
- No assurance from DECC that the current assumption on overseas waste wouldn't change.
- DECC's framework for desk-based identification/assessment provides a good basis for moving forward.
- Negotiations between the Government and industry regarding waste and spent fuel disposal from new reactors are taking place now. This issue has significant implications for operation and design of a GDF, the amount of spoil created, and inventory.
- The Government should make it clear that if for any reason the present process fails, a full review of all the options will be undertaken.
- The Government should look at the geology of the whole of the UK and decide which area is best suited to underground storage before asking for volunteers/the Government's approach to voluntarism is wrong.
- Would the government believe it was feasible if it was an area close to them?
- The Government never stated what type of geology or hydro-geological regime they are looking for so the West Cumbrian community at a disadvantage in 'trying to counter a moving argument'.
- Concern that the traditional British Government attitude of 'stuffing unpleasant things well away from the home counties in remote areas, regardless of the effect on the communities there' will prevail.
- Concern the Government will put a GDF in West Cumbria regardless of arguments against it/will override local opinion 'in the national interest'/it will have spent so much money on this that it will want to ensure it goes ahead.
- Concern the Government is railroading this through by taking advantage of an area in need of economic regeneration/is trying to buy the people of Cumbria.
- West Cumbria has had little help from the Government previously/has been used as a 'dumping zone' or 'nuclear experiment'.
- Concern the Government is 'so desperate to resolve the issue of nuclear waste' that it will ignore expert advice and act in haste.
- The Government has ignored the International Atomic Energy Agency's recommendation that before any community is asked to have a nuclear repository the whole country should be surveyed and communities in the most suitable areas geologically asked if they will host a repository.
- The UK Government, not individual communities, should take responsibility for decisions about a GDF.
- Concern about the Government desiring accelerated timescales, for example the impact this could have on safety, security and environment.

- Concern the Government will take planning away from the remit of local government or use new planning laws to force a repository upon a community.
- Why can't the Government confirm how a GDF would be dealt with in terms of planning?
- Concern over impact of Government cutbacks, for example on regulator capacity, NDA capacity, on whole GDF programme.
- Concern the current Government will not deliver community benefits or will not stick to any agreements made about community benefits.
- Concern a future Government would not stick or would not be able to stick to any agreements made about community benefits with this Government.
- The Government response to the community benefits principles is weak/cautious/not strong enough.
- Previous experiences of Government performance on support/money/benefits does not provide confidence in the delivery of community benefits.
- Need early Government commitment on the mechanism and specifics of community benefits.
- The Government should recognise the need for early and clear engagement on community benefits.
- Lack of trust in the Government.
- The Government is short-termist/cannot speak for future governments.
- The Government would see a GDF as an opportunity to make money by importing waste from abroad.
- Concern that this Government or a future Government would change the inventory without local agreement or consent, particularly in relation to overseas waste.
- The Government's assumption is that new build waste would be disposed of in a GDF, and this should be clearer.
- The Government has ignored some of CoRWM's recommendations or taken them out of context (e.g. new build waste as ethically distinct, continuation of research into other disposal methodologies).
- Wording from the Government department is 'vague, leaves endless room for interpretation and extension of the purpose'.
- DECC's response to inventory principle 6 is weak and provides no commitment.
- Lack of trust that the Government would allow a right of withdrawal to happen, especially further along the process.
- Assurances from the Government about the right to withdraw up until building begins are reassuring.
- Concern that Government policies can or will change.

- Concern the Government will increase pressure to accept a GDF if/as the process continues.
- Concern that Government has no Plan B.
- The [consultation] document is a manipulation by Government and NDA to enable them to have a repository in West Cumbria adjacent to Sellafield.
- The Government is wasting/using taxpayers' money and a project 'too big to fail'.
- The Government needs to educate the population on how to use less energy, and promote renewables, self-sufficiency and efficiency.
- House prices must be protected by the Government if a GDF is located in West Cumbria.
- The Government should put in place 'a properly funded parallel research program (to go alongside any proposed GDF facility) that when implemented would over time lead to the accelerated transmutation of waste and eliminate harmful nuclear waste altogether' and 'make efforts be made to introduce Thorium based technology to generate nuclear power without the bi-product of weaponisable fissile material and harmful Transuranic Wastes'.
- The Government should 'set up four mini research repositories one in Wales, one in Scotland, one in the south of England and one in the north (which could be in Cumbria.) One should be in salt, one in clay, one in sedimentary rock and one in a hard rock such as granite'.
- The Government should rethink geological disposal as the best way forward.
- A decision on long-term storage of radioactive waste should only be taken 'after careful well researched advice of competent experts reporting to a senior select committee of the House of Commons'.
- 'If the proposal goes ahead then Allerdale, Copeland and Cumbria Councils and UK central government will have acted in a negligent manner and will face legal proceedings.'
- 'The current selection process is a sham intended to maintain an illusion that the government can find a reasonable means of disposing of waste from new nuclear power stations until the irrational decision to build them has passed. The government already knows from many years of study and hundreds of millions of pounds of expenditure that there is no suitable site in West Cumbria and that no other part of the country will accept a repository.'
- Concern that the Government is motivated by 'diverting more public money to their business friends' and 'extending the nuclear industry – especially in West Cumbria – even if a wiser policy would be not to do so'.
- The Government should educate the rest of the UK about the need for a repository for existing and future wastes.

#### The DMBs/three Councils

#### Allerdale

- Uncomfortable that only a few councillors (i.e. ruling cabinet of Allerdale) will make the decision.
- Unhappy about the 'close partnership' between Allerdale and the nuclear industry.
- Decision by Allerdale to volunteer is more political than geological.
- The initial interest expressed by Allerdale was without any meaningful consultation with the public and was therefore not acceptable/has failed its constituents.
- Allerdale and Copeland should take part in the search/should not take part in the search.
- Allerdale Council is predisposed/wants a repository.
- The project is too big for Allerdale or Copeland alone to consider.

#### Copeland

- Unhappy about the 'close partnership' between Copeland and the nuclear industry.
- Decision by Copeland to volunteer is more political than geological.
- Copeland Council is determined to find a site 'regardless of suitability'.
- Copeland Council 'should be ashamed of "offering us up".
- Copeland Council 'were reported as saying that they were hoping for a 300 year package [of benefits]! Details?'
- Copeland Council are not representing their electoral role.
- The initial interest expressed by Copeland was without any meaningful consultation with the public and was therefore not acceptable/has failed its constituents.
- Allerdale and Copeland should take part in the search/should not take part in the search.
- Copeland Council is predisposed/wants a repository.
- Copeland councillors do not see this is 'a sham and a complete waste of time and taxpayers' money'.
- The project is too big for Allerdale or Copeland alone to consider.

#### Cumbria

• Cumbria County Council's view is already that the risk is too great for geological of intermediate level waste (reference to Nirex Public Inquiry and Appeal).

- Cumbria County Council has ignored previous lessons learned (reference to Nirex Inquiry).
- Cumbria County Council is predisposed/wants a repository.
- Cumbria 'and its weak politicians' have had their arms twisted by the Government and NDA.

#### All three DMBs/'The councils'/'Local councils'

- The decision to express an interest by all three DMBs did not include the discussions and meetings required by the White Paper.
- 'All three Councils were represented at a 'Nuclear Influencing Strategy Workshop' held in Kendal on January 15th 2008, where the minutes show they agreed hosting a nuclear dump would be a 'trump card' in making the case for new reactors in West Cumbria.'
- The planning role of the DMB councils should be clarified.
- There is a potential conflict of interest between the councils' role as DMB and as a planning authority.
- DMBs should have a veto on inventory.
- Lack of confidence in the impartiality of the DMBs.
- The DMBs favour new nuclear reactors; in addition they 'all have supported the notion that there already is 'a willing community' for hosting a GDF and that this represents a 'trump card' in attracting new nuclear reactors to West Cumbria'.
- The Partnership has been dominated by the DMBs.
- There are factions within the DMBs which are not democratic.
- DMBs are not accountable to local residents/do not represent potential host communities.
- The fact that the DMBs are represented on the Partnership and will also make the final decision about participation leads to a lack of genuinely independent role/conflict of interest.
- The Partnership has been dominated/influenced by the DMBs.
- DMBs may act against the wishes of the communities/have already shown they are willing to do this.
- The decisions are being made by three DMBs with different structures/by a small number of people.
- DMBs are 'too local' e.g. a much wider area could potentially be affected by a repository.
- Lack of confidence in the DMBs to resist the development of a GDF.

- The DMBS should ask the Government to rethink its approach, e.g. commit to more practical research before going any further.
- The councils should proceed/should not proceed.
- 'If the proposal goes ahead then Allerdale, Copeland and Cumbria Councils and UK central government will have acted in a negligent manner and will face legal proceedings.'
- The councils want a repository for economic reasons/are greedy.
- The planning system must be independent from any 'separate council bribed department'.
- The planning authority would be one of the councils involved in the present consultation this is not right.
- The local councils won't take planning decisions; the decisions will be made in Westminster.
- Suspicions over the councils' motives.
- The local council should have an increased influence over what waste is imported into West Cumbria.
- The councils should work together for the greater good of Cumbria and avoid a Copeland/Allerdale divide.
- The councils do not represent all people in the area (i.e. not 100% of voters)/are not democratically representative.
- Councils should not take part in this without public mandate, which is not forthcoming.
- Suspicion that money is being offered to get a positive response from the councils / the councils are predisposed due to potential financial gain/benefits.
- The councils are predisposed to a repository due to nuclear industry ties/commitment.
- The councils are predisposed to a repository due to local councillors' prior beliefs about the supposed benefits of a repository/individual predispositions.
- The councils are 'bulldozing' proposals/want a repository/are biased.
- Lack of confidence in the impartiality of the local councils/their ability to act on behalf of local people/ability to make a decision without sufficient technical knowledge.
- Community benefits should not become 'a bail out option for the ineptitude of the local council'.
- The local councils did not engage local people in the initial decision.
- Changes of local council may have implications for the process e.g. community support/lack of support needs to be clearly defined.
- The councils should not take the final decision as they lack expertise it should be a referendum.

- The process started by the councils is faulty/undemocratic/not transparent.
- Can local councils afford to enter the search with austerity cuts?
- The councils should 'not be tempted to sell off the long term security of this area in return for short term gains'.
- Safety, not jobs, should be the first priority for the councils.
- Lack of confidence in any council running the budget for a benefits package/reference to past experience.
- The councils should pursue a legally binding benefits package.
- Lack of confidence generally in local councils due to the way in which they are currently handing austerity cuts.
- The councils are doing their best and giving people as much information as they can.

#### The NDA

- The NDA has assumed that they can construct what they want where they want it.
- The NDA has not always been helpful, for example in relation to the request to review
  practice overseas for involving environmental groups in similar projects 'not only did the
  NDA produce a flawed review by neglecting the case of Canada where a very rigorous
  procedure operates, but it ignored its own knowledge base that had previously
  explored this very case as part of its work for the White Paper. The Partnership drew
  the conclusion that little was to be learned about how NGOs might be involved, on the
  basis of what can only be construed as a deliberately biased account provided by the
  NDA'.
- 'The NDA needs to be far more open and transparent about how research on these
  outstanding issues is being carried out and it needs to acknowledge that simply
  agreeing to carry out the research does not necessarily mean it will get the answer it
  wants.'
- The NDA had a clear interest in promoting the process and the Partnership should have thought more carefully about the work it allocated to the NDA.
- The [consultation] document is a manipulation by Government and NDA to enable them to have a repository in West Cumbria adjacent to Sellafield.
- From the NDA's point of view West Cumbria is surely a long-odds gamble.
- The NDA presentation of the DSSC on its website is impressive.
- The NDA has not always answered critics (e.g. Haszeldine) adequately.
- How can the NDA have suitable capability and processes in place to protect residents when the location of the repository is unknown?
- Trust the NDA to ensure the safety and security of the process/confident in its integrity.

- NDA has been pursuing design studies for long enough for the concepts to be mature and realisable.
- Do not trust the NDA/not confident about its integrity or impartiality.
- NDA is just Nirex under a different name.
- Not confident the NDA is competent to run the programme, and the RWMD should not be allowed to become the Site Licence Company.
- The NDA described as a 'nuclear-industry-orientated quango'.
- The NDA reports to treasury, so cost is its prime concern, not safety.
- The NDA has a vested interest, so any evidence from them will be biased towards finding a suitable site.
- Not satisfied the NDA has suitable capacity and processes in place to protect people/environment.
  - Difficult to provide such assurance even over a 50-100 year timescale, and impossible over the very long term (e.g. 10,000s of years).
  - o Track record at Sellafield adds to lack of confidence.
  - Reduction in public funding could impact capacity.
- The NDA places far too much emphasis on engineered barriers 'to overcome geological, geotechnical and hydro-geological components of a coastal Cumbrian GDF'.
- Concerns about the NDA's R&D programme, for example:
  - Overoptimistic about the probability of solving some problems.
  - Progressing too slowly.
  - Not wide enough in scope.
  - Doesn't deal with the issues in the NWAA list or the Rock Solid? Report sufficiently.
- Positive comments about the NDA's R&D programme, for example:
  - Support the NDA's R&D work on safety.
  - The programme appears to be sufficiently open ended and transparent.
- Other comments about the NDA's R&D programme, for example:
  - Its requirements should be more clearly defined.
  - Critics should be involved as stakeholders in the R&D planning so that the NDA can develop answers to the critics' questions.
  - There must be independent scrutiny of the R&D programme.

- Close supervision will be required to ensure appropriate funding is provided for new work rather than just adapting work from similar overseas projects (which will have significant differences to this one).
- NDA should produce principles for spoil disposal/NDA reply on the issue of spoil is unconvincing or concerning.
- The NDA's 15-year timescale seems too long 5 years should be ample.

#### The regulators

- The regulators will ensure that the interests of current and future generations are protected, but they need to be sure they are competent to meet this obligation/can retain the knowledge/can recruit and retain an adequate number of suitably qualified and experienced inspectors.
- Even with a regulatory authority in place, nothing can be 100% safe or secure.
- Lack of confidence that all regulatory bodies are fully aware of the nature of the infrastructure in Cumbria (e.g. road system).
- Not convinced of the independence/transparency of the regulatory bodies.
- Not convinced the regulators have capacity, competency or remit to fully consider all relevant issues, and they are already overstretched.
- The regulators have been optimistic over their ability to respond to all of the challenges the safety case will bring.
- The assumptions and complexity of the safety case increase the probability of the regulators making a mistake, especially if there is pressure to deliver by 2029.
- Regulators have not always been effective in the past or have not always had a good reputation.
- Regulators did not manage to prevent previous disasters in other countries/could not guarantee to prevent a disaster here.
- The NII/previous regulation has consistently failed (e.g. to ensure safety at Sellafield); how would the ONR be any different?
- The ONR role needs to be more clearly defined.
- Unclear whether or not the ONR would be involved in direct discussions with a potential host community.
- The ONR should be more involved than it currently is in the process.
- Hard to believe the ONR won't be heavily involved before 2025.
- The ONR only cares about nuclear safety, not dosage or security to the level of the public's concern.

- It would have been more reassuring to see a greater input from the ONR to the Partnership's work.
- Difficult to comment on the effectiveness of a body not yet formed.
- Concerns over impact of cutbacks on the ability of the regulators and the NDA to coordinate adequately.
- Regulatory systems seem to be in a constant process of change.
- Regulators need to continually evolve and develop.
- It will be hard to judge how good regulatory processes until later in the process.
- A robust regulatory process is needed, with an independent overview if needs be.
- Assume a regulatory body would be in place to authorise any change methodology for the inventory.
- The UK regulatory environment is well established and robust/regulators a long history of dealing with nuclear issues/regulators have experience.
- Reassured that the regulators will be making their assessments public.
- Confidence in the regulators generally/confidence they would ensure safety and security.
- The regulators are independent and competent.
- Reassured by the independence and integrity of the regulatory bodies, but it is the operator, not the regulator, who has the prime responsibility for safety the regulator should be a last line of defence.
- Regulatory and planning bodies should be engaged from the start to ensure a robust safety case is developed and adhered to.
- Good to hear the regulators are aligned on this.
- Good that the regulators are involved already.
- Is there any international regulatory framework with regard to HLW and ILW?

#### Other people/organisations

#### **British Geological Survey**

- A reputable/competent/unbiased/professional organisation.
- A highly respected organisation with a long-running expertise.
- Now that it is involved, the BGS cannot remain an impartial source of information.

#### **Britain's Energy Coast**

• Various comments on how/if a GDF fits in with the Energy Coast.

#### **Cumbria Nuclear Constabulary**

• 'The best security available'.

#### Cumbria Tourism

- Not representing the interests of the tourist industry in this process due to conflict of interest/involvement with Osprey Communications.
- Request that the comments of Cumbria Tourism should be available for public consideration.

#### **Developer/operator**

- Concern that any problems would occur once a repository is up and running and under the care of the operator.
- The operator, not regulator, would have the prime responsibility for safety.
- Concerns that an operator would compromise safety or security for cheaper labour with a lack of background checks.
- Too much reliance on the developer to do the right thing.
- Concern the operator would not clean up a GDF post-operation.
- Concern a GDF would be operated for profit by a private company, and that there would be a loss of local control/impact on jobs and benefits.

#### Independent experts

- Who were the independent experts for the BGS report and why were they chosen?
- Difficulty in using independent experts because the nature of science means that you can always find someone with a different view.

#### Lake District National Park Authority

- Concern they will vote against a repository due to potential impact on tourism, regardless of evidence and local support.
- Concern LDNPA would be reduced to a consultee and lose its planning rights.
- How could the LDNPA approve a GDF when they refuse other things (e.g. installation of uPVC doors, restrictions on the colour of paint use).

- Agree with LDNPA that surface facilities could not be located within the National Park or its setting.
- Request that the comments of LDNPA should be available for public consideration.

#### **Ministry of Defence**

• Must make information on its part of the inventory available to the NDA.

#### **National Health Service**

• Must make information on its part of the inventory available to the NDA.

#### Nirex

- 'Profit driven company'.
- Various references to Nirex Inquiry and previous geological investigations in West Cumbria.

#### **Nuclear industry**

- Positive comments about nuclear industry history in terms of impacts, experience or behaviour (e.g. good safety record, has experience needed in West Cumbria, employment).
- Negative comments about nuclear industry history in terms of impacts, experience or behaviour (e.g. poor safety record, haven't previously delivered on community benefits, lack of trust, allegations of bribery).

#### Other organisations

• Concern that a 'US waste management/construction company' is opening offices in Whitehaven.

#### **Planning authorities/planners**

- Will need additional independent skills or resources.
- Concern over lack of expertise of local planners.

## **Comments about the Partnership**

#### **This Partnership**

- Various comments about whether or not the Partnership should encourage the three Councils to proceed or not.
- The Partnership has been dominated by the DMBs.
- The Partnership has not provided a proper platform for opposing views.
- There is confusion from the Partnership about the word 'representation' representation of different sides of the argument has not happened.
- The Partnership has failed to properly scrutinise the evidence, particularly in relation to geology, engineering and inventory.
- The Partnership has misunderstood the concept of 'peer review', which usually involves a number of reviewers who hold disparate views.
- The Partnership has not followed its own draft terms of reference in exploring whether OR NOT to participate. Debates have favoured the 'pro' position, with positions against framed as 'challenges'.
- The Partnership has never agreed its terms of reference.
- Positive comments about the Partnership process/feel it has been a robust process.
- Confidence in the Partnership overall e.g. professionalism, integrity.
- Happy that the Partnership has conducted its research thoroughly/carefully.
- Does not appear to be predisposed towards a particular outcome.
- Concern over lack of expertise/knowledge/qualification within the Partnership.
- Concern the Partnership has not sought the right/enough expertise on specific subjects or has ignored certain expert input (for example on the topic of geology).
- The Partnership has paid too much attention to/been influenced by the Government and the NDA. For example the NDA had a clear interest in promoting the process and the Partnership should have thought more carefully about the work it allocated to the NDA.
- Comments about the Partnership's geologist (e.g. queries about expertise or independence).
- Lack of trust in the Partnership to find the 'right' answers.
- Concern that the Partnership's work is full of generalisations and vagaries.
- The Partnership has underplayed the potential negative impacts of a GDF.
- Is predisposed towards having a GDF (for example due to the amount of time and money already spent on the process, ties with the nuclear industry, vested interests, financial incentive, specific members being in favour).

- Has already made up its mind that West Cumbria should proceed with the next stage/have a GDF and therefore feel that the consultation is a tick-box exercise.
- The Partnership is not legitimate/robust:
  - Due to the way it was formed (the councils did not submit an expression of interest in the correct way or with the correct amount of local consultation).
  - Due to issues with its Terms of Reference.
  - Due to issues with its membership breadth/imbalances/predispositions.
  - Because it is undemocratic/unrepresentative.
  - Because it ignores or misinterprets the White Paper.
- The Partnership should have had an independent chair.
- The Partnership process lacks transparency.
- The Partnership process has been open and transparent.
- Concern that some things are being decided without consultation e.g. statement from Partnership Chair that the councils would be included on a community siting partnership.
- Some topics are not for the Partnership to take a view on e.g. safety and security is for the regulators to consider.
- The Partnership is looking at the wrong thing/asking the wrong questions (generally in the context of concerns about geological disposal or the voluntarism approach).
- The Partnership has run 'over-managed' public events.
- Concern about the overall cost of the Partnership process.
- Facilitators have done an excellent job but have to bow to the wishes of the Steering Group.

#### **Future partnership**

- Needs to talk to as many experts as it can.
- Needs to educate the public as much as possible/keep local people informed.
- Continuity is needed so that current work and knowledge from this Partnership is not lost.
- Should undertake a longer-term visioning exercise 'to make sure economic implications are understand more clearly, so that both urban and rural areas would benefit'.
- Some of the Partnership's guidance is too prescriptive about what a future partnership might look like, but recognise it is just guidance.

## **Comments about the consultation**

#### Process

- Stakeholders/public involved too narrow (e.g. should have involved people to North East of Cumbria due to prevailing wind, not enough of the people who live in Cumbria are responding/involved).
- Not enough rigorous debate with local communities.
- Not rigorous enough national debate.
- Level of national engagement welcomed.
- Difficult for people to be engaged when they don't see the relevance to their local area.
- Concerns that lack of willingness to engage from local residents makes it difficult to gauge a true picture of community feeling.
- Concern that local apathy is due to the feeling of this being 'a done deal'.
- Professor Smythe was not given sufficient time or opportunity to put across his views to the Partnership.
- The large amount of publicity given to Professor Smythe's views may have skewed the consultation due to no balancing arguments being presented to the same degree.
- Biased/predisposed towards a specific outcome (generally to proceed with Stage 4 or to have a GDF) e.g. due to political or business agenda, or vested interests.
- Biased/predisposed towards a positive view/not enough publicity on the negative effects of a repository.
- Positive comments about exhibitions, e.g. questions were helpfully answered by geologist, well facilitated.
- Public events have been 'over managed' e.g. too many Government etc views, too few opposing views, technical language could overwhelm local residents/visitors.
- Parishes should have been given resources to provide meetings in each location, as community events in Jan-Feb were not accessible to all.
- There has been an overlap between public engagement and public relations so that communications have been dominated by positive messages about the Partnership's work instead of seeking debate.
- Negative comments about publicity (e.g. only just heard about it, many people have not heard about it, ad hoc publicity, low key, no national campaign).
- Positive comments about publicity (e.g. the right steps have been taken to publicise the process, giving people as much information as they can, publicity has been wide enough).
- Grateful to be able to give an opinion.

- Evaded/ignored Government guidelines for consultation (e.g. focus on opinion instead of fact, not clear about what is being proposed, the scope of influence and expected costs and benefits).
- Concern that issues raised by telephone are 'not valid'.
- 'Inappropriate and inadequate' public consultation
- Engagement has been 'sincere and plentiful'.
- Limited involvement of specific stakeholders so far (e.g. United Utilities).
- Concerns that views will not be listened to.
- Important to consider all views, not just a vocal minority.
- Important to be responsive to public and stakeholder views.
- Concern that people saying 'not sure/partly' to the consultation questions will be 'counted out'.
- Important to provide a visible process that won't fall to legal challenge.
- Online process is a good way of seeking views.
- Do not trust the consultation process.
- Overall support for the consultation process.
- Positive comments about the overall process (e.g. 'careful and dignified', 'thoroughgoing and comprehensive', 'very clear', 'a good thing', 'well devised', 'carefully thought out', 'exemplary', 'the Partnership has done a great job in the consultation', 'being carried out in a responsible and open manner', 'thorough', a good approach/good process).
- Process driven from the top without local consultation.
- Process has not achieved the aims set out by the White Paper (to find a practicable solution for the UK's higher activity wastes that: achieved long-term protection of people and the environment; did this in an open and transparent way that inspired public confidence; was based on sound science; ensured the effective use of public monies.
- Fair and commensurate level of consultation with community and regulatory organisations.
- Local communities were not engaged/should have been engaged in the initial decision by the Councils to express and interest.
- Consultation has been 'too parochial' given the importance of the issue.
- No simple way of saying 'I object to a GDF in West Cumbria'.
- Process is open/transparent/honest (e.g. about level of uncertainty).
- Box-ticking/PR exercise/sham/mockery/flawed.

- Process open to manipulation by those with a vested interest/is being manipulated by the DMBs.
- Consultation seems to have been as wide as possible/widespread and effective consultation.
- General support for consultation process.
- Resident perceptions across the whole of Cumbria are required (re impacts).
- Use of Twitter and Facebook have been 'abandoned'.
- Consultation process cost a lot/too much.
- No information on where the money for the consultation came from.
- Waste of money (given geology not suitable).
- Consultation process too long/cumbersome.
- Consultation process is being rushed.
- Length of consultation process and potentially of repository operation make in depth ongoing engagement difficult suggest of continuing publicity and education to aid this.
- Process is undemocratic.
- Process is already out of date (references to documents from 2008, 2010, 2011).
- Could not access the online form.
- Online response form doesn't have an 'end' page showing that it is finished.
- Opinion survey is undemocratic/not representative/open to rigging.
- Opinion survey is not an acceptable method/should have used a referendum.
- Opinion survey timing means it would not take account of any issues raised in this consultation, or additional information such as the brand protection study.
- Request to keep the process transparent and verifiable.
- Results should be published openly and transparently.
- Would a final decision for a GDF be subject to a referendum?
- How do we input our views after the Partnership dissolves?
- Need further consultation with all of the general public.
- Make any further consultation more user friendly.

#### Materials/content

• Negative comments about the language (e.g. too much uncertainty, too vague/generic, factual inaccuracies, not accessible/too complex/too technical/too much information, too simplistic/too little information, issues with specific words or phrases, fudging the

issues/ambiguous, too much about process rather than substance, too much 'consultation speak', contradictory (e.g. on retrievability, safety, too much lumped into one question (SSEP specifically), use of 'political' or 'emotive' language). Some comments specifically about the opinions (e.g. nonsensical, vague, conditional, difficult to form an opinion about the opinions, too legalistic and long-winded, not really opinions etc). Some about the questions (e.g. not really a question, cannot agree to something that you 'cannot be certain about', too little information to answer).

- Positive comments about the language (e.g. clear/accessible language, full explanations, honest, balanced, good overviews of specific topics, comprehensive, a fair summary, has integrity, appropriate level of detail, has provided understanding). Some on opinions (e.g. considered).
- Other comments about the language, e.g.:
  - Include the word 'substantially' in the phrase 'we should be better off after a repository'.
  - Confusion over whether it is for storage or disposal.
  - 'Disposed' is meaningless given the timescales.
  - Definition of 'amount' of waste? (Radioactivity, volume etc?)
  - Unclear what is meant by inventory.
  - Confusion over usage of community siting partnership/new partnership.
  - 'We have received what we are looking for' is a bad choice of words.
  - Contradictory over when host communities would be involved in the next stage of the process.
  - Contradictory about right of withdrawal (says could happen at any time but then limitations revealed in siting chapter).
  - Words like 'adequate' do not inspire confidence.
  - Should say 'storage' not 'disposal'.
  - Unclear why only one criterion for some topics.
  - 'High level' confusing (re geological study) does it mean limited or detailed?
  - o Poor English: 'How can areas decide whether or not to take part in the search?'
  - 'West Cumbria' is misleading (makes people think it is just the west coast).
  - o 12.3 in consultation document and paragraph 4 in document 240 are at odds.
  - Too many acronyms with no explanation.
- Biased/predisposed towards a specific outcome (generally to proceed with Stage 4 or to have a GDF) – for example incomplete information, biased language, assumption that Stage 4 would go ahead, too much supporting information from the NDA and the Government, manipulated by the Government/the NDA, questions are worded to give a particular answer/so that people feel they should say yes.

• 'Manufactured consent' predetermined by the way in which the questions are worded/hard to disagree.

Document deliberately designed to be difficult to understand for the average reader.

- Deliberate skewing of data/statistics.
- Too many assumptions, not enough knowledge/facts.
- Comments on specific sections/chapters these tend to relate to other issues, e.g. too much uncertainty around benefits, siting chapter not clear, CBP chapter poor etc.
- Question irrelevant (generally where respondent is opposed to a DaP or to a GDF, often due to issues with geology).
- Questions focus too much on issues such as design and engineering, thus distracting from the key issue/s in relation to whether or not to proceed.
- Comments that the DVD had been watched (and some expressing what they had learned as a result). Some negative (e.g. 'people on the DVD looked old', 'too glib', 'raised more questions than answers'). Some positive (e.g. informative, easy to understand).
- Queries/comments over specifics/information not contained in the document, e.g. brand protection, siting criteria, other specifics such as:
  - Throughout the consultation document the views of the Partnership on a decision to participate are put forward rather than on a decision about participation (therefore it is biased in favour of participating).
  - The document refers to 'a' repository rather than the possibility of more than one/the fact that there would be an underground facility and surface facilities (i.e. two sites).
  - The size and scale of the project is not properly depicted.
  - 'The Consultation document does not make clear the unique nature of the project in attempting to accommodate both high and intermediate level waste, probably along with spent fuel.'
  - 'Higher activity wastes' is an unfamiliar term and hides the unique nature of the project from view.
  - The scale of associated infrastructure works, especially in relation to spoil (and the need to store spoil somewhere before backfill), is not mentioned.
  - The presence of a large industrialised zone during construction is not mentioned.
  - The presence of aquifers are mentioned in the consultation document but not shown in Figure 9.
  - Information about the unsuitability of West Cumbria's geology has been excluded.

- Showing examples of benefits in other countries is misleading when there is so much uncertainly and there may not be any benefits.
- Examples of benefits are 'paltry' (e.g. roads constructed to service the facility).
- Employment profile over time is not clear.
- o Document is 'mealy-mouthed' about retrievability.
- Lack of information on how 'high activity' waste would be managed.
- Timescales, cost, order of criteria and criteria themselves are not included in relation to research/further screening programme.
- Cannot imagine scale based on the Royal Albert Hall.
- o Storage requirements/volumes for different waste types is not clear.
- White Paper has been ignored in the siting chapter.
- o Little indication of the process to convert/package the waste.
- Various other comments about omissions, for example in relation to geology, waste and voluntarism (UserIDs available for reference if required).
- Comments on graphics (e.g. illustration of multi barrier concept too simplistic, scale diagrams don't give true indication of size, design images not helpful).
- Comments on question wording (e.g. not enough opportunity for people to comment on issues that are important to them).
- Not all relevant reference documents were included.
- Too many references to other documents made the consultation document difficult to follow.
- Consultation document produced by Partnership in a 'casual and unprofessional' manner.
- Consultation documents is a tick box exercise.
- Consultation document/other documents produced by consultation are very fine/excellent.
- Consultation document is well presented.
- Good to provide background information.
- Consultation document is too large/wordy/complex/will discourage people from responding.
- Consultation document 'simplistic, formulaic, selective'.
- Consultation document doesn't focus enough on the subject/content or is too narrow in its content.
- The consultation document or pack cost a lot/too much/too many produced without being read.

- Comments that the full consultation document/response form was not received with the comments slip.
- Could not find comments slip.
- Not enough space for additional comments on the online response form.

## Suggestions/requests about further public and stakeholder involvement

- Continue to provide plenty of information, education and opportunities to get involved.
- Continue an open and transparent process of engagement.
- Continue to publicise widely through multiple channels.
- Provide more information tailored to young people.
- Provide more user friendly/accessible information.
- Have further debate perhaps with a forum or Facebook page.
- Use Twitter/Facebook.
- Provide parishes with resources to hold specific meetings in their local areas.
- Continue to seek public views, but efficiently don't waste time and effort where not required.
- Run the process in consultation with universities and colleges so that students studying relevant subjects can have involvement and learn from this.
- Concerns over how different views will be balanced or weighted.
- All of Cumbria should be involved and have a voice at all stages.
- Continue to involve young people and people in their 20s.
- Involve ex-colliery (NCB) engineers, surveyors, miners.
- Involve neighbouring councils in decisions, not just Allerdale and Copeland.
- Continue to involve all stakeholders/members of the public.
- Give more weight to the voice to the affected communities than others (e.g. less weight to areas screened out by the BGS report).
- Consult or involve affected communities now/as soon as possible.
- Decisions should be localised to a village level.
- Give more weight to views in West Cumbria than to those coming from elsewhere.
- People in the North East of England should be consulted.

- Communities likely to be affected by a GDF should have appropriate input to the planning process at the earliest possible time.
- Give communities a balanced and realistic picture of the true costs, benefits and risks to them.
- Make it clear when public opinion will be taken into account at each stage of the process and how the public will know their opinions have been listened to.
- Take public opinion into account at all stages.
- Pause points should be an opportunity for public and stakeholder input.
- Have a final consultation before the right of withdrawal passes.
- Emphasis of the importance of listening.
- Follow the process in the White Paper in order to balance opinions of the host community, wider interests and decision-making bodies.
- People representing West Cumbria should be involved in independent reviews.
- Stakeholders and critics should be involved in independent reviews.
- More consultation on environmental impact.
- There has to be genuine agreement between all stakeholders on safety issues.
- Future engagement should include a vision of the future with and without a GDF.
- Have a separate project of research and consultation regarding new build wastes.
- Criteria for credible reasons for withdrawal should be subject to consultation.
- Various views on a referendum/voting:
  - Have one now, before a decision about participation.
  - Use local referenda to decide whether or not a local community continues to be involved.
  - Have a full referendum of all people in areas that might be affected.
  - o In any referendum, people should only have a say about their specific area.
  - Any decisions after an expression of interest 'should be subject to individual resident democratic vote, with the ability of votes from the directly affected area or parish carrying the veto to any proposal'.
  - Have one at some point.
  - Have one before the final right of withdrawal passes.

# Other comments about the MRWS process/policy and future stages

(These comments tend to be in addition to the comments about the siting process dealt with in the PSE3 report, although there may be some overlap.)

- The process should put geology before voluntarism/survey the whole of the UK/find the most suitable areas then ask for volunteers/this is a national issue and a national approach should be taken/should follow international guidelines.
- The process is based on policy, not legislation this raises the question as to whether any decision to participate would be legitimate.
- The process ignores findings from the Nirex Inquiry.
- A national approach should be taken, possibly even if it goes against public opinion.
- Fruitless seeking the 'best' site as all will have complications; better to ask 'is this one safe'.
- Would be useful to know the financial implications of looking at geology before voluntarism.
- West Cumbria has been chosen as a preferred site for the wrong reasons (e.g. nuclear reliant/compliant/in need of investment).
- Support for the process/least bad option.
- The process is flawed [non-specific].
- The process is unethical and a waste of money.
- The process is flawed as deep geological disposal is not the way forward.
- The process is flawed as there is only one interested area.
- The process is predetermined/will happen anyway regardless of what the local area thinks/a GDF will be located in West Cumbria.
- Something has to be done with the waste; this process should run its course.
- Further geological studies are needed.
- An in depth study rather than a desk study would be more appropriate for the next stage.
- An in depth study (of geology) is required before the next stage/before a decision about participation/need to know what the prospects of finding a suitable site are.
- Geological uncertainty may be an aspect of any further studies that has to continue to be managed.
- The process is misguided until the geology question is answered.
- Need more details on when/how much/where more detailed work would take place.

- Keep local people informed throughout, including making research activities and results accessible.
- Maintain open debate.
- The process needs to continue to be open and democratic, and to be seen as such.
- The public need to know what the impact would be on them and their communities.
- How and when can the public continue to be involved, and what information will be publicly available?
- Maintain and improve the level of consultation wherever possible if a decision to participate is taken.
- Look at historical evidence and well as new.
- The cost of the siting process would be very high.
- The cost of the siting process would be too high/not worth it given likelihood of finding a suitable area.
- Concern that right of withdrawal would get more difficult as the process progressed.
- The site should have been chosen first before any consultation.
- If a West Cumbrian solution remains open, there will need to be a credible argument and prima facie reasons as to why a particular option is suitable and safe in the long term.
- Peer review or independent verification of investigation and research is critical.
- Remuneration and reporting arrangements for peer reviewers should maintain their independence.
- There needs to be a spatial plan/3-dimensional model.
- Ensure the community is engaged in the design process.
- Open up the design to wider scrutiny/monitoring and improvement.
- Address all design and engineering issues before moving forward to agree a site at a later stage.
- Draft design consultants into Cumbria for the duration.
- Uncertainty about the inventory should be reduced before any final commitment is made.
- What if West Cumbria says no? Plan B?
- If it is safe, site the GDF in a developed area, near to the people who use the energy.
- The process will be constantly changing, e.g. constantly evolving safety ideas; it may be difficult to keep up with.
- Safety, security, environment and planning will become a higher priority as the process progresses.

- Safety issues should be reviews and monitored throughout each stage if the process continues.
- Engage internationally and learn from other countries.
- Would like to see more input from the ONR in the next stage.
- Base the future development of this on hard data, not feelings and beliefs.
- Be clearer about local ambient radiation levels and any estimated increase a repository might cause. Quoting such statistics may help to alleviate some fears.
- There should be a separate project of research and consultation regarding new build wastes.
- 'In the case of the MRWS process, Stage 4 only involves non-intrusive examination of a number of potential candidate sites. This means that it will be necessary to include the whole of West Cumbria within an initial PVP 'zone of influence', apart from those areas excluded by the BGS screening exercise. It will therefore be necessary to agree at an early point the form of the potential impact upon property prices etc. that might be included in any proposed Stage 4 PVP, as this is likely to include planning blight and concerns amongst those considering purchasing or renting properties within the whole of the potential siting area. Only when and if a final site is selected will it be possible to agree a more focussed AVP Zone.'
- 'The University of Manchester has opened a new research base in West Cumbria and investments such as this provide an opportunity to develop a strong independent academic community based in the area that is capable of delivering the research and development necessary to underpin decisions made throughout the GDF process. It will be important that wherever possible research is within and by the local community to engender the necessary trust, engagement and communication. Independent research & development activities should include exhibition space, public viewing areas and a vibrant outreach programme into local schools and community based organisations.'
- 'The current selection process is a sham intended to maintain an illusion that the government can find a reasonable means of disposing of waste from new nuclear power stations until the irrational decision to build them has passed. The government already knows from many years of study and hundreds of millions of pounds of expenditure that there is no suitable site in West Cumbria and that no other part of the country will accept a repository.'
- Drive to accelerate the programme increases concerns about right of withdrawal and safety/shortcuts.
- During the siting process, the Government should continue to seek other volunteer communities.
- What is the overall action plan going forwards/why has the Partnership not set one out?
- The process should not be allowed to be derailed or delayed by minority views.
- No resources have been offered to those of differing views.

- The step-by-step process is right.
- Given the long timescales there is no need to rush to a decision.
- The principles of community involvement have already been breached.
- There should be a referendum at each withdrawal point.
- 'A 'free' right of withdrawal should be available at any stage to all concerned as the project progresses.'
- Once an area is identified as a suitable site that community should be consulted about the community benefits package.
- The boroughs should have been balloted before the councils expressed an interest.
- 'Should the programme continue I believe there will be a repeat of June 2007, where the House of Lords Science and Technology Committee called the MRWS Programme proposals "incoherent and opaque".'
- The whole process in nonsensical until new nuclear build is ruled out and existing nuclear stations are decommissioned.
- The process has been 'designed to massage public opinion to produce a predetermined result'.
- The process should more forward but not with RWMD as the Site Licence Company.
- Public opinion should be taken into account as strongly as any geological evidence.

## **Comments about energy policy/mix**

- Opposed to nuclear power overall (and in some cases therefore to a GDF as a development that might further nuclear power).
- Oppose new nuclear build.
- Oppose wind turbines.
- Impact assessments should include the implications of the current and potential future nuclear power stations.
- Support nuclear power/nuclear new build.
- Minimise new nuclear build.
- Support nuclear/not opposed to nuclear but oppose the idea of West Cumbria taking the nation's waste.
- This process is just a scheme to justify new build.
- There should be no new nuclear build until a safe, sustainable solution is found.
- Recognition of the differing views that nuclear energy and the nuclear industry elicits.
- Support using any/every form of energy generation available, including nuclear.

- Decommissioning should be the priority.
- Support renewables/clean energy/non-nuclear energy sources.
- Subsidies should be available for a diverse range of alternative [non-nuclear] energy producers.
- Support local/micro-generation and renewables.
- Learn lessons from Germany, with its higher capacity renewables industry.
- Focus on energy saving activities/energy efficiency schemes.
- Instead of having a repository in West Cumbria, put the cost of it into developing safe renewable energy and reducing power usage.
- Job creation is low compared to those which could be created with similar investments into sustainable energy technologies.
- Concern about UK national energy policy which 'panders to public superstition and wishful thinking'.
- Consider sharing/coordinating benefits package for a GDF with that for new nuclear build.
- Research recycling/processing of nuclear waste further.
- Consider the new generation of fast breed reactors, claimed to be safe and leave less toxic waste.
- More research needs to be done regarding the use of thorium as an alternative source of power.
- All UK counties should retain and store their own nuclear waste.
- Do not need extra generating capacity in West Cumbria.
- Need a holistic approach, e.g. where the development of alternative energy supplies is related to the need for, and size of, a repository.
- Need a mix of energy sources (e.g. including wind and wave power, or including nuclear).
- 'Currently, reactor construction programs are on hold. Transuranic wastes are only created when Uranium fuel is used. Such reactors were initially designed to produce weaponisable fissile material. Thorium reactors can be commissioned at some point resulting in much less harmful waste. Additionally, a nuclear research facility should be commissioned with the purpose of understanding and developing a accelerated transmutation facility to deal with legacy waste. This would be a world class facility and attract to Cumbria a knowledge base which will have substantial economic benefits.'

## Comments about disposal of radioactive waste

- A waste solution is needed.
- The current situation is not acceptable.
- We do not need a GDF/current arrangements are fine/prefer surface storage.
- Either put it where the geology is right, or store it at the surface.
- Support for geological disposal as a way forward/preferred option.
- Support for geological disposal, but geology/location has to be right.
- Support for geological disposal, but not in West Cumbria.
- Should be an above sea-level GDF.
- A GDF should be for legacy wastes, not new build.
- Geological disposal is a safer, more secure approach overall/than current arrangements (e.g. safer from terrorists, all in one place, away from surface events).
- Geological disposal has pros and cons (e.g. better security but safety and environmental implications).
- A shallower repository may be better, e.g. in terms of retrievability.
- Why not put lower risk radioactive material in repositories and higher risk materials in high security surface facilities.
- Opposition for geological disposal as a way forward.
- Why waste money on a repository when waste could potentially be useful in the future.
- No dry storage while reprocessing is still possible.
- Put more effort into reprocessing.
- Spent the money on renewables instead.
- Link geological disposal to accelerated decommissioning.
- If HLW can be safely encased or solidified (e.g. in glass) then why is a GDF needed?
- Geological disposal has been experimented with in some countries but none of them have been able to give a 100% guarantee of safety over thousands of years i.e. it is not a proven approach.
- Uncertain as to whether geological disposal is the right way forward.
- Surface storage is the current arrangement/reference current location of waste.
- There should be a centralised store, but have it on the surface (e.g. at Sellafield).
- Uncertain as to whether a centralised stores, or many smaller stores would be better (e.g. in terms of security)

- Opposition for a centralised store/prefer local storage/whoever creates the waste should deal with it.
- Store the waste in cities, where the majority of the energy gets used.
- Each nuclear station should have its own waste store.
- Continued surface storage would bring more jobs over the long term.
- Geological disposal is less safe/secure (e.g. because waste is not accessible quickly if things going wrong/waste will leak).
- If the repository is for disposal rather than storage, the implications for geology are different and there may be fewer financial benefits for the councils.
- Surface/above ground storage is a safer, more secure approach (e.g. easier to monitor and deal with issues, waste is accessible if needed, waste not all in one place).
- Surface storage should be an option in this process (the MRWS process).
- If future generations can't be trusted to manage waste above ground, how can they be trusted to manage it below ground?
- Concern that too much money is being spent on a GDF and not enough on looking at other means of safe disposal.
- Need a clear comparison of the cost, risk and future problems associated with different scenarios (e.g. the 'keep waiting' case, different disposal options in the short and long term).
- There is no option of doing nothing and no case in which there is no risk.
- The waste should be recyclable or reusable/more research should go into this area (e.g. efforts should be made to develop accelerated transmutation technology through a world class R&D facility).
- Spend the money looking at whether we need repositories and reducing the need for repositories (e.g. lifestyle changes and alternatives may be needed).
- There may be better options of dealing with the waste in the future.
- Need to consider what the other options are for dealing with the waste.
- What are the other options/have they been considered?
- Put more effort into finding other options.
- Need an SEA to consider other options.
- Get the waste off the planet/fire it into the sun.
- Export the waste to another country with more favourable host rock.
- Put it in a depleted oil basin.

## Suggestions about specific topics

#### Suggestions of specific design considerations

#### **GDF** design

- Design should only be considered after site and inventory are clearer, in order to avoid overlooking novel design features.
- Learn from other countries e.g. overall design, screening.
- Consider the comparison of options for burial of UK vitrifies HLW, published by UKAEA Northern Division in 1981 (A; Deep burial of the waste in relatively thin steel packages lowered them down vertical boreholes in the floors of access tunnels, followed by a relatively thin bentonite backfill. B: Deep burial of HLW containers overpacked in thick (300cm) steel or cast iron in a horizontal mode in tunnels surrounded by a thick backfill of bentonite. C: Horizontal tunnel emplacement as in B but above sea level, where host rock could be drained, bypassing the backfilled region, into the original access tunnels.)
- Apply the precautionary principle to matters of site selection and design, to safeguard the wellbeing of future generations as much as possible.
- Should be 'designed for disaster' i.e. assume that something will go wrong.
- Should be 'overdesigned' with several levels of fail-safe built in.
- Stringent environmental standards would need to be met with any design.
- Design should give high priority to health, safety and security.
- Design process should include minimisation of impact on living conditions of local people.
- Design should be flexible to allow for changes in inventory.
- Consider instances where concrete has failed in the past (e.g. chloride attack, sulphate attack, alkali-silica reactions).
- Repository boundaries should ensure 'safe storage' is retained for the lifetime of the facility.
- Would a repository be designed to expand as further waste is produced?
- Would a rock characterisation chamber be included as part of the design?
- The amount of space for each type of waste (e.g. ILW, HLW) is unclear.
- It should be technically possible to place high, intermediate and low level waste within a repository, though high and intermediate should be the port of call.

- The inclusion of spent fuel and plutonium would have significant implications for design.
- Consider surface storage for 'high risk'/high-level waste and 'lower risk' material for underground storage.
- The nature of packaging would have implications for design
- More work on design is necessary at the site-specific stage.
- Design should take account of particular geological characteristics.
- Could the design be extended to go under the seabed?
- If and how repackaging of existing waste would occur.
- Retriavability should be built in/should not be built in/has issues either way (e.g. operational and environmental safety in the short and long term).
- A risk analysis should be carried out around the issue of retrievability.
- Retrievability should be left as an open question, but design should assume and cater for permanent disposal.
- Would waste containers be surrounded by a buffer material and, if so, how is this compatible with retrievability/more consideration should be given to how retreivability could work if tight encasement in a buffer material occurs.
- Over what timescales would retrievability remain an option/when would backfilling occur?
- Consider implications of retrievability on surface facility size.
- Need early commitment to minimise surface construction as far as possible and reduce visual impact on the countryside (e.g. using screening to mitigate).
- Surface facilities should be confined to what is needed and not allowed to expand.
- Surface facilities should be restricted to a storage area.
- Developments should be of traditional Lakeland stone and slate to minimise visual impact/blend in with surroundings as much as possible.
- Where/how would the soil/spoil dug out be used?
- Construction may generate large quantities of groundwater which would need to be dealt with through the existing wastewater network/treatment facilities.
- How would it be determined what goes above ground and what goes below ground?
- Would there be any surface facilities directly above the underground facilities (other than the main surface facilities).
- Would a fuel encapsulation plant be present at the surface facilities?
- Waste treatment should not happen at the surface facilities as this would lead to continued expansion of the surface facilities and further decommissioning challenges.

- Some waste treatment facilities may be necessary at the surface to ensure the waste is fit for the repository.
- Waste packaging may affect construction due to the decomposition/heat generation and gas releases from packaging interacting with the waste.
- How would the multi-barrier concept be applied to different waste types?
- Make it clearer that a repository would be designed to leak/leakage is inevitable.
- What would be a tolerable level of water and radionuclide flow?
- Should be deep enough to be secure against terrorism, accident and future glaciation.
- Should be at least three kilometres deep.
- Should be guaranteed not to flood and not be exposed to earth tremors.
- How would impacts of climate change (e.g. increased rainfall, flooding) be considered in design?
- How would the risk of criticality/explosion/emergency situation (e.g. through seismic events, fracking impacts, terrorism, impacts of previous mining activities etc) be considered in design?
- Should be engineered to exclude water penetration, but also to collect and treat (if necessary) any water that does enter.
- Watercourses need to be considered more in the design.
- How would microscopic particles of plutonium in a waterlogged repository be contained?
- Monitoring should be built in, in order to detect water penetration, loss of containment/leakage of radioactive material, gas build up, activity level, fire and heat. The long timescales need to be considered.
- The intense heat and gas pressure scenario can be handled through design.
- Could heat from spent fuel be used to heat homes?
- How would decay heat be removed?
- What would tunnels be lined with?
- Consider the increased costs of longer access tunnels from surface to underground facilities.
- How would access tunnels affect the countryside above, including river and stream flow?
- Tunnels should be above sea level.
- Entry should be by drift rather than shaft.
- Consider how exhaust products would be removed from the large amount of underground transport/ventilation design will be a challenge.

- There should be more than one exit route from underground, although this also allows more places for leakage.
- Access to and from vaults should only be from an existing nuclear licensed site, including all ventilation and support supplies.
- How would we inform future generations of what is in a repository?
- Over long timescales, integrity of design is an issue e.g. water access down shafts, general access, ventilation, sealing, lifting/movements.
- RWMD should work with communities to ensure community input into the design process is obtained.

#### Other related design issues

• The presence of a repository may influence the design of future nuclear power stations – i.e. they should be designed with long working life and low waste generation.

#### Suggestions for specific community benefits

- Infrastructure improvements (general and rural). With some people saying these would need to be in place early, or at least agreed early.
- Money.
- Roads/rail/air/sea/general transport infrastructure, both within Cumbria and connecting Cumbria to other counties. As well as general improvements, specific examples are also given, such as improving links from Calder Bridge to Millom/Barrow in Furness, creating a connection between Cumbria and Morecombe (e.g. bridge, road, hovercraft service), dual carriageways (e.g. A66, A595, links to M6), airport.
- Housing infrastructure (e.g. affordable housing, social housing).
- Communications infrastructure/broadband.
- Education facilities (including schools, colleges, universities).
- Assistance with education costs.
- Guarantees of local jobs, or provision of (early) local training facilities and opportunities (for all ages and backgrounds) to aid the securing of local jobs. For example technical colleges, apprenticeships.
- Initiatives to help sustainable employment.
- Facilities to improve mental and physical health, e.g. outdoor exercise apparatus, fruit trees, etc.
- Medical services, hospitals, specialist consultants or facilities (e.g. genetics, cancers), GPs, dentists, air ambulance.

- Free places in care homes for OAPs.
- Improved local amenities (general).
- Community projects and facilities.
- Funding for community organisations (e.g. youth groups, voluntary organisations, environmental organisations, sports clubs).
- Recreational facilities (e.g. sports facilities, parks, play areas, cycle paths, football team, rugby league team).
- Benefits for National Park users.
- Reduction in fuel bills/council tax/personal tax/general rate reduction.
- Initiatives to attract other diverse employers to the area, e.g. low tax designation/zero business tax/business rate reduction/non-nuclear business package.
- Retail development.
- Manufacturing development.
- Other job creating opportunities/initiatives.
- Science park.
- World class nuclear research facility.
- Radioactive waste reprocessing/manufacturing facilities.
- Investment in local renewables, e.g. tidal power.
- Undergrounding of electricity cables.
- Regular income/subsidy to West Cumbria (some say in perpetuity).
- Investment (non-specific).
- Parish funds.

#### Comments on specific siting criteria

- No underground facilities under existing housing.
- No underground facilities under the Lake District National Park/no overground facilities in the Lake District National Park/avoid national Park.
- Consider statutory purpose/policy in relation to the Lake District National Park.
- Site in a developed area, near to those who use the energy, if truly believed to be safe over the long term.
- Use a sparsely populated area/open countryside/rural area.
- Avoid coastal areas.
- Locate above ground facilities away from built-up areas.

- Locate in industrial areas/on the edge of already built-up areas to maximise economic benefits.
- Locate a good distance away from any nuclear power plant (outside of exclusion zone, e.g. 30km).
- Consider location in terms of wider UK geography (e.g. Cumbria is approximately at the geographical centre of the UK).
- Criteria should be given well in advance and be independent of any specific area.
- Consider the area of land south of Ravenglass (around Bootle and Black Combe).
- Locate it in the South Copeland area due to lower population, fewer tourists and lower employment than other areas would also benefit from improved road infrastructure.
- Do not locate it in South Copeland geography, geology, seismology and the sacred environment should rule it out.
- Sellafield area, Millom area, an area north of Cockermouth and an area around Silloth seem to be the places that should receive particular attention.
- Prefer packaging to be done at Sellafield and Drigg, followed by transport of the containers, preferably by rail, to underground facilities.
- Will there be trade offs with the criteria, such geology (e.g. at Silloth) vs convenience of access (e.g. at Sellafield)?
- Prioritise geological safety (e.g. avoid Blawith and Subberthwaite area).
- Presumably standardised assessment techniques will be used, e.g. weighted scoring matrices.
- Use the 'best' site.
- Don't/cannot seek the 'best' site. Instead ask 'is this one safe'?
- Could put it at Sellafield/use Sellafield/consider proximity to Sellafield/locate near Sellafield.
- Consider additional infrastructure requirements.
- Consider rail access.
- Minimise transport of waste (e.g. for safety and security reasons) often coupled with comments about Sellafield area being a good location.
- Minimise Greenfield site usage, prefer brownfield usage (even if it has an immediate impact on more people).
- Impact of investigations, construction work and long-term impacts of operations, and the views of a potential host community on these issue should be taken into account.
- Specific requirements/criteria need to be defined.
- Should be largely based on geology and the need to make it safe.

- Do not include political arguments/criteria.
- Consider mathematical modelling and historical investigations.
- Consider how/when the public would need to be involved.
- Only those directly affected should have an influence.
- Consider requirements for compensation.
- Avoid tourist 'honey pot' areas/put surface facilities as far away from tourist areas as possible.
- Minimise impact on tourism/National Park/landscape/future generations.
- Can it be put out at sea, under the seabed?
- Can an old open cast mine be used?