

# West Cumbria Managing Radioactive Waste Safely Partnership



## Meeting Report

**From 14<sup>th</sup> April, 2011**

At The Wave, Maryport

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**Note:**

This report is a summary of discussions at the meeting. It is compiled by independent facilitators 3KQ, operating on behalf of all participants. Note that it is meant as an aide-memoire for participants and a means of update to non-attendees, rather than a definitive record of every detail.

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*The front cover image is an aerial view of the above-ground facilities at ANDRA (Sweden), and was supplied courtesy of ANDRA/4 vents – see <http://www.westcumbriamrws.org.uk/page/108/International-experience.htm> for further information about ANDRA and other overseas facilities.*

# Executive Summary

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**Overview.** The 16<sup>th</sup> meeting of the West Cumbria Managing Radioactive Waste Safely (MRWS) Partnership took place on 14<sup>th</sup> April 2011. 35 people attended with 13 members of the public present to observe the meeting. The main objectives of the meeting were to: review the Nuclear Decommissioning Authority's (NDA's) generic Disposal System Safety Case (DSSC); understand the responses of the NDA and the regulators to the technical issues raised by Nuclear Waste Advisory Associates (NWAA) and others; consider the outcomes of the research into the potential impacts of a geological disposal facility (GDF); and reflect on and consider the key findings from the second round of the Partnership's public and stakeholder engagement programme (PSE2).

**Updates.** The Partnership's Engagement Package for 2011/12 has been signed by the Department of Energy and Climate Change (DECC). The Partnership's Technical Review Group (TRG) is meeting for the first time this month to review and pull together the different work streams of the Partnership's work to prepare the ground for the Partnership to draw conclusions during the summer. The Community Benefits Sub-Group and DECC are continuing to work on defining a set of principles which will be discussed at the next Partnership meeting on 24<sup>th</sup> May 2011. Ipsos MORI have carried out the third opinion survey on behalf of the Partnership at the end of February 2011. The 2010 UK Radioactive Waste Inventory has now been published.

**Impacts research.** The Partnership heard presentations regarding the research that was commissioned by the Impacts Sub-Group to inform the Partnership about how the development of a GDF in West Cumbria might alter people's perceptions of the area. A number of issues were discussed, including the impacts that the ongoing debate/discussions could have on tourism and the food and drinks industry in particular. It was agreed that this and other issues will require further in-depth consideration if the process moves forward. The TRG will be considering the Impacts research as part of its work in advance of the Partnership Assessment meetings.

**PSE2 – evaluation and findings.** The Partnership considered the draft PSE2 Report that details the findings from the second round of PSE (November 2010 to February 2011). The Partnership's independent evaluators presented their report on the work of the Partnership and PSE2, expressing overall satisfaction with the work. In the light of discussions on the day, a set of draft responses to the PSE2 report will be considered for sign off at the 24<sup>th</sup> May 2011 Partnership meeting.

**The NDA's generic DSSC.** The NDA has published its generic Disposal System Safety Case that covers a wide range of issues involved in developing a repository. The Partnership heard presentations from the NDA and the regulators. The discussion that followed included questions/concerns about the peer review process and the extent to which the option for retrievability was available.

**NWAA Issues Register.** NWAA has developed an Issues Register, identifying 101 safety issues that they believe need to be addressed in developing a GDF. Following a presentation by NWAA, the Partnership heard the NDA's and the regulators' responses to the technical issues raised by NWAA and others. The need for a transparent and visible process for how the issues are responded to was agreed by all parties. The NDA will set up a meeting to discuss a way forward for communicating the NDA's responses to the Issues Register and how this links with managing uncertainties.

For future meeting dates and more information please see the Partnership's website [www.westcumbriamrws.org.uk](http://www.westcumbriamrws.org.uk).

# 1. Introduction

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## 1.1 – Objectives

Specific objectives for the day were to:

- Review the Nuclear Decommissioning Authority's (NDA's) generic Disposal System Safety Case (DSSC) (Task 1b(i)).
- Understand the responses of the NDA and the regulators to the technical issues raised by the Nuclear Waste Advisory Associates (NWAA) and others (Task 1a(v)).
- Consider the potential impacts of a geological disposal facility (GDF) and the recent research results (Task 3b(iv)).
- Reflect on the second round of the Partnership's public and stakeholder engagement programme (PSE2), including the evaluation carried out by the Partnership's independent evaluators, and the key findings in the PSE2 Report (Task 6a(v)).

The full agenda is in Appendix 1.

## 1.2 – Attendance

35 participants<sup>1</sup> attended at The Wave, Maryport on 14<sup>th</sup> April 2011. A full list of those in attendance is in Appendix 2. The meeting was open for the public to observe and 13 members of the public attended.

# 2. Updates

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## 2.1 – Finance

The Partnership's Engagement Package has been signed by the Department of Energy and Climate Change (DECC), and is for £1.1m for 2011/12 with a 6 month review that will lead to a renegotiation if required. Document 106 on the Partnership website ([http://www.westcumbriamrws.org.uk/all\\_documents.asp](http://www.westcumbriamrws.org.uk/all_documents.asp)) sets out the financial situation and will be updated when the accounts for 2010/11 are closed.

## 2.2 – Work Programme – moving towards conclusions

Today's meeting was one of the last to discuss substantive new content. The Partnership then moves into a period of agreeing conclusions and writing the report that will go into PSE3 for consultation. 3KQ are writing a note to all members setting out what will be required during the next six to nine months.

## 2.3 – Technical Review Group

The Technical Review Group (TRG) meets for the first time next week to review and pull together the different work streams of the Partnership's work. They will prepare the ground for the Partnership to draw conclusions during June, July and August 2011.

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<sup>1</sup> Plus 9 from the facilitation team, secretariat and presenters.

## **2.4 – Extra Partnership meeting dates**

There will be an extra full Partnership meeting on 12<sup>th</sup> January 2012 to ensure there is adequate time to adapt conclusions in the light of PSE3. A contingency Partnership meeting might also be booked (to be confirmed) in February 2012 in case it is needed.

## **2.5 – Waste Isolation Pilot Plant virtual site visit**

The virtual visit to the site in New Mexico took place on 9<sup>th</sup> March 2011. A full report can be found on the Partnership website (Document 156).

## **2.6 – Task 5a(iv) – Commitment of Government to sustain the process**

The Steering Group has considered what else could realistically be requested of the Government to provide reassurance of their support for the Managing Radioactive Waste Safely (MRWS) process in West Cumbria. They noted the following: that the process has cross-party support in central government; the principle of voluntarism and the right of withdrawal as set out in the White Paper; and the continued provision of funding for the Partnership's work.

In the light of this, the Steering Group decided that there are no additional reassurances that they can realistically ask from DECC at this stage in the process. However, they also noted that two specific agreements are still pending with DECC on Inventory principles and Community Benefits principles.

## **2.7 – Community Benefits Sub-Group**

The Community Benefits Sub-Group and DECC are continuing to work on defining a set of principles that give reassurance that the community accurately understands the Government's intentions. The principles are due to be discussed at the next Partnership meeting on 24<sup>th</sup> May 2011.

## **2.8 – Documents published**

Since the last Partnership meeting the following documents have been published in the Documents section of the Partnership website at:

[http://www.westcumbriamrws.org.uk/all\\_documents.asp](http://www.westcumbriamrws.org.uk/all_documents.asp).

- 164. Awareness Tracking Survey 3, Ipsos MORI
- 162. CoRWM's View on the Geological Suitability of West Cumbria – 16<sup>th</sup> February 2011
- 156. Report from 'Virtual' Visit to the Waste Isolation Pilot Plant in New Mexico, 9<sup>th</sup> March 2011
- 153. Steering Group Minutes 16<sup>th</sup> March 2011
- 152. Report from Residents' Panel PSE2 January 2011
- 151. E-bulletin 9 – March 2011
- 150.1. Meeting Report 3<sup>rd</sup> March 2011
- 149. Notes from Geological Society Meeting 17<sup>th</sup> February 2011
- 147. Regulators' Views on the NDA's Research & Development (R&D) Programme March 2011
- 146. Review of the NDA's R&D Programme, by Professor Stuart Haszeldine
- 145. Steering Group Minutes 2<sup>nd</sup> February 2011

## **2.9 – PSE Updates**

### **2.9.1 – Opinion Survey results**

Ipsos MORI carried out the third opinion survey on behalf of the Partnership at the end of February 2011. The results show that there has been an increase in awareness of the MRWS process. The number of people who said they had 'heard that the West Cumbria Managing Radioactive Waste Safely Partnership is talking to the British Government about *possibly* locating a GDF somewhere in

West Cumbria' had increased since the first survey in November 2009:

- in Allerdale from 61% to 71%.
- in Copeland from 70% to 75%.
- in Cumbria as a whole from 52% to 58%.

Most of the people who are aware of the discussions also clearly feel they know 'at least a little' about them. There have also been increases in the number of people who say they feel they know 'a fair amount' about the process (now 28% in Allerdale, 37% in Copeland and 20% in the whole of Cumbria).

The number of people saying that they were in favour or opposed to a decision to take part in the search for a site has changed very little between the 3 surveys.

The latest figures show that:

- in Allerdale 52% were in favour and 25% opposed.
- in Copeland 62% were in favour and 19% opposed.
- in Cumbria as a whole 48% were in favour and 28% opposed.

The report of the full survey results is published as Document 164 on the Partnership website.

### **2.9.2 – Residents' Panel report**

The Partnership ran a whole-day focus group of a cross section of West Cumbrian residents. The report has now been published (Document 152) and covers the deliberation and views on: community benefits; how the possibility of siting a GDF under the Lake District National Park changes people's views; and how to manage controversy in the science of facility development.

### **2.10 – Inventory update published**

DECC and the NDA have now published the 2010 UK Radioactive Waste Inventory. Further details are available in Document 166 (Inventory update) on the Partnership's website, and on the NDA's website at <http://www.nda.gov.uk/ukinventory>.

### **2.11 – CoRWM paper on PSE**

The Committee on Radioactive Waste Management (CoRWM) has published its Position Paper on Public and Stakeholder Engagement. Although the section on the Partnership is brief, it is complimentary about the Partnership's PSE work to date.

(See <http://corwm.decc.gov.uk/documentstore/DirectoryListing.aspx?tags=33>, Document 2850 for further information.)

### **2.12 – NDA response to the peer review of its research & development plans**

At the meeting on 3<sup>rd</sup> March 2011, the Partnership heard a presentation from Professor Stuart Haszeldine, commenting on the Nuclear Decommissioning Authority's research and development (R&D) plans. The NDA has completed its response back to Professor Haszeldine, and his further comments/responses will be available within two to three weeks.

### **2.13 – Long-term visioning exercises**

At the meeting on 3<sup>rd</sup> March 2011, it was agreed that the Partnership would briefly explore what experience there is of long-term visioning exercises having been undertaken in overseas projects, as well as what might be appropriate to do later in the process *if* a decision to participate (DtP) is taken. Steve Smith is currently looking into this, and the current view is that it will probably be a valuable thing to do if the process moves forward, but *not* at this stage in the process. A summary note will be circulated shortly.

## 3. Impacts and Perceptions Research

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### 3.1 – Background and overview

Criterion 3b in the Partnership's Work Programme (see Document 13.1) is: 'Whether the Partnership is confident that appropriate possibilities exist to assess and manage environmental, social and economic impacts appropriately if they occur'. In order to address this criterion, the following tasks were identified:

- Task 3b(i) – 'Understand the likely broad impacts (both positive and negative) of hosting a repository, and how they might be mitigated.'
- Task 3b(ii) – 'Define a specification for research to assess the likely extent of impacts.'
- Task 3b(iii) – 'Conduct and monitor research to assess impacts.'

Additionally, PSE1 also generated a further issue for the Partnership to address: 'Review what transport infrastructure would be required and the associated lead-in time, so that the Partnership can reach a view on how the delivery of transport infrastructure could be staged over time' (see Document 73, Partnership Response to Round 1 of Public and Stakeholder Engagement).

In order to address these tasks, the Impacts Sub-Group developed a specification for and commissioned research to inform the Partnership of the likely extent of impacts of the development of a GDF in West Cumbria, including the perceptions held by residents, visitors/tourists and business/investors. The aim of the meeting today was to address Task 3b(iv): 'To consider the results of this research and take a view on their acceptability at this stage'.

The Partnership heard the following presentations:

- **Stewart Kemp, Impacts Sub-Group member and Partnership member from Cumbria County Council** – outlining the work of the Impacts Sub-Group and the specification of the research that was commissioned.
- **Rob Hickey from GVA** – providing an overview of the key findings from the research that they carried out.

The presentations were supported by Document 163, the final Impacts Sub-Group Report, which includes:

- An overview of the work and remit of the Impacts Sub-Group.
- The 'Schedule of Potential Impacts to be Assessed'.
- A summary of the GDF Impacts perceptions research carried out by GVA.
- The NDA's transportation briefing.

Full copies of GVA's report (including an executive summary) are available to download from the Partnership website (Document 168), and can also be provided on CD or in hard copy.

The presentation slides are provided below, followed by a summary of the questions and discussion that followed.

## Presentation 1 – Stewart Kemp from the Impacts Sub-group

**GDF Impacts Sub Group Report**

**West Cumbria MRWS Partnership**  
14 April 2011

Stewart Kemp, Cumbria County Council

westcumbria:mrws

**The Task**

Partnership Work Programme Task 3b:

"Whether the Partnership is confident that appropriate possibilities exist to assess and manage environmental, social and economic impacts appropriately if they occur."

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**The Task**

Partnership Work Programme Task 3b(i):

"Understand the likely broad impacts (both positive and negative) of hosting a repository, and how they might be mitigated ."

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**The Task**

Partnership Work Programme Task 3b(ii):

"Define a specification for research to assess the likely extent of impacts ."

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**The Task**

PSE1 generated a further issue for the Partnership to address:

"Review what transport infrastructure would be required and the associated lead-in times so that the Partnership can reach a view on how the delivery of transport infrastructure could be staged over time"

westcumbria:mrws

**What we did**

**Prepare a Schedule of Impacts to be Assessed** and seek NDA and Environment Agency Assistance in its completion (Report Appendix A)

**Commission GVA** to research the perception of residents, visitors and business/investors towards GDF development (Report Appendix B and GVA presentation to follow)

**Ask NDA to brief** on transport impacts (Report Appendix C)

westcumbria:mrws

## Presentation 2 – Rob Hickey from GVA



**Impact of a Nuclear Waste Repository Facility on Perceptions of West Cumbria**

**Summary Findings**

Managing Radioactive Waste Safely Partnership  
14 April 2011

westcumbria:mrws

[gva.co.uk](http://gva.co.uk)



**To cover...**

1. Aims and objectives
2. Approach
3. Residents perception
4. Tourists perception
5. Business and investors perception
6. Lessons from elsewhere
7. Conclusions

2



## 1. Aims and Objectives

- Exploration of the perception of a potential Geological Disposal Facility in West Cumbria
- Research should cover existing and future residents, businesses and visitors
- Understand perceptions in terms of:

| <b>Place</b>   | <b>Prosperity</b>  | <b>People</b>  |
|--|--|--|
| - Quality of Life<br>- Property Market<br>- Services<br>- Accessibility<br>- Environmental<br>- Identity | - Employment<br>- Economic Growth<br>- Tourism<br>- Skills | - Population<br>- Demographics<br>- Health & Wellbeing<br>- Community Cohesion |

- Considering the:
  - Pre-development phase
  - Construction phase
  - Operational phase

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## 2. Approach

- **For residents:**
  - An on-street survey of **377 residents** of West Cumbria
  - 5 residents focus groups
  - 8 interviews with local property agents and registered social landlords (RSLs)
  - Focus groups with the police and health professionals
- **For visitors:**
  - An on-street survey of **363 visitors** across Cumbria
  - 16 structured interviews with tourism attractions, representative groups and stakeholder organisations discussing similar themes.
- **For businesses and investors:**
  - Over 20 face-to-face and telephone interviews with business representative organisations
  - 7 business workshops attended by over 100 organisations
- Majority of research was undertaken in February 2011, before the events that took place in Japan

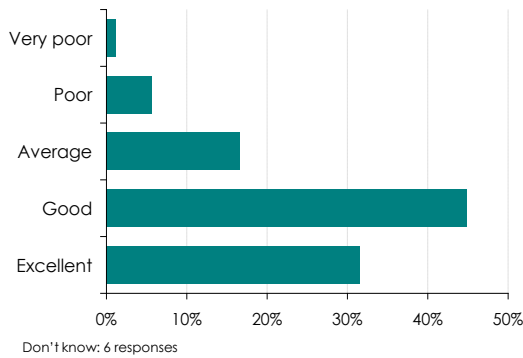
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### 3. Residents perception Key findings – quality of life

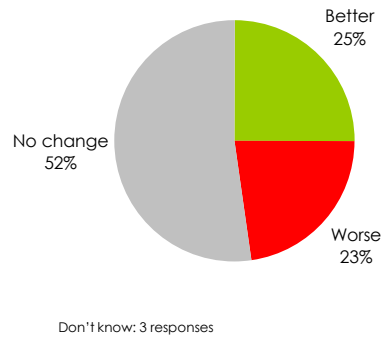


- Overall, current perception of quality of life is strong, and opinion is divided as to how the GDF will influence this.

Current quality of life?



Impact of GDF?



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### 3. Residents perception Key findings – quality of life



- Residents of Workington, Cleator Moor, Egremont and Cockermouth were most **positive** in relation to the impact on quality of life
- Residents of Maryport, Wigton and Keswick were the most **negative**, in Keswick almost half of respondents took the view that the GDF would be a bad influence on quality of life
- Responses in Whitehaven were, on average, neutral.

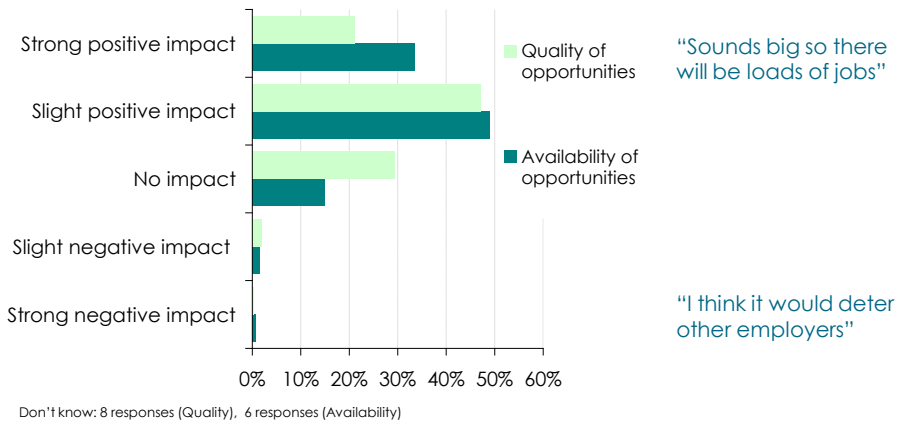


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### 3. Residents perception Key findings – employment



- Perceived impact on the availability and quality of employment was overwhelmingly positive
- Over 80% believe there would be more jobs, and 70% believe they would be better jobs



"Sounds big so there will be loads of jobs"

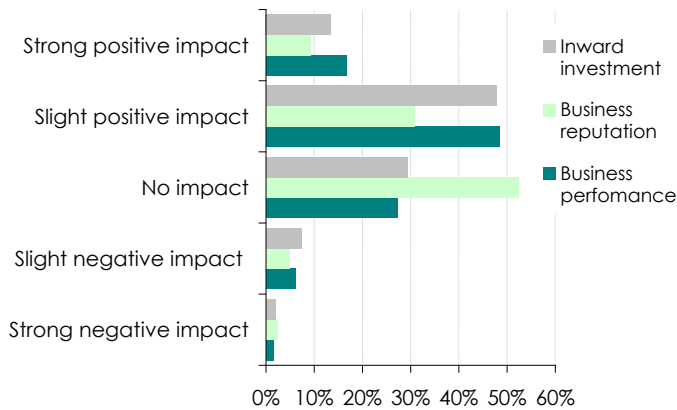
"I think it would deter other employers"

7

### 3. Residents perception Key findings – business and economy



- Perception of the impact on businesses was generally positive
- Over 65% expect an increase in business performance, 60% an increase in inward investment and 40% improvement in the reputation of local businesses



"Has to be a good thing if more money to spend"

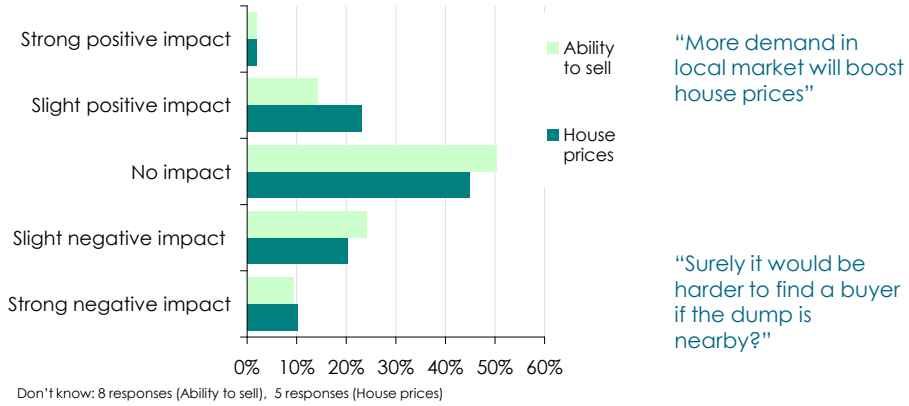
"Dump of the country – why is this good for business?"

8

### 3. Residents perception Key findings – housing



- Just under half the sample thought that the GDF would have no impact on house prices, although 1 in 10 believe there will be a strong negative impact.
- As many think that prices will go up as think they will drop, but ability to sell is a bigger concern, with 33% believing that homes will be more difficult to sell.

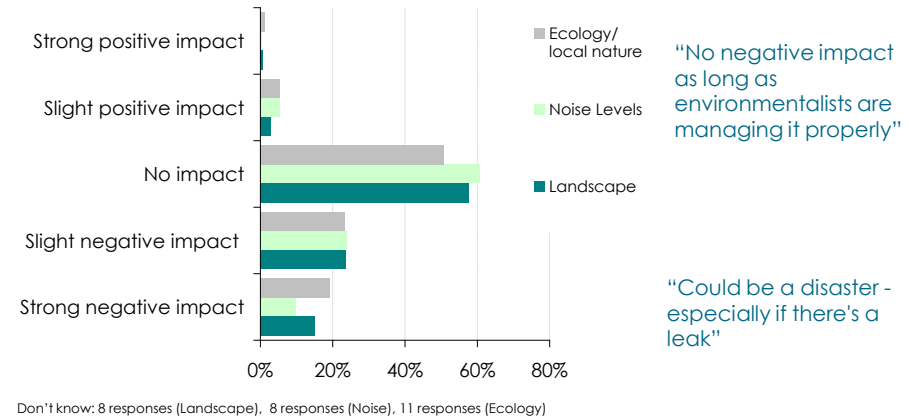


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### 3. Residents perception Key findings – the environment



- Whilst over half of the sample foresee no environmental impact, 40% have concerns
- Perceived impact on ecology, noise and landscape are all similar: those who felt that one would be impacted typically thought all three would be impacted

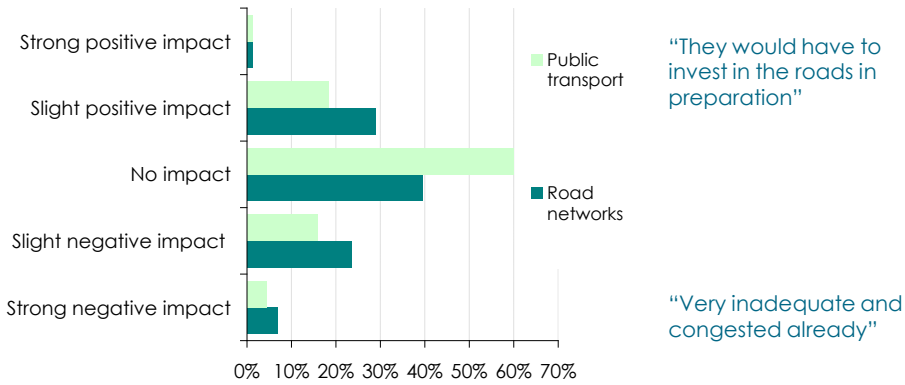


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### 3. Residents perception Key findings – transport and access



- Around as many perceive a negative impact on roads (through increased congestion) as a positive impact (expecting the necessity to invest)
- The impact on public transport is mainly neutral



"They would have to invest in the roads in preparation"

"Very inadequate and congested already"

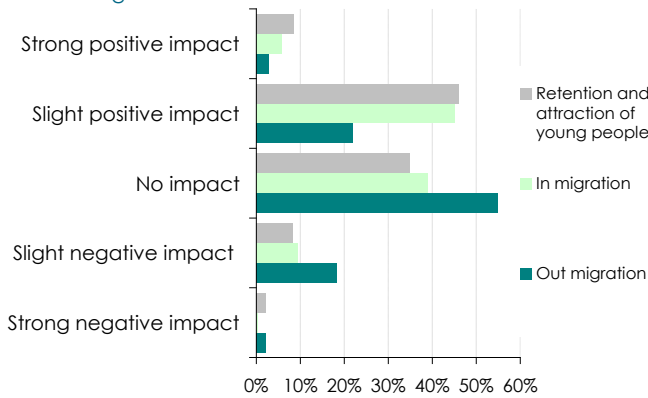
Don't know: 9 responses (Public Transport), 8 responses (Road networks)

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### 3. Residents perception Key findings – migration and retention



- A strong positive perception of the way that the GDF will help retain and attract young people
- 25% think it will lead to reduced out migration and 50% to increased in-migration



"It is a reason to stay and people will be attracted by jobs"

"The fear factor means some people might leave"

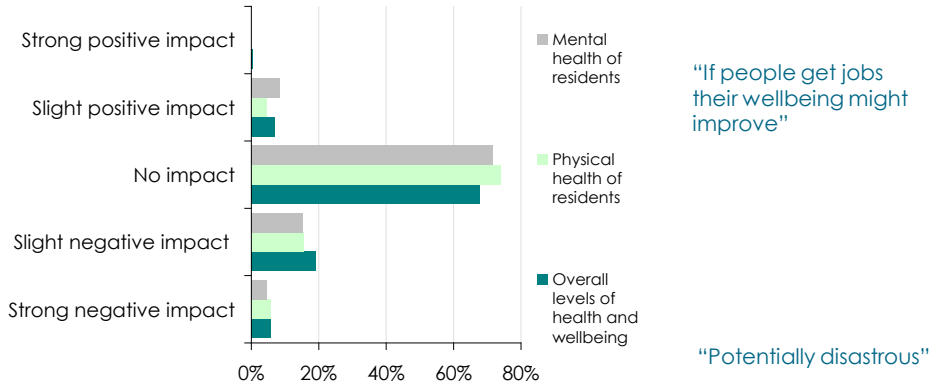
Don't know: 12 responses (Young people), 15 responses (In migration), 14 responses (Out migration)

12

### 3. Residents perception Key findings – health impacts



- Approximately 70% of our sample perceived no health impact of the GDF
- Around 25% perceived a slight or strong negative impact



"If people get jobs their wellbeing might improve"

"Potentially disastrous"

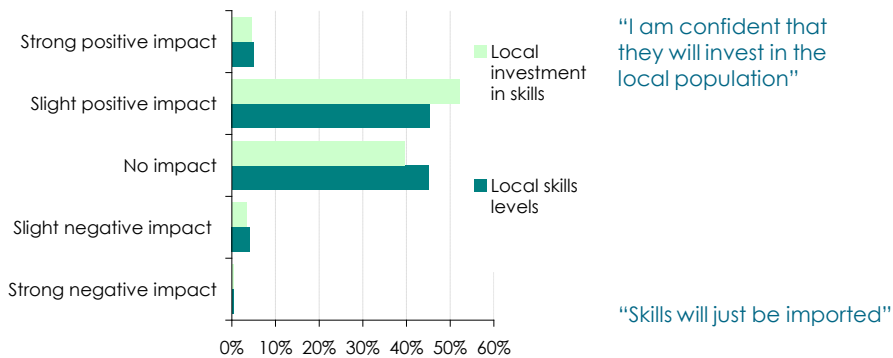
Don't know: 11 responses (Mental Health), 14 responses (Physical Health), 8 responses (Overall)

13

### 3. Residents perception Key findings – skills



- Half of the sample saw the GDF as being a catalyst for local skills development, with more investment in young people



"I am confident that they will invest in the local population"

"Skills will just be imported"

Don't know: 17 responses (impact), 12 (investment)

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### 3. Residents perception



#### Other findings

- The overwhelming majority of respondents perceived **no impact in terms of community cohesion and crime**.
- Whilst most people expect **no impact on public services**, more thought they would improve than weaken – linked to the necessity of investment.

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### 3. Residents perception



#### Focus group headlines...

##### Rural community

- Limited awareness of the MRWS Partnership and the process
- Worries around impact on landscape, property and land prices, ability of infrastructure to cope and possible negative effect on the growing tourism sector in West Cumbria.
- Perception that no benefits are created for local people
- Significant concern over risk and previous alleged contamination from Sellafield.
- Belief that West Cumbria has a negative reputation due to nuclear industry.

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### 3. Residents perception

#### Focus group headlines...



#### Young People

- Expectation of jobs and training provision
- Concern that the nuclear industry will be their only option in future.
- Very limited concerns regarding risk and safety as accustomed with Sellafield

#### Older People

- A perception that local people still don't fully understand the scale of GDF or the process being looked at
- The site is an important factor in terms of perceptions
- West Cumbria still bears the scars of limited investment in housing, health and infrastructure
- Concern that the previous 'boom and bust' pattern will be repeated as seen in Egremont in the 1980's

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### 3. Residents perception

#### Focus group headlines...



#### Property Agents and RSLs (current)

- Stimulate housing demand in coastal areas and near associated industries
- Construction workers will concentrate in Whitehaven and Workington, and will boost short/medium term demand for mid-level rental accommodation
- Dampen lifestyle in-migration in the Central Lakes
- Overall economic benefits – perceived that this will stimulate local demand and enable release of development sites and housing land.
- Job creation may also enable increased owner occupation and a reduction in RSL waiting lists

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### 3. Residents perception

#### Focus group headlines...



#### Police

- Potential to increase the population by 10%.
- Potential for tensions between local residents and construction workforce
- Capacity will be an issue due to budget cuts. Discussions required between Cumbria Police and DECC/Home Office around funding formulas.
- Infrastructure is a serious concern particularly increased volumes of traffic on unsuitable roads.
- Many of the potential risks (e.g. environmental protest, terrorism, traffic) can be mitigated if they have sufficient time to plan.

#### Health professionals

- No direct health concerns
- Community would actually get healthier if employment levels rose and people were happier
- Increased demand due to the population rise would be manageable if there was time to plan.

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### 3. Residents perception

#### Summary



- No general consistent view
- 77% felt that the biggest advantage was employment creation
- Largest disadvantages: environment (18%), effect on tourism (16%) and health implications (14%).
- Young people were generally positive, seeing the benefits of high quality sustainable jobs as key. Older people were more cautious, remembering the disruption of the construction period decades ago
- The rural population were negative, seeing a direct impact on the landscape and on rural activities and tourism.
- Consistent views:
  - Need for adequate road, rail and housing infrastructure
  - Need to ensure that jobs and supplier contracts are channelled to local people and businesses
  - Continue to engage with the community
  - Allow sufficient time and resources to plan public services carefully.

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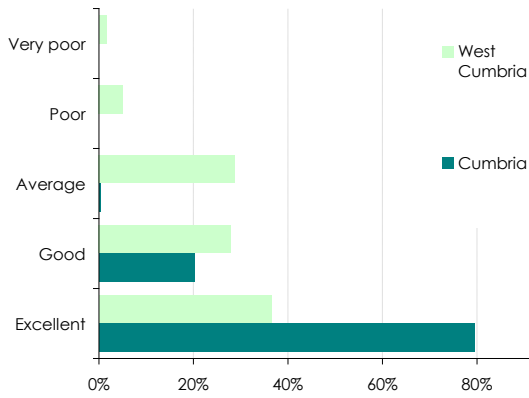
## 4. Visitors perception

### Key findings – quality of destination



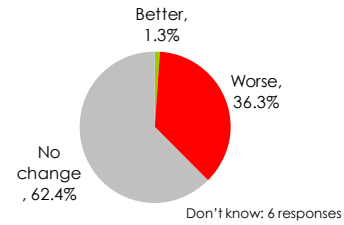
- From a strong starting point, over half the sample believe that the GDF will have no impact on destination. Over a third however, feel it will have a negative impact.

#### Current quality of destination?



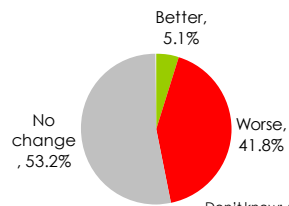
Don't know: 5 responses

#### Impact on Cumbria?



Don't know: 6 responses

#### Impact on West Cumbria?



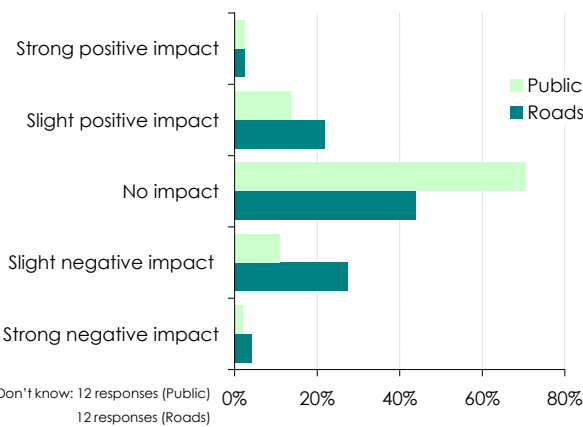
Don't know: 6 responses

## 4. Visitors perception

### Key findings – access and transportation



- Little impact is perceived in terms of public transport, whilst around 3 in 10 visitors believe that roads would be adversely affected by the GDF
- Those believing that there would be improved access and transport infrastructure suggested that investment would be a necessity if the facility was created



Don't know: 12 responses (Public)  
12 responses (Roads)

"It could help improve transport as the Council would have to invest"

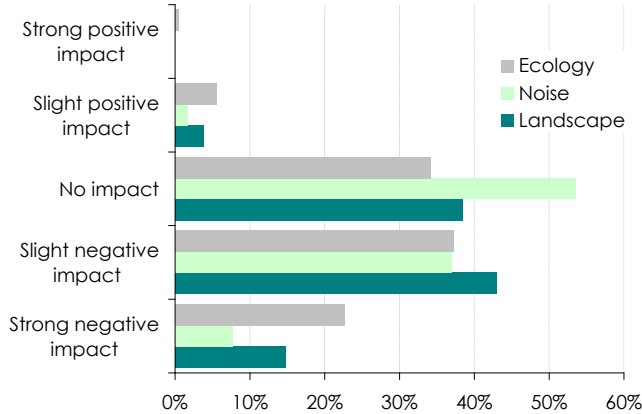
"There is bound to be more traffic coming and going to the site - the roads are already congested in Cumbria"

22

## 4. Visitors perception Key findings – environment



- Almost 60% of visitors surveyed felt that the GDF would have a slight or strong negative impact on ecology and landscape. 40% thought noise would be an issue.



"I assume the site would be constructed sympathetically"

"Unnatural intrusion into a landscape and habitat noted for natural beauty and wildlife"

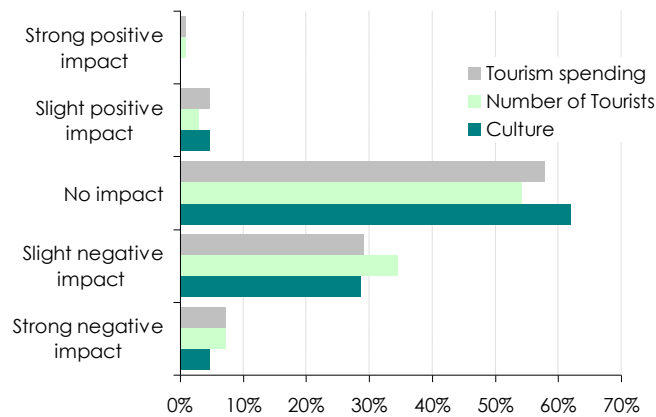
Don't know: 12 responses (Ecology)  
11 responses (Noise)  
8 responses (Landscape)

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## 4. Visitors perception Key findings – tourism



- 4 in 10 visitors felt that the GDF would negatively impact on the number of tourists and 36% believed that spend would decrease
- A third of those surveyed felt that the cultural heritage of Cumbria would suffer



"Potential for overseas fact finder visits"

"I think if tourists are ill-informed they may not wish to visit a 'nuclear site'."

Don't know: 12 responses (Tourism Spend)  
14 responses (Number of Tourists)  
12 responses (Culture)

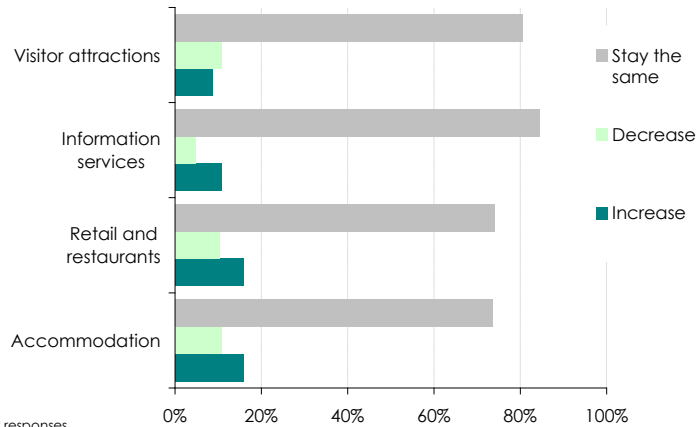
24

## 4. Visitors perception

### Key findings – availability of key services



- Around ¼ of the sample perceived no impact on any key tourism service
- Over 15% suggested that the GDF would bring with it the demand for increased accommodation, retail and restaurants



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## 4. Visitors perception

### Focus group headlines...



- General acknowledgement that we need to take responsibility for our waste
- Location dependent – if tourists have to pass it on their journey or their experience is affected then this will have an impact.
- Media will have an impact nationally and internationally in raising awareness of nuclear focus even pre-development.
- Important to protect the 'brand' of the Lake District
- Those representing hoteliers, camping and caravanning operators are strongly against any facility – on economic and environmental grounds
  - 'nuclear anything' creates a ripple effect
  - The value of tourism outweighs the value of nuclear
  - People will be in constant fear of terrorism and potential leakages
- Construction period will have the most significant impact in terms of the noise, disruption & landscape disturbance.

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## 4. Visitors perception

### Focus group headlines...

- Potential to extend the 'footprint' of the nuclear industry into non-coastal areas resulting in negative impacts on tourism and job losses.
- May affect current efforts to develop the tourist offer in West Cumbria and encourage new visitors to the Central Lakes.
- Transport infrastructure improvements are essential, and improved accommodation for contractors may provide a legacy for developing tourism in West Cumbria.
- Lack of faith in the 'Authorities' to deliver a safe and secure facility – and is this now obsolete technology?
- People are not getting the level of information they require to make an informed decision / take a view

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## 4. Visitors perception

### Summary

- General concern amongst visitors, businesses operating in the tourism industry and wider stakeholder organisations
- 48% of tourists referred to employment creation and the benefits to the economy
- Stated 'largest' concerns included the impact on the environment (24%), health risks (23%) and the impact on the tourism industry (19%). 4 in 10 people think the area will be a worse place to visit
- The strength of perception is driven by:
  - the choice of a location for the GDF and the relationship between this and core visitor areas
  - the influence of the media and the way that communication in relation to the GDF is managed the local tourism 'brand' protected
  - the strength of partnership working and engagement with key stakeholders and representative groups

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## 5. Business / investor perception

### Key findings – existing businesses



- No overall consensus on the extent to which a GDF will create direct additional jobs for local people:
  - number and quality of employment?
  - extent to which labour will be imported?
- Providing that the jobs are there, businesses agree that this offers a huge opportunity
- Need to develop the capacity of existing businesses to be able to engage in the supply chain.
- There needs to be investment in skills in the form of tailored courses or apprentices programmes

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## 5. Business / investor perception

### Key findings – potential investors



- Part of a series of major schemes – needs to be joined up
- Potential to tie the GDF closer to other proposals: e.g. New Build and the University of Manchester Dalton Research Institute
- Create a coherent 'cradle to grave' sector rather than the development of a 'dump' in isolation.
- Will attract a lot of negative publicity which will need to be managed
- Supporting infrastructure is key to this development and that the existing transport network is not fit for purpose
- Further opportunities to development related industries around the ports, roads, rail and broadband provision.

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## 6. Lessons from elsewhere



- Six benchmark projects have been reviewed to understand how public perceptions change over time, appreciate how consultation with the public can influence opinion and explore lessons learnt:
- Headlines:
  - Areas with a strong nuclear or industrial heritage will be more hospitable but that support should not be taken for granted
  - Open, honest and consistent communication is important in the process.
  - Rapid response to public concerns can help build faith in the process.
  - The technology proposed should be made clear and all other options for consideration presented.
  - Once works begin, the engagement process needs to be maintained and monitored

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## 7. Conclusions



### Place

- **Location** of the site is a key determining factor
- **Geographical variance** in perception of impact on quality of life
- **Environmental impacts** are a key area of concern amongst visitors
- **A positive impact on the road network** is perceived where individuals expect investment as a result of the development

### People

- **Retention of young people** is perceived to be a positive impact with a link to skills development and availability of employment.
- This also leads to a perception that **out-migration will reduce** and in-migration will increase.
- **Perceptions of negative impacts on health are limited to visitors** – this is linked to existing experience of living in proximity to Sellafield.

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## 7. Conclusions



### Prosperity

- **Economic benefits are perceived as potentially significant** in terms of job creation and quality
- But how many jobs? And will they be local?
- Concern that **benefits will accrue during the construction phase with subsequent stagnation** when the site is operational.
- Biggest perceived **negative impact on tourism** is during pre-development and construction phase
- A perception that negative impacts on tourism will be largely **media-driven**.
- Diversification is constrained by **accessibility and infrastructure** – not by a negative image of the nuclear industry.
- **Infrastructure improvements** are perceived to be a key outcome of the development and that this will drive business growth.

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## 7. Draft conclusions



### Additional Findings

- **No significant consensus** of opinion across the three groups – perceptions are very much based on the individual.
- **Limited awareness** of the MRWS Partnership and a request for more information on the key issues to enable informed decisions to be made.
- Some concern expressed that this is a **'done deal'** and that local people do not fully understand the implications of this.
- **Partnership working** will clearly be crucial

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**The questions and points of discussion that followed the presentations are summarised in 3.2 – 3.13 below.**

### **3.2 – Impact of the debate/discussions about potentially hosting a GDF, particularly with regard to the food and drink industry**

There was surprise from some members that the research had not factored in the impacts of the debate/discussions about hosting a facility and it was noted that these impacts should not be underestimated. These were called 'pre-development' impacts.

Particular mention was made of the importance of the food and drink sector to the development of industry in Cumbria as a whole, and references to previous impacts on this industry, particularly with regard to the foot and mouth outbreak, were made. There was some suggestion that if there is a decision to take part in the search for a site, mitigation measures would need to be considered to take into account adverse impacts on this sector while discussions are ongoing.

It was acknowledged by the Impacts Sub-Group that this had not come through particularly strongly in the work that they undertook, and it was agreed that if the process moves forward it should be considered.

It was noted by the presenter from GVA that, whilst food and drink was not separated out in the research, the responses from the food and drink businesses that they spoke to were similar to those of the rural industries that they had commented on specifically.

There was a reminder that the Community Benefits Sub-Group is very mindful of the impact of the ongoing discussions, and that this issue has informed some of the work that it has been doing around Community Benefits principles and staging of benefits. These areas will be discussed/negotiated with the Government, and the Partnership will be able to discuss this further when the Community Benefits Sub-Group reports on its work.

The Environment Agency (EA) also noted that the British Geological Survey (BGS) screening study of West Cumbria screened out areas containing aquifers. They reiterated that the EA has a statutory responsibility for the protection of groundwater resources, and noted that they are aware of the need for them to engage with the key stakeholders on these issues during the siting process.

### **3.3 – Responses from the tourism industry**

Cumbria Tourism noted that they were a bit surprised by the reaction in the report from the tourism industry, as they have not picked up on the same level of concern about the presence of the nuclear industry in West Cumbria in the work that they have done.

They stated that their key issue is the protection of the Lake District brand, which is different from, and separate to, the perception of Cumbria, which is seen to sit alongside the presence of the nuclear industry. It was acknowledged that this distinction may be artificial to people who live and work in Cumbria, however, the key issue is about managing perceptions held by people nationwide.

In relation to the points made in 3.3 above, it was reiterated that, if the process moves forward, management of the media and the press is going to be key in terms of managing people's perceptions, especially those from outside the county, as that is where the real damage to the tourism industry could come from. It was also noted that Cumbria Tourism are using 'Western Lake District' as the brand in developing tourism in Western Cumbria.

GVA noted that a lot of tourism industries in West Cumbria made reference during the research to the coastal area being a "fledgling" tourist market which is not well known. Therefore, the key issue was about how to manage promoting West Cumbria as a place to visit alongside a potential GDF. It was also noted that a lot of tourism industries did not object outright to a GDF and saw the need for a balance. It was also confirmed that GVA did not talk to tourism industries outside of West Cumbria.

It was agreed by some that, in relation to 3.2 above, not enough is being done to address the impacts of the debate and it was acknowledged that raising the profile of the issue in itself can have a damaging view on perceptions, visitor numbers etc.

### **3.4 – Communication**

There was a discussion about the way that the Partnership communicates, and the level of information being provided. It was acknowledged that, whilst a lot of people think the level/amount of communication that is being done is adequate, one or two think that the Partnership does not do enough mass communication or make enough use of broadcast media.

In addition to the points raised above regarding the impacts of the current debate/discussions, it was also noted that the issue of people believing that it is a 'done deal' needs to be addressed. Cumbria County Council noted that, as far as they are concerned, this is not the case, and reiterated that public opinion will inform the decision. They highlighted the need for the debate, and the information that is provided to inform this debate, to be "sophisticated enough".

The presenter from GVA agreed with this, and also noted that people need/want more *specific* information in PSE3 including e.g. more detail about how big a facility would be, and the levels of employment that constructing and operating a GDF would actually create.

### **3.5 – Impacts in relation to proximity to a facility**

It was suggested that it might be useful in Stage 4 of the MRWS process, to try to measure the affect on tourists' perceptions in relation to the distance between a tourist facility and the location of a GDF.

### **3.6 – Long-term potential for visitor facilities**

It was suggested by one member that, as the Sellafield Visitor Centre has closed down, and given the complexities that are involved in trying to organise visits to/tours of facilities such as Sellafield and the Low Level Waste Repository (LLWR) at Drigg, there is real long-term potential for tourism in developing a place to visit, especially if it is designed to look much more widely at all nuclear-related/environmental issues together.

The NDA agreed with this, and noted that a multi-purpose facility and visitor centre has been developed at Bure in France which caters for a number of different events and brings people in for many different reasons e.g. conferences, educational facilities, school science projects etc. There is also a separate technology centre which people can visit which demonstrates the technical equipment that will be used in the disposal facility. It was suggested that the Partnership members taking part in the upcoming visit to Bure could make note of what is happening with this.

### **3.7 – Strategy for working with the media**

In relation to the points made in 3.3 above, it was reiterated that, *if* the process moves forward, management of the media and the press is going to be key in terms of managing people's perceptions, especially those from outside the county. It was acknowledged that inaccuracies and bias also need to be challenged when they occur, and that there needs to be a strategy to deal with this in order to try to provide a more balanced view and put across the counter-arguments.

### **3.8 – Figures on employment**

It was noted that the research made reference to a study on employment opportunities, and it was suggested that it would be useful to have this in time for PSE3. The NDA confirmed that they are currently finalising a piece of work on the jobs that would be generated by GDF development, and that firm figures will therefore be available within about a month, and certainly in time for PSE3.

### **3.9 – Concerns re safety**

Clarification was sought about the extent to which the research had identified concerns re safety. The presenter from GVA confirmed that concerns re safety were mainly expressed by visitors rather than residents, although there were higher levels of concern in the rural community (see slides 16, 17, 26 and 27 above).

### **3.10 – Further information re transport movements**

Cumbria Tourism noted that they were a bit disappointed with the information on transport in Document 163 that had been provided. They acknowledged that it is difficult to predict the scale of transport movements at this early stage, but requested whether some more generic work could be done including e.g. an analysis of overseas facilities to assess potential impacts.

The NDA confirmed that the Environmental Impacts Assessments (EIAs) for other countries could be looked at, together with provision of estimates for the UK of the number of transport movements per week/month and when those might happen. It was noted that EIAs are developed for specific sites and inventories (e.g. transport movements might nearly all be by road, sea or rail depending on location), and any information provided could therefore be misleading. However, it was agreed that it would be possible to provide some more generic, quantitative information.

It was agreed that the NDA and Cumbria Tourism should, in liaison with the Impacts Sub-Group, discuss what information has already been provided to the Partnership and decide what further information, if any, is required.

There was a reminder from the EA that the issue of the regulation of transport infrastructure has been raised previously. The responsibilities for transport infrastructure are split between the Department for Transport (DfT) and other organisations, e.g. for rail they lie with the DfT, the Office for Rail Regulation and Network Rail (see Document 36.1 for further information). The DfT's policies for the national transport infrastructure are currently under review. Implementation of such policies is, in general, through the planning system.

### **3.11 – Current situation in Japan**

Following the recent/ongoing situation at the Fukushima Plant in Japan, a question was asked as to whether there was anything in the research, or any subsequent changes of thought, as to the risks being greater or less with waste being stored above ground (as at present), or disposed of underground

The presenter from GVA confirmed that all of the Impacts research was carried out before the incident in Japan. He also noted that a lot of people responded to the questions on the basis that they assumed a GDF would be safe, but many of those who were against it tended to ask questions about technology and research into options. He suggested that it would be useful to do more to communicate issues such as this, including what the options for dealing with the waste are, what scientists think are the best options and the relative merits of each.

CoRWM stated that in their work there were two fundamental options, which were to either maintain surface storage or dispose of the waste underground. One of the key issues regarding surface disposal was the lack of control if the current institutional framework broke down and the material was left without the operators or regulators to maintain it safely. This was a major issue which led to CoRWM's first recommendation to opt for geological disposal, subject to ongoing R&D (see CoRWM Document 700, CoRWM's Recommendations to Government, available via the Partnership website in the External Documents section or CoRWM's website at:

<http://corwm.decc.gov.uk/documentstore/AdvancedSearch.aspx?term=&tags=&urn=700&fromDate=&toDate=&alpha=>).

It was reiterated by a Partnership member that, given that the majority of the country's higher level waste is already at Sellafield, the Partnership needs to be picking up on the fact that the issue is about West Cumbria hosting a repository *in comparison to* what's already there. It was agreed that this should be noted for future communications activity.

### **3.12 – The need for more in-depth research if the process moves forward**

It was acknowledged by the Impacts Sub-Group that the recent research was quite high-level and if a decision to participate in the next stage of the MRWS process is taken, there will be a need to carry out much more in-depth research into several of the issues that had been raised.

### **3.13 – Agreements and way forward**

It was agreed that the work of the Impacts Sub-Group (as set out in the Work Programme, see Document 13.1 and Document 163 for further details) has been satisfactorily completed at this stage of the process, although this is subject to the assessment meetings on this criterion, the outcomes of PSE2 and the possibility of further input on transport movements from the NDA.

A group of Partnership members are taking part in a visit to the facilities at Bure in France, and will provide an update to the Partnership afterwards.

## 4. PSE2 – Key Findings and Questions for the Partnership

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### 4.1 – Background and overview

The second round of the Partnership’s public and stakeholder engagement programme (PSE2) took place from 8<sup>th</sup> November 2010 to 11<sup>th</sup> February 2011. The PSE Sub-Group has developed a fully collated and analysed report of all of the strands of activity undertaken during this period, and the draft PSE2 Report (Document 157) was circulated to Partnership members in advance of the meeting.

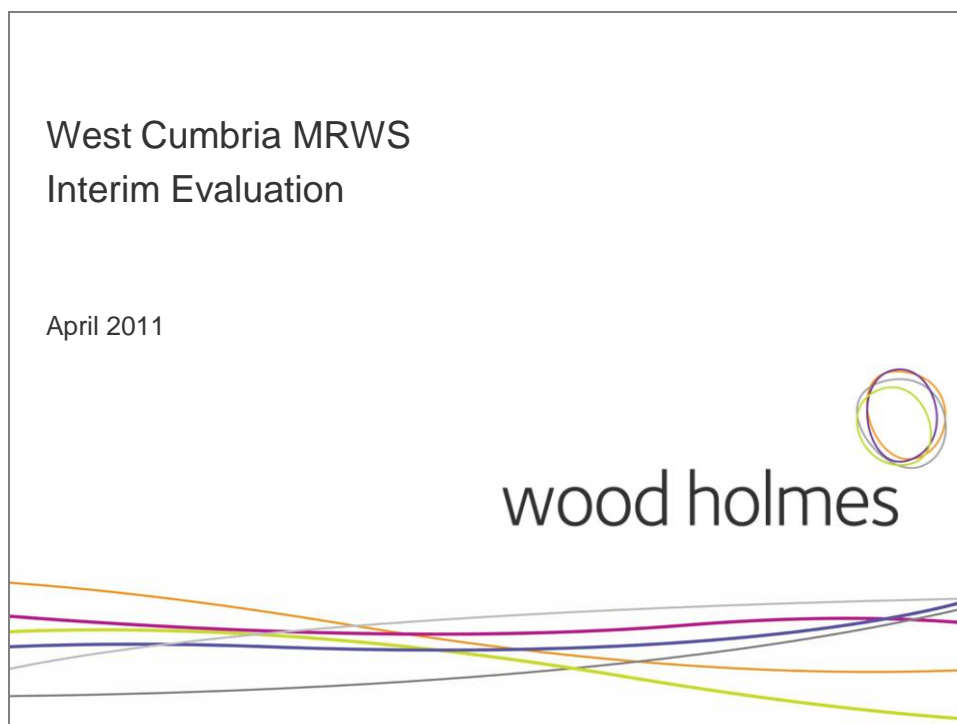
The Partnership heard the following presentations:

- **Gareth Powells from Wood Holmes, the Partnership’s independent evaluators** – providing an overview of their evaluation report on the work of the Partnership and PSE2 in particular, supported by their Interim Evaluation Report (Document 158).
- **PSE Sub-Group** – providing an overview of the main ‘headline’ findings, and key questions for the Partnership arising from the draft PSE2 Report (Document 157).

Following these presentations, Partnership members were asked to consider and reflect on the output and key findings from PSE2, and consider a series of key questions arising from these findings.

The presentation slides are provided below, followed by a summary of the questions and discussion that followed, and an overview of the responses to the key questions.

### Presentation 1 – Gareth Powells, Wood Holmes



## **Introduction**

Wood Holmes were commissioned to undertake:

- Evaluation and assessment of the operation of The Partnership
- Evaluation and assessment of second phase of PSE work

## **Objective**

- To feed an independent perspective into Steering Group and Wider Partnership based our prior experience and evaluation activities

## **Methodology**

- Attendance at Events
- Data Review
- Stakeholder Interviews
- Reviewing Documented Materials
  - Those produced by The Partnership
  - Literature from elsewhere (academics, practitioners, etc.)

## A 'Wicked' Problem

Issues are complex, ... and depend on political judgement to reach some kind of closure (Bergmans et al, 2006).

- Risks perceived as very high
- Very long timescales
- Uncertainty: Institutional, Scientific, Democratic, Geographic
- Institutional trust is low
- Stakes perceived to be very high
- Cognitive load is high

## Spectrum of Public Participation

The Partnership is active across several modes of engagement across the Spectrum of Public Participation (SoPP)

Inform > Consult > Involve > Collaborate > Empower.

Part 1 of the report deals with the direct involvement and collaboration between stakeholders and decision makers through the operation of The Partnership.

Part 2 deals with how The Partnership informs, consults and involves wider community and stakeholders.

## Operation of The Partnership

### 5 Key strengths

1. The existence of The Partnership as an independent body
2. The appointment of independent facilitators
3. The decision to manage the complexity by imposing a structure based on the criteria
4. Clear and regular acknowledgement of and reference The Partnership limits of stage and criteria
5. The 2 tier structure of The Partnership enables input of observing members without compromising independence

## Responding to Challenges

- Constitutional Issues
  - Partnership, mis-match between name and structure?
- Impartiality – sound despite perceived dominance of Principle Authorities
  - Independent status has been maintained.
  - No sense of pre-determination among members
- Inclusivity:
  - Can be satisfied with efforts to include all parties
  - However: Onkalo PSE Finding
  - Scope for more self-structured, well resourced challenge

## PSE2

- Much has been achieved across various strands spanning the 'Spectrum of Public Participation' (IAP2)
- Inform, Consult, Involve, Collaborate, Empower.
- Focus of PSE2 on 'informing' and 'consulting', with only a small amount of involving communities and stakeholders directly in decision making.
  - This matches Work Programme.
- Reporting from PSE2 is critical to effective involvement.

## Social Media

- Attracted young demographic but in small numbers.
  - Scope for experimentation.
- Tracks PSE activity levels.



## Responding to Challenges

1 / 4 - Reach: Awareness rising, but scope for better informed awareness

- Sufficient breadth of activities
- Would expect diminishing marginal returns on increased investment

2 / 4 - Structure of Engagement

- Mostly well regarded
- Events: Show of commitment can feel like show of force.
- Further scope for self-structured, well resourced engagement



## Responding to Challenges

3 / 4 - West Cumbrian Context

- NIREX remains unresolved, even within Partnership
- Efforts to avoid confusion with other Nuclear projects as a priority in communications (Visuals, direct reference)

4 / 4 - Reporting

- Emphasise this is a critical process
- Well designed checks and balances



## Conclusions

- Positive Headline
  - No 'red flag' and much achieved
  - A well managed, fair and effective body
  - Scope for improvement:

## Conclusions

- Priorities
  1. Involvement: Well resourced, self-structured input from full range of perspectives
  2. Partnership: Addressing issues related to 'partnership'
    - Short and long term responses to both issues
  3. NIREX and disambiguation re. other nuclear projects
  4. Reporting: Creating an effective Final Report
    - Scope for better understanding of authorship implications for members
    - Effective use of PSE2 Report

**The questions and points of discussion that followed this presentation are summarised in 4.2 – 4.12 below.**

#### **4.2 – Clarification re self-structured engagement**

Wood Holmes were asked to provide clarification about the comments made regarding self-structured engagement (see slides on Responding to Challenges above).

It was explained that this issue came up in the following two ways:

- 1) It was apparent that some attendees of engagement events felt that the way that the events were set up and conducted were more about telling than listening. Whilst the Partnership has tried various ways to overcome this, including numerous meeting invitations, some organisations remained dissatisfied with the way that they have been consulted or engaged. This echoes a similar situation in Finland where some organisations also felt that their input had not been sufficiently incorporated into the process and the opportunities that they had to do so were limited.
- 2) With regard to how challenge is brought to Partnership meetings, the evaluation report provides a couple of examples of where peer reviewers or academics have been brought in to bring a wider range of perspectives, but they have been brought in via fairly well-structured or short-term briefs. Whilst this goes some way to addressing the issue, there may be alternative ways to allow it to be done in a more 'self-structured' way. One suggestion is to have, from the outset, a fund for people with alternative perspectives to bid into (e.g. film-makers or scientists) to bring an alternative perspective on their own terms.

Given that there is some dissatisfaction on both of these issues, it is felt by Wood Holmes that there is an opportunity for the Partnership to think about process innovation and more creative ways to achieve the aims.

#### **4.3 – Level of informing**

It was noted by one member that there had been some mixed messages between the evaluation report and the presentations from Wood Holmes and GVA about whether levels of public awareness are acceptable or whether the Partnership is failing to inform adequately.

The presenter responded to say that, in the context of this process being so uncertain and undefined, in the view of Wood Holmes the current level of awareness is about what they would expect for something that is, as yet, so unclear. They also highlighted that the context in West Cumbria can, and does, create some confusion. For example, a lot of people think that they are aware of the process, but they might be confusing it with Sellafield or the LLWR at Drigg. Therefore, more *can* be done, but there is no cause for alarm with regard to current awareness levels.

A further question was asked about the comparators/benchmarks that were used to determine the level of awareness that Wood Holmes would expect.

The presenter acknowledged that this is hard to say as it is such an unprecedented process. They therefore looked at best practice and benchmarks of other organisations/comparators to try to determine whether the Partnership has done enough from a process point of view e.g. in terms of activities, rather than outcomes.

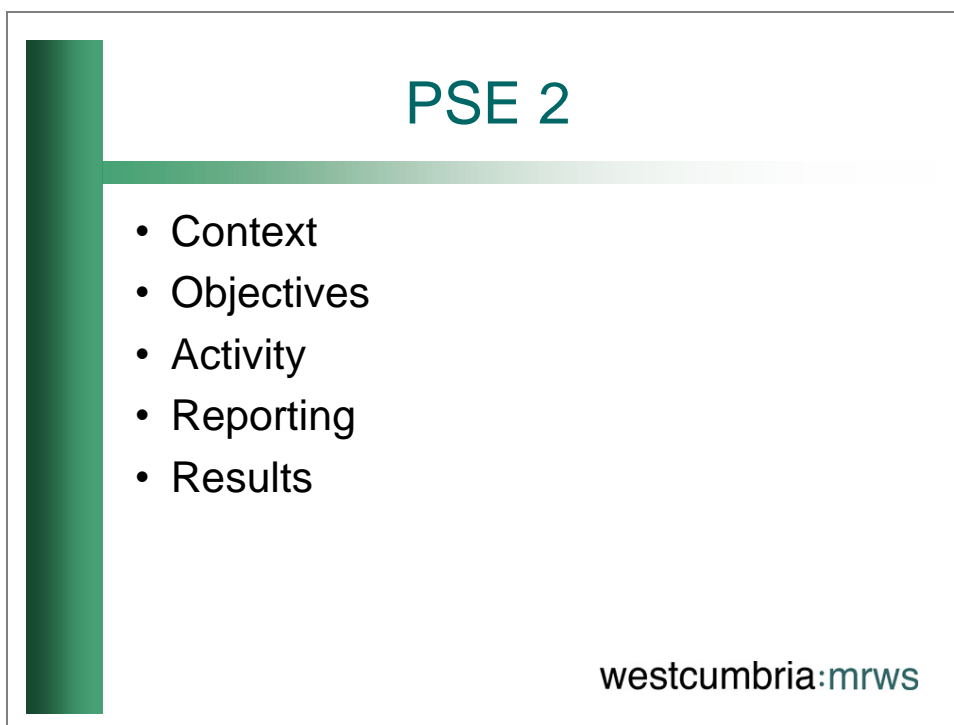
#### 4.4 – Structure of engagement activities

Cumbria Chamber of Commerce noted that they were particularly intrigued by the comments about the structure of engagement and the related point about “show of force” at some events. They highlighted concerns about the process needing to be a genuine consultation and not ending up with a situation “where people are being told what they’re supposed to think”, and expressed an interest in being part of the engagement process with businesses.

#### 4.5 - Nirex

With regard to the issues that were raised about the history of Nirex, including the misunderstandings and perceptions that are still held by many people/members of the public, it was noted that there is still a lack of confidence amongst some Partnership members to be able to explain the differences between what happened in the 1990s and what is happening now. There was a reminder that the Partnership arranged a seminar in November 2010 to raise awareness amongst Partnership members on geological issues, and that this seminar included information about the history of Nirex. Partnership members were encouraged to make use of the information that was gained from this seminar, and perhaps to use it with members of the public as well (see Document 123, Notes from Geology Information Seminar 15 November 2010, and also Document 91, Briefing Note on Why this Siting Process is Different to Nirex).

#### Presentation 2 – PSE Sub-Group



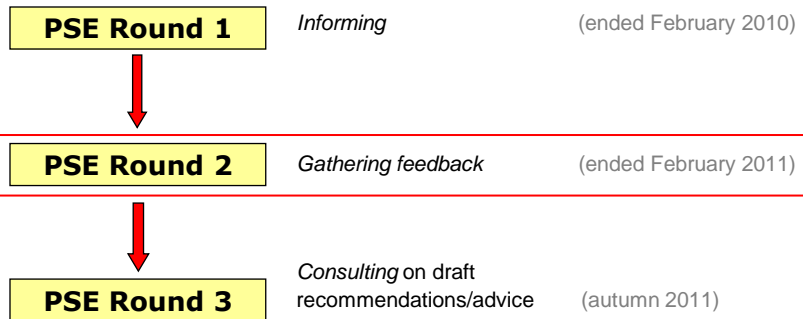
The slide features a dark green vertical bar on the left side. The title 'PSE 2' is centered at the top in a teal font. Below the title, a list of five bullet points is displayed: Context, Objectives, Activity, Reporting, and Results. The logo 'westcumbria:mrws' is located in the bottom right corner.

## PSE 2

- Context
- Objectives
- Activity
- Reporting
- Results

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## 3 parts to one conversation



westcumbriamrws.org.uk **westcumbria:mrws**

## Objectives

- Build understanding of MRWS, inc BGS study
- Seek input:
  - How public views will inform the Partnership
  - Impacts and Community Benefits
  - Community Involvement
- Understand wider issues
- Demonstrate that past input has lead to change
- Provide a response and adapt activity

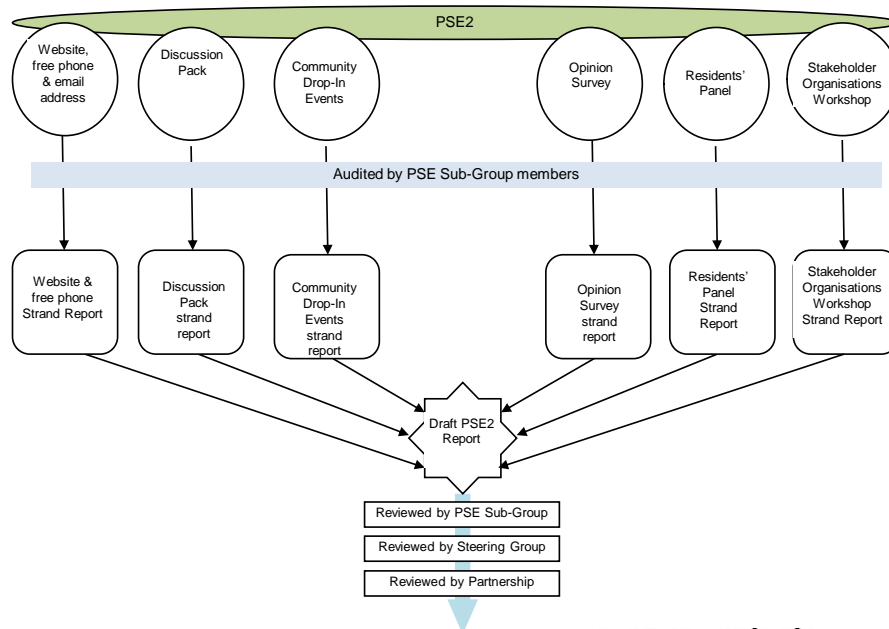
**westcumbria:mrws**

# Activities

- Community Drop-In Events
- Discussion Pack
- Website, 0800, email and letters
- Residents' Panel event
- Stakeholder Organisations Workshop
- Opinion Survey
- Stands at Whitehaven and Workington
- Newsletters (2), e-bulletins, publications
- Advertorials
- Media coverage

➤ *All independently evaluated* westcumbria:mrws

# Reporting



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## PSE2 Report

- Captures the essence of views under the objectives, esp. the 3 consultation **topics**
  - Highlights **issues** requiring a response by the Partnership
  - Suggests **who** is best placed to formulate the response
  - Highlights 5 key **questions** for deliberation today
- (reminder: next mtg we sign off response)

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## Questions for today (1)

1. Have you heard anything in PSE2 that changes your mind that 'net support' is the right quantitative indicator? (see p25)
2. Does the Partnership's work on impacts address the issues raised? (see p29)
3. Have you heard anything that causes you to rethink or amend its principles for community involvement? (see p32)

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## Questions for today (2)

4. Should the opinion survey results be split out according to whether people are screened out by the BGS study? (see p44)

5. Should the opinion survey be changed so that Allerdale and Copeland are treated as separate areas, and residents only surveyed in connection with their area?

*i.e. Allerdale residents are asked whether they support or oppose Allerdale entering the siting process, etc*

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## Questions for today (3)

6. Is there anything else that you think the Partnership should change or do as a result of PSE2?

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Following this presentation, Partnership members were asked to split into small groups to discuss and consider the key questions on the final slides, and summarise their responses on flipcharts. The flipcharts were also displayed throughout the rest of the day in order for attendees to be able to review the responses and add any further comments. Summaries of the responses that were given by the Partnership members who took part in the specific discussions, together with any additional comments that were added during the day, are provided in 4.6 – 4.11 below.

**4.6 – Q1: Have you heard anything in PSE2 that changes your mind that ‘net support’ is the right quantitative indicator? (see page 25 of draft PSE2 report)**

- Overall yes net support is OK but... Geographic boundaries of who is considered – should Cumbria be in?
- Danger of Partnership being seen to 'sell' the GDF: information must balance both pro and anti views.
- Regarding the level of awareness: is the quality and quantity of information sufficient before surveying people?
- Regarding the 'don't knows', a small proportion would be OK but a large proportion would cause problems.
- Should compare the GVA data with the Ipsos MORI data: do they read across? Were there more 'don't knows' in GVA results?

**4.7 – Q2: Does the Partnership’s work on impacts address the issues raised? (see page 29 of draft PSE2 report)**

- Security – impact of security issues arising from GDF development has not been considered in any detail.
- Inventory – in the light of current DECC consultation on plutonium management and events at Fukushima, concern that plutonium might be directly disposed to a GDF and significantly impact on overall inventory volume, and size of GDF 'footprint'.
- Insufficient recognition of wash-over of one major project on another – no further work needed now but should be considered in preparation of final consultation report for PSE3.
- Pre-development impacts need to be recognised in ongoing work around the principles for Community Benefits.
- Consideration of GDF development is impacting in West Cumbria now and this is likely to intensify if MRWS programme progresses to site identification.

**4.8 – Q3: Have you heard anything that causes you to rethink or amend the principles for community involvement? (see page 32 of draft PSE2 report)**

- Principle 3. Underline importance of having sufficient time and resources for learning on the part of new participants, who may know little.
- Principles 1 and 6 need to be thought about together. Technical process for identifying sites should not overwhelm principle 6.
- Need to set out a provisional roadmap for how principles 1 – 6 would be put into effect.
- MRWS name doesn't convey the nature of the siting process.
- Community empowerment is important – fostering and hearing individuals.
- Appropriate people need to be in the driving seat!

**4.9 – Q4: Should the opinion survey results be split out according to whether people are screened out by the BGS study? (see page 44 of draft PSE2 report)**

- Yes split them out. But also need to be aware of the whole county's view.
- Separate them out.
- County level community decision – it affects all of us in terms of the key issue of economy and tourism effects.
- All areas could be affected by a surface facility therefore areas that are screened out should be surveyed just the same and not split out.

It is noted that there are different views expressed under this question, and that further discussion will be required on 24<sup>th</sup> May to agree a way forward.

**4.10 – Q5: Should the opinion survey be changed so that Allerdale and Copeland are treated as separate areas, and residents only surveyed in connection with their area? (i.e. Allerdale residents are asked whether they support or oppose Allerdale entering the siting process, etc.)**

- Yes support focus should be on Allerdale and Copeland.
- Is there an additional split required: the National Park?
- Yes, separate Allerdale and Copeland questions should be asked.
- As long as the question is crystal clear that it is asking only about entering the siting process without commitment, not actually having a facility.
- Also needs to be clear that entering the siting process would not necessarily mean either Allerdale or Copeland hosting a facility.
- OK, but shame to lose the data set consistency from PSE1 and PSE2 surveys, so can we ask both the West Cumbria question and the borough focused question?
- No, question needs to ask about West Cumbria and then responses split by borough. This is because it is likely that a 'West Cumbria' solution would be sought rather than a competitive situation between Allerdale and Copeland should both areas proceed.

Most people, but not everyone, believed that the survey should focus on borough areas. Again further discussion is required on 24<sup>th</sup> May on this point.

**4.11 – Q6: Is there anything else that you think the Partnership should change or do as a result of PSE2?**

- Can we use TV more? It is the primary medium – news features, documentaries etc.
- How do we effectively do the survey? 1200 people is less than a third of 1% of the populace!
- N.B. County authority is final decision maker, via clerk/chief exec approval [sic].

#### **4.12 – Agreement and way forward**

It was agreed that any further comments on the PSE2 Report and responses to the key questions, should be notified to the Programme Manager by Friday 22<sup>nd</sup> April. The PSE Sub-Group will consider all responses and make amendments as required to the report, and further discussion will take place on the topics noted above at the 24<sup>th</sup> May 2011 Partnership meeting, with a view to the final report being signed off on that day.

# 5. The NDA's generic Disposal System Safety Case

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## 5.1 – Background and overview

Earlier this year, the NDA published its generic Disposal System Safety Case (DSSC) that covers a wide range of issues involved in developing a repository. Criterion 1b in the Partnership's Work Programme (see Document 13.1) is for the Partnership to be: 'Satisfied that the NDA's Radioactive Waste Management Directorate (RWMD) has suitable capability and processes in place to protect residents, workforce and the environment.'

The purpose of the agenda item at the meeting today was to review the generic DSSC (Task 1b(i)) and the processes that were used in developing it, and in order to do this the Partnership heard the following presentations:

- **Lucy Bailey, Disposal System Safety Case Manager for the NDA** – providing an overview of the NDA's generic DSSC.
- **Gavin Thomson of the Environment Agency** – providing an overview of the scope and timescales for the regulators' review of the generic DSSC.

Hard copies and DVDs containing different levels of information regarding the DSSC were available at the meeting, and can also be found on the NDA's website (<http://www.nda.gov.uk/aboutus/geological-disposal/rwmd-work/dssc/index.cfm>). The documents include: an introductory leaflet; a 50 page overview document aimed at lay audiences; the main safety case reports which are targeted at the regulators and a technical audience; and the supporting assessment, inventory and design reports and the status reports which are aimed at those who are particularly interested in the status of knowledge on specific technical issues.

The presentation slides are provided below, followed by a summary of the questions and discussion that followed the presentations.

# Disposal System Safety Case – Presentation to MRWS Partnership

Lucy Bailey  
Disposal System Safety Case Manager

14 April 2011



1

## What is a safety case?

- A safety case is a collection of analyses and evidence that demonstrates the required level of safety of a facility, item of equipment or activity.
- Safety cases must be developed to meet regulatory requirements before nuclear operations can go ahead.
- The generic Disposal System Safety Case for a geological disposal facility addresses:
  - packaging of waste
  - transport of waste to the facility
  - construction and operation of the facility
  - long-term environmental safety after facility has been closed.

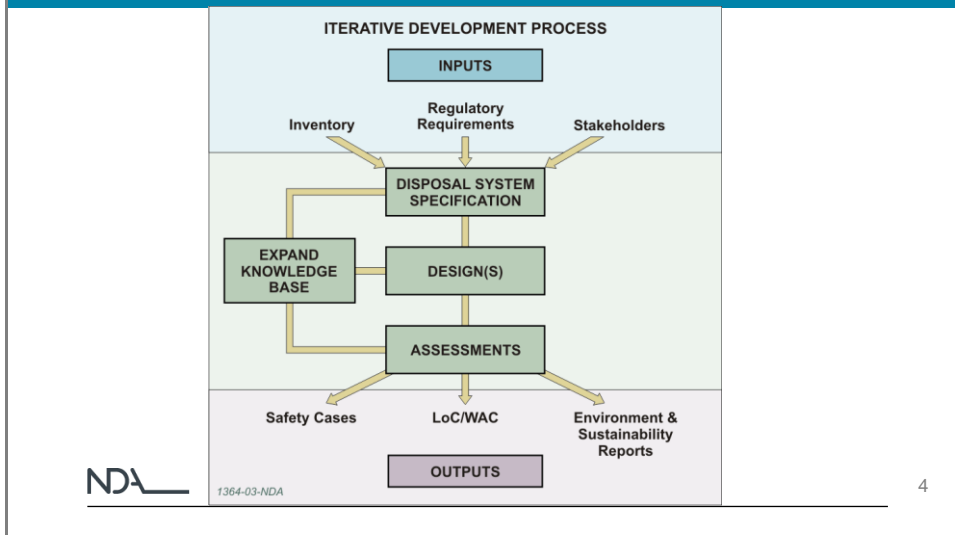


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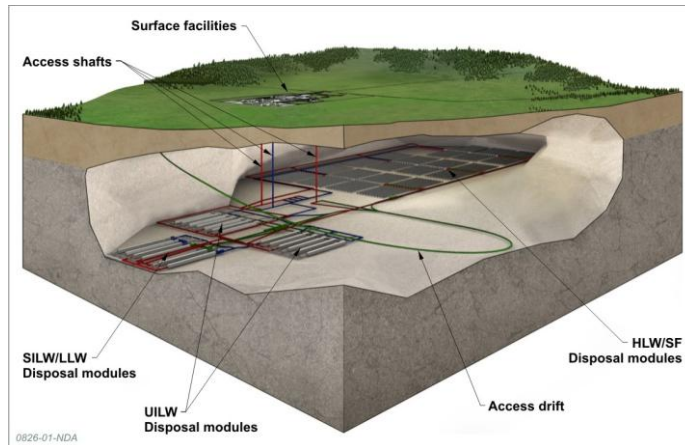
## Why have we produced a generic DSSC?

- To provide confidence that higher activity wastes can be safely disposed of in a GDF
- As a basis for disposability assessments of waste being packaged now
- As a basis for desk-based studies
- As a basis of scrutiny of our work
- As a basis for stakeholder comments and input
- To identify research and site characterisation needs

## How have we developed the generic DSSC?



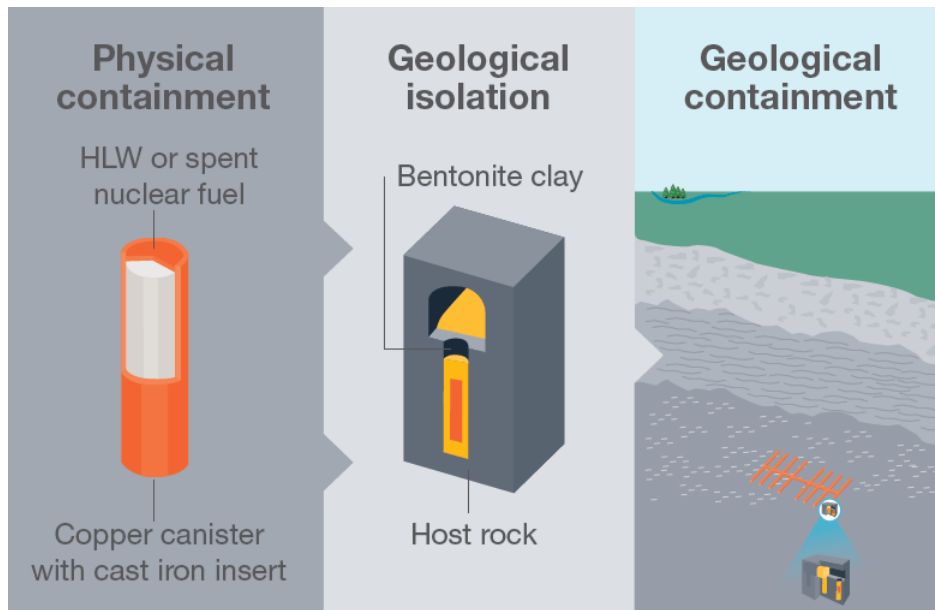
## Illustrative view of GDF



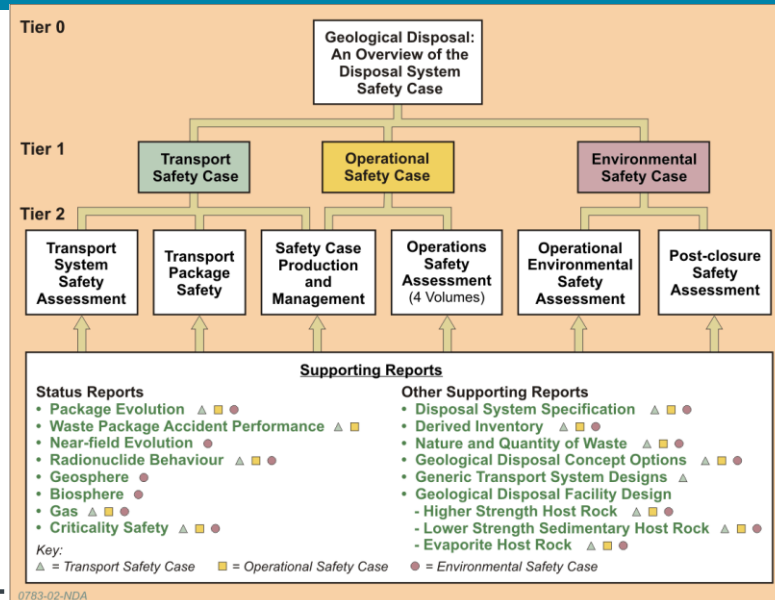
NDA

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## Illustrative disposal concept for HLW



# Generic DSSC suite of documents



7

## DSSC review process

- Internal review of all documents
- External peer review of safety assessment reports (2 phases – draft and final reports)
- External review of all research status reports and disposal system specification
- Review by Nuclear Safety and Environment Committee of Overview report and 3 main safety case reports

### Next:

- Review by regulators and CoRWM

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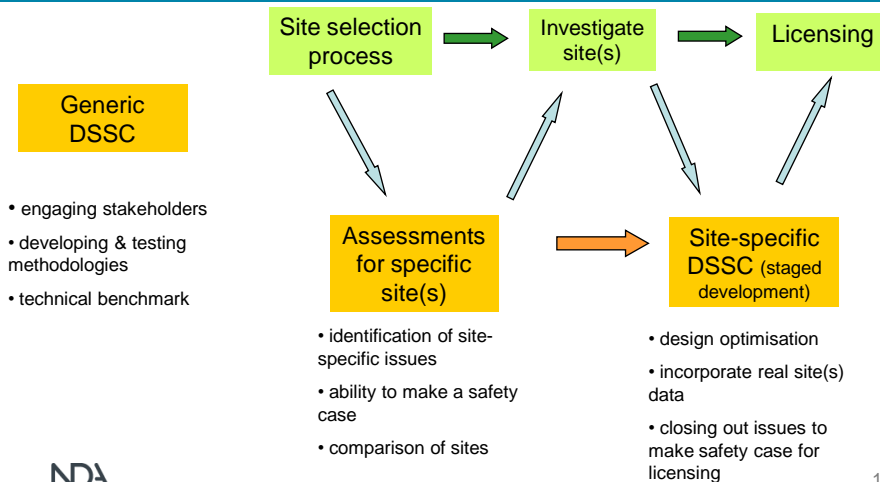
## Examples from peer review conclusions

- “The DSSC has collated and integrated a considerable body of information from across the waste disposal programme .... The peer review panel considers that this collation and integration of information is an important and not insubstantial achievement.”
- “Most of the key peer review comments have been addressed.”
- “...further work would be needed to resolve several issues concerning the approach taken to the PCSA calculations...”
- “RWMD has effectively deferred work to address some peer review comments to the forward programme.”
- “...the peer review process has been transparent, rigorous and well recorded – comparable to a journal review process...”

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## Next steps in developing the DSSC



10

# Regulatory review of RWMD's 2010 Generic DSSC: Review scope

West Cumbria MRWS Partnership, April 14<sup>th</sup> 2011



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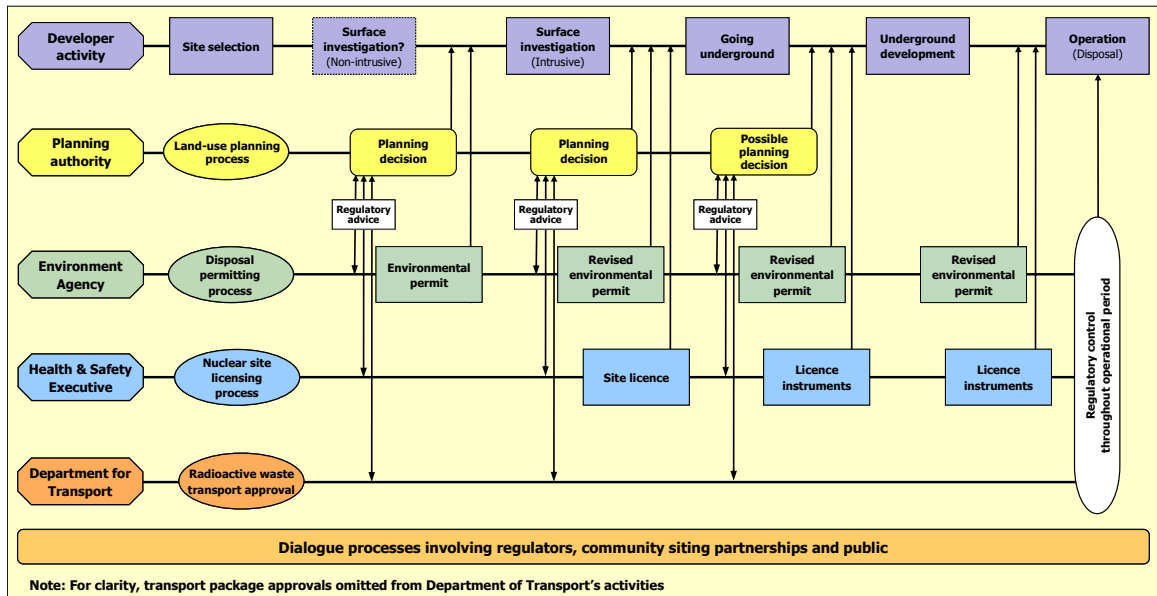
## Contents

- Staged permissioning
- Regulators' scrutiny of RWMD
- Drivers for review of Generic DSSC
- Review approach & questions
- Review timescales
- Concluding remarks



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## Staged permissioning of a GDF



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## Regulators' scrutiny of RWMD

- In advance of any permit or licence application from RWMD the regulators are providing comment and advice to RWMD on regulatory issues in a number of areas, e.g.
  - development of a Disposal System Safety Case
  - generic assessments and concepts in support of site selection
  - application of the disposability assessment process
  - preparations for establishment as an SLC
- The scrutiny is overseen by a programme board with representatives from all the relevant regulators
- Annual summary of the scrutiny is published by the regulators



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## Reasons for review of Generic DSSC

- Main reasons are
  - to determine its suitability to underpin RWMD's disposability assessments of higher activity radioactive wastes
  - to determine whether RWMD is progressing towards being able to submit applications for, and to hold, a permit



Environment  
Agency



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## General review approach

- No regulatory decision required
- EA's focus largely on the Environmental Safety Case
  - Targeted review looking across whole case
  - Some technical issues and aspects more relevant to each question
- ONR's focus largely on Operational Safety Case
  - Uses normal ONR regulatory sampling approach
  - Uses ONR's normal Safety Assessment Principles and Licence Condition requirements to identify anything significant missing from the safety case
- Consolidate reviewers' findings, integrate regulators' comments, use regulators' joint issues resolution process
- Definition of follow-up to Generic DSSC review



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Agency



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## Guiding questions for regulators review

- Does the content of the Generic DSSC provide an appropriate basis for future disposability assessments and endorsements through the LoC process?
- Is RWMD's strategy for the development and use of the Generic DSSC in the MRWS site selection process consistent with our expectations?
- Do RWMD set out a credible route to achieving the R&D underpinning necessary to support a full site-specific safety case and accurately describe the current state of progress on that route?



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## Guiding questions for regulators review - cont

- Are the scope, format and types of content of the Generic DSSC consistent with our expectations of an ESC for a GDF?
- Does the Generic DSSC confirm or modify our 2005 conclusion on the Viability report, namely that "it is feasible in the medium term that a safety case could be generated that would meet regulatory requirements, provided a publicly and technically suitable site were available."?



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## Review timescales

- Request to brief Partnership on progress with our review July 2011
- Regulators' views provided to RWMD in Autumn 2011 and published
- Some areas likely to require consideration of forthcoming documents not in Generic DSSC and will be addressed in our ongoing scrutiny



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## Concluding remarks

- Generic DSSC is not a regulatory submission and we will only provide advice and comment
- The combined views of regulators will be provided to RWMD in autumn 2011 and will be published
- Some areas are likely to require further scrutiny as part of ongoing regulatory engagement
- We will use our regulatory joint issues resolution process



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**The questions and points of discussion that followed the presentations are summarised in 5.2 – 5.9 below.**

### **5.2 – Process and methodology used to develop the DSSC**

The NDA was asked to provide an overview of the processes and the methodology that were used to develop the safety case, as well as to comment on information sources for specific aspects.

The NDA referred people to the DSSC reports for further information, and also advised that information sources are documented in the detailed research status reports. A brief overview of the process for developing the long-term safety case was given, which included looking at all the features and the events that could happen, i.e. all the “what-ifs”, and assessing all the processes via which radionuclides could return to the surface through e.g. formation of gases, corrosion of containers, human intrusion, earthquakes etc.

### **5.3 – Drivers for producing the DSSC**

The NDA was asked what the primary driver was for producing the DSSC given that it is not a submission that is required by the regulators at this stage.

The NDA confirmed that the primary purpose is to bring together their current understanding into a format which can be published, so that these kinds of conversations can be held, and the regulators can provide feedback. It also provides advice to the operators who are packaging waste now, so that if the waste is packaged in a way that meets the *generic* DSSC, then it is likely to fit in with a site-specific safety case.

### **5.4 – Confidence in the peer review process**

It was noted that the Partnership’s criterion in the Work Programme is for them to have confidence in the NDA’s capability and processes, and that this also requires confidence in the peer review process. In various parts of the DSSC, there are statements about whether the NDA agrees, or not, with the peer reviewers of the DSSC report (see also Document 161 – Summary Report on the Peer Review of the DSSC). The NDA were therefore asked where the Partnership can find the reasons for these disagreements, and how the Partnership can keep track of any further work when the NDA does not agree with the peer reviewers and/or does not take an action.

The NDA confirmed that the process they used was to produce spreadsheets of all of the issues and the comments that were raised by the peer reviewers. There were three classifications of comments: minor comments, observations, and reservations. Where appropriate, NDA documents were also updated.

The peer review team received the spreadsheet of comments back and where the peer reviewers and the NDA were in agreement, this was clear. From the NDA’s experience however, some other aspects were quite hard to “disentangle”, as it may be that the NDA agreed with the comment, but possibly not with the proposed action to deal with it. For example, in responding to these kinds of comments, the NDA put a lot of effort into rewriting the description of the methodology in order to present it better. The NDA acknowledged that this approach may have led to some confusion as to whether the NDA had accepted the peer reviewers’ comments or not.

It was further noted by the Partnership that the peer review had quite a few comments about the peer review process itself, and the NDA were asked what steps they are taking to improve the peer review process in response to those comments.

The NDA acknowledged that there were some frustrations with the peer review process. Throughout the overall development of the DSSC, the NDA had a number of advisory panels consisting of external people who reviewed documents and gave advice/help to the NDA in developing their documents. At the end of the process the NDA wanted to commission an independent peer review on the nearly complete set of documents. Whilst some of the peer reviewers would have liked to have been involved earlier in the process, the NDA wanted the peer review process to be done at the end and for it to be from a “fresh set of eyes”. Therefore, one of the criteria for the peer review panel was that nobody from the advisory panel could be included.

For the future, the NDA acknowledged that there are lessons to be learned from the whole process of how they produced the DSSC, and advised that they are currently reviewing how they use advisory panels and peer reviewers. They acknowledged the pros and cons of different approaches, but also reiterated the need for having ongoing advice, and restated their view that there is value in having a final independent check on their work.

### **5.5 – Site specific safety case and credible public support**

A discussion was held about whether it is possible to make a safety case for a site in any geology. The NDA stated that they cannot say that it is possible to make a safety case in *any* geological conditions, but as there is a lot of freedom in how to design/use engineered barriers, there is a broad range of environments in which it would be possible. The NDA confirmed their belief that, given a *suitable* site, it is possible to design a suitable method of engineered barriers for that site.

It was noted that one of the Partnership's principles is that site investigations will not commence unless there is credible local support, however the issue of how to gain credible support without a safety case already existing was highlighted.

The EA gave a reminder that the first permit that they would issue would only be for boreholes, and the second permit would be for underground investigations, so the regulatory control would limit a developer from moving beyond certain stages without satisfying the EA.

### **5.6 – Concerns re whether sites might be judged to be 'good enough'**

Concerns were expressed about the potential for moving forward with a site which is judged to be "good enough" by the NDA.

The NDA responded to say that they are looking for a solution that meets the safety requirements, and that they would not consider any site for which a safety case cannot be made.

The EA also provided assurance that if a site cannot meet the regulators' requirements then the relevant permits and licences cannot be issued.

### **5.7 – Retrievability**

It was noted that no mention had been made of retrievability in the presentation, and the NDA were asked if this is something extra that would need to be done. It was also noted that, in Allerdale in particular, it is a high profile issue that retrievability should be achieved.

The NDA responded to say that, before any backfill or 'buffer' goes in, the waste would be retrievable, and that they are looking at a long timescale before they would start to close it. They have also looked at the logistics of removing waste after backfill goes in around it, as it would then have to be mined out and there would need to be e.g. a spare vault to move waste around into other areas.

It was acknowledged that there is not a great deal of information about retrievability in the DSSC as retrievability is so site-specific. It was also acknowledged that, from the perspective of a safety case, retrievability has benefits and disadvantages – from a safety case point of view, backfilling and closing sooner is preferable, but from a retrievability point of view it is not. It was noted that this is something that should be discussed with a host community, and it was further noted that, whatever the NDA did, they would have to make sure that it did not compromise the overall safety case.

There was a reminder that the regulators do not require that retrievability be built in, however the MRWS White Paper requires that it not be ruled out. However the EA noted that, if retrievability is built in, they will require that the Environmental Safety Case is not unacceptably affected by it.

#### **5.8 – CoRWM’s plans to comment on the DSSC**

CoRWM were asked if they are planning to comment on the DSSC and the peer review process used for it.

CoRWM confirmed that they have been asked by DECC to review RWMD’s technical capability associated with the DSSC and its input into the NDA’s R&D programme. They are reviewing all of the status reports, with the exception of the report on the biosphere, as well as some aspects of the specifications. In essence they are trying to answer the question of whether RWMD is capable of developing the safety case, including all of the R&D that will be required in the future. The scope of this work will be developed by the summer and will then be agreed with DECC. It was noted that it is a large piece of work and it is unlikely that there will be any concrete conclusions out of it by PSE3 and possibly not before the point of making a decision about participation.

It was noted by DECC and CoRWM that the scope of this work is not quite the same as the questions that the Partnership is seeking to address, however it was agreed that CoRWM would provide an update once the work has been scoped out in the summer.

The Partnership stated its disappointment that it will not have any more visibility on either what the NDA might do to develop its peer review process, or CoRWM’s views on the NDA’s work, within the timescales of its own Work Programme.

#### **5.9 – Agreement and way forward**

It was agreed that DECC and CoRWM should discuss how the work that DECC has requested of CoRWM overlaps with the Partnership’s Work Programme, and that CoRWM will provide an update to the Partnership after it has developed the scope of this work (likely to be sometime after June).

# 6. NWAA Issues Register and Rock Solid Report

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## 6.1 – Background and overview

Nuclear Waste Advisory Associates (NWAA) (<http://www.nuclearwasteadvisory.co.uk/>) have developed an Issues Register, identifying 101 safety issues that they believe need to be addressed in developing a GDF. As part of Criterion 1 (Safety, Security, Environment and Planning) in its Work Programme (see Document 13.1), the Partnership is seeking to understand the NDA's and the regulators' responses to the technical issues raised by NWAA and others, including the report 'Rock Solid' by Dr Helen Wallace.

The NWAA Issues Register and 'Rock Solid' can both be found in the External Documents section of the Partnership's website at <http://www.westcumbriamrws.org.uk/documents.asp>.

In order to address this, the Partnership heard the following series of presentations

- **Pete Wilkinson of NWAA** – providing an overview of who NWAA are, where the Issues Register came from and an overview of some of the key issues.
- **Steve Barlow of the NDA** – providing an overview of the RWMD issues management process and the NDA's response to the NWAA Issues Register and 'Rock Solid'.
- **Pete Roche of NWAA** – providing NWAA's response to the NDA's responses.
- **Gavin Thomson of the EA** – providing a perspective from the regulators (supported by Document 154, draft).

The presentation slides are provided below, and are followed by a summary of the questions and discussion that followed.

### Presentation 1 – Pete Wilkinson of NWAA





NUCLEAR WASTE MANAGEMENT - **PERCEIVED COSTS AND UNCERTAINTIES**

Containment of 500,000 cubic metres: 78,000,000 terrabequerels of radioactivity

Demonstration of repository safety over millennia

How does 'the community' demonstrate its opinion? What does it base its opinion on? How is 'the community' defined? New build waste?

NUCLEAR WASTE MANAGEMENT – **PERCEIVED BENEFITS AND OPPORTUNITIES**

Community benefits package?

Long term job creation and economic revitalisation?

Waste 'dealt with' to remove future burden?

Removes need for institutional control?

THE PARTNERSHIP AND THE COMMUNITY NEED TO STRIKE A BALANCE DECISION BASED ON A VIEW OF COSTS VERSUS BENEFITS, ON SOUND SCIENCE, TECHNICAL ADVICE AND INDEPENDENT SCRUTINY OF SAFETY.

[www.nuclearwasteadvisory.co.uk](http://www.nuclearwasteadvisory.co.uk)



Nuclear Waste Advisory Associates is a group of eight independent experts providing

information and advice on the risks posed by radioactive waste

support to decision makers, stakeholders and communities involved in its management

[www.nuclearwasteadvisory.co.uk](http://www.nuclearwasteadvisory.co.uk)



NWAA's purpose is to advise on minimising the risks to people and the environment now and in the future from the dangers of radioactive wastes by:

Raising awareness of the scientific, technical, social and ethical issues

Undertaking a balanced scientific and technical appraisal and independent policy analysis

Ensuring that any proposals for the storage and/or disposal of existing legacy wastes or wastes arising from any proposed new build programme are subjected to critical appraisal and challenged, where appropriate, at every stage in the decision making process



Providing information, advice and support to enable stakeholders and communities to respond in an informed manner to any proposals for radioactive waste management that may affect them

Encouraging an open, transparent, rigorous, accessible and participative process at every stage in decision making.



What NWAA does not have a consensus on:

That deep geological disposal of radioactive waste should be abandoned

What NWAA does have a consensus on:

That any potential host community should have ready access to the issues affecting safety, be able to interrogate those issues, feel confidence in the manner they are being dealt with and monitor their progress towards resolution



#### ISSUES REGISTER

Environment Agency meetings

Issues drawn from official documents (EA, EU JRC etc)

Designed to be a benefit to the partnership, not a hurdle

How to take it forward?

Readily accessible on website

Routine and regular updates on progress

Importance of issues, rationale for importance

Contractors, qualifications for undertaking the work, timetable

Peer review and QA, publication dates and general visibility

## RWMD issues management process and response to NWAA Issues Register

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MRWS Partnership Meeting  
14 April 2011



## RWMD issues management process

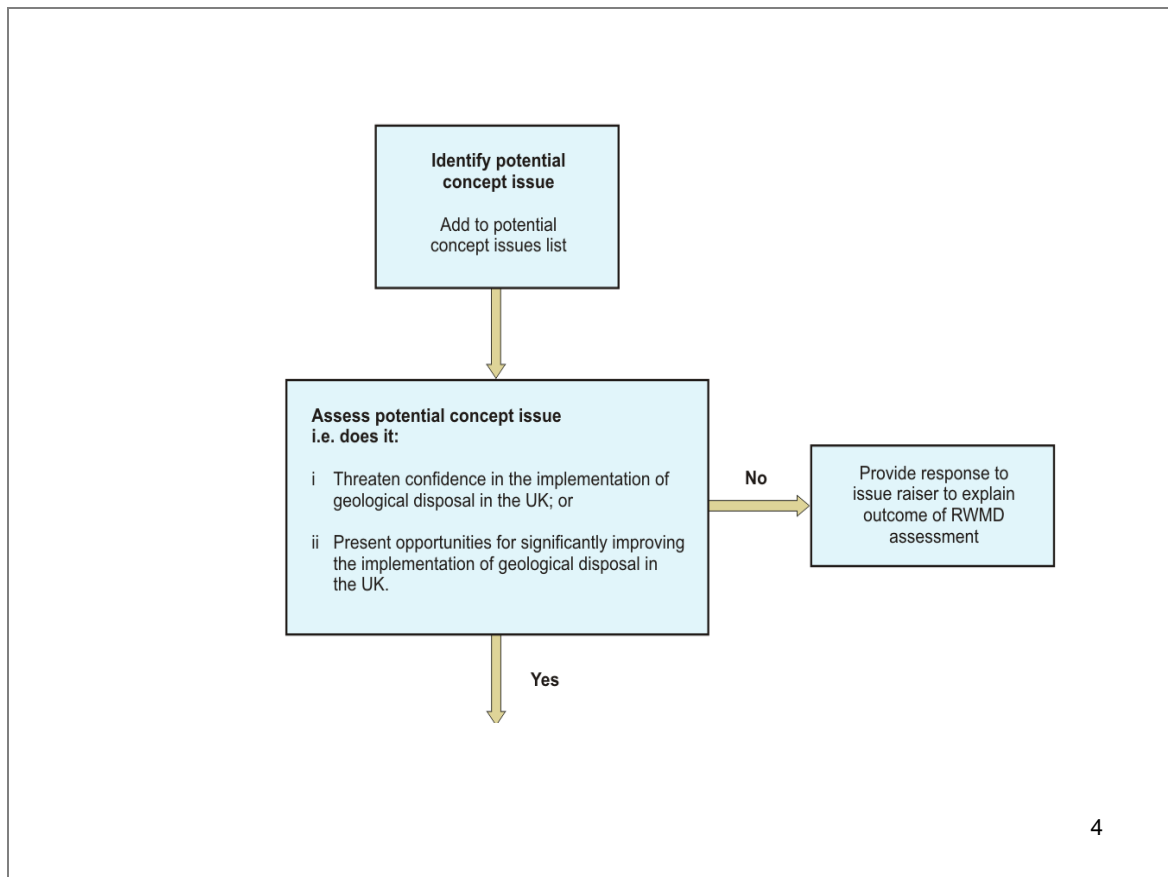
- **Potential concept issues may be raised internally or externally**
  - e.g. scientific, technical, environmental, economic, social or ethical issue which could affect the concepts being developed
- **Purpose of process is to ensure that all potential concept issues are appropriately considered and where appropriate incorporated into the work programme**
- **Key objectives of process are to provide RWMD with:**
  - Clear view of the issues that need to be addressed
  - A basis for responding to issues and queries raised

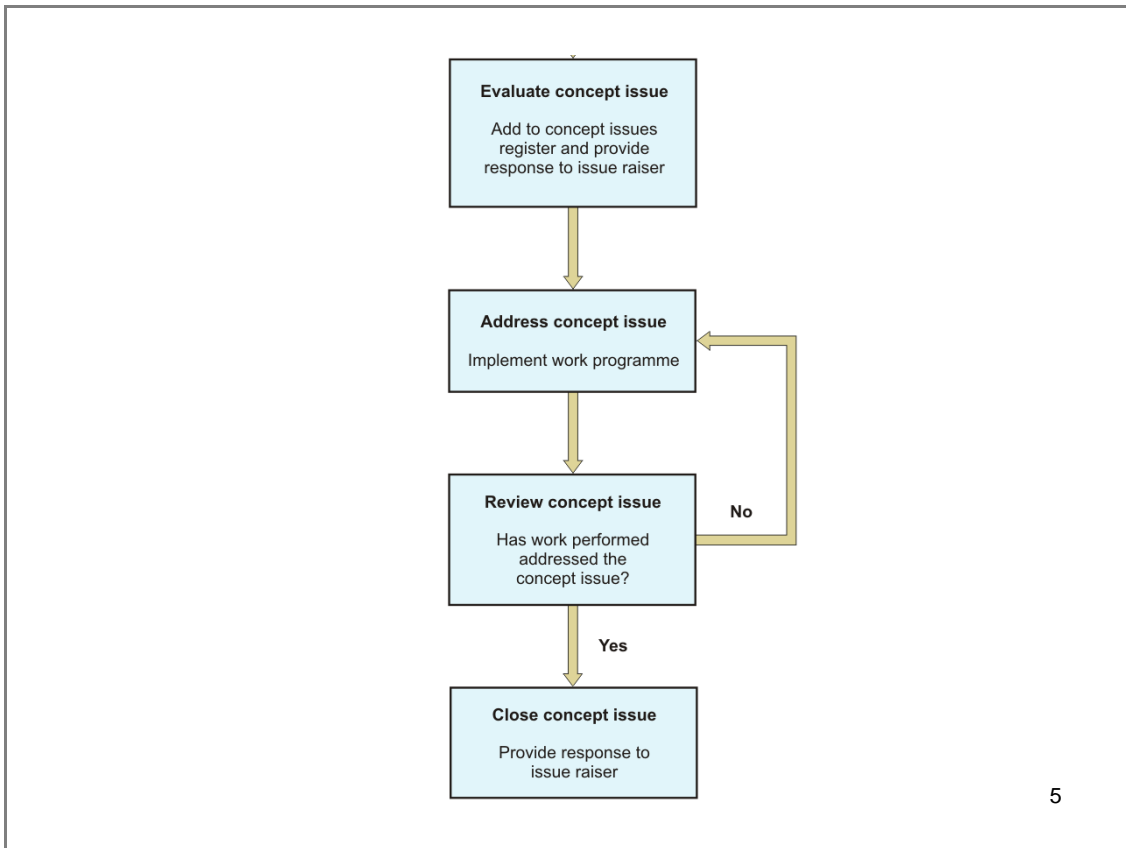


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# Process Overview

- **Identification**
  - All issues raised captured on potential concept issues list
- **Assessment and Screening**
  - Threaten confidence in the implementation of geological disposal in the UK; or
  - Present opportunities for significantly improving implementation of geological disposal in the UK.
- **Evaluation**
- **Address**





## Current status of the process

RWMD issues management process is being developed:

- **Compilation of the potential issues list is well advanced**
- **Assessment and Screening stage has started**
- **Evaluation of Concept Issues has started**
- **The NWAA issues will be subjected to this process**
- **Our first publication of the Potential Issues List and Concept Issues Register is planned for later this year**

## Response to NWAA issues

- **RWMD has reviewed the issues raised and set out in a detailed response how we have interpreted the issue**
- **Our response explains where appropriate**
  - the status of work to address issues, including how they will be addressed in the future work programmes, or
  - any issues that can not be addressed directly by RWMD e.g. because it relates to the MRWS or regulatory processes
- **Response published as NDA Technical Note**

NDA

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## Example 1

The need to allow the release of hydrogen gas which is contrary to the need for 'barriers'

- **Depends on the design of the engineered system**
  - Waste containers
  - Characteristics of the surrounding host rock
- **We will investigate the issue at a later stage in the programme when potential candidate sites are identified using**
  - Information on the host rock properties
  - Disposal facility designs suitable for the host rock

NDA

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## Example 2

much colloid work has been restricted to experimentation with uranium resulting in considerable research gaps as far as other radionuclides are concerned

- **Depends on the concentrations and properties of colloids at a candidate site**
- **Lots of UK and international research has been conducted**
- **We are reviewing whether we should undertake any further work at the current stage**
- **We will do further research when potential candidate sites are identified**

NDA

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## Example 3

work on container failure – specifically corrosion rates of steel and copper is required

- **The choice of materials for containers needs to consider:**
  - The type of waste to be contained
  - The environmental conditions in storage and disposal facilities
- **Following a recent review we have concluded that there is a good knowledge base for the corrosion performance of containers**
- **Further work is ongoing to expand our knowledge base to consideration the effects of storage regime**

NDA

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## Example 4

The data used to predict radionuclide take up by solid surfaces is known to be wrong

- There are various approaches to describe sorption, encompassing both empirical methods and thermodynamic models
- We believe the current state of knowledge provides a good understanding of the uncertainties associated with radionuclide sorption
- The NEA Sorption Project is looking at different sorption models and their use in safety assessments
- We are supporting and helping guide this initiative through our participation

NDA

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## Rock Solid?

- Addresses European and other international approaches such as the Implementing Geological Disposal Technology Platform (IGD-TP)
- Identifies a number of phenomena that could compromise safety
- Many of the technical issues are also raised by NWAA so already considered
- The Rock Solid? report will be reviewed for any other potential issues that need to be considered

NDA

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## Rock Solid? – "Unresolved Issues"

- Our safety cases, and the arrangements for review and scrutiny of them, will address issues of interpretative bias and complex models
- Waste inventory is published regularly and an estimate of the waste for geological disposal will be published by DECC
- The site assessment and characterisation processes will identify whether a sufficient volume of rock is available at a single site
- Regulatory approval and other scrutiny will ensure that safety standards are met
- Safety cases aim to demonstrate that potential releases are managed in a way that ensures safety

NDA

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## Summary

- Potential Issues are raised both internally and externally
- We are developing a robust and transparent process to address issues
- We will provide feedback to people who raise issues
- The NWAA and Rock Solid? issues will be evaluated using the issues process
- We will provide a periodic update on the issues management process on the web

NDA

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## Presentation 3 – Pete Roche of NWAA

Nuclear Waste  
Advisory Associates  Want the whole picture ?  
[www.nuclearwasteadvisory.co.uk](http://www.nuclearwasteadvisory.co.uk)

**No.6:** release of hydrogen gas; contrary to the need to provide “barriers”.

- EC’s Joint Research Centre (JRC) says “...*overpressure could result in fractures ... fast migration pathways*” especially for Carbon-14.
- RWMD says gas could migrate or water could be insufficient depending on rock-type; want to wait until site is selected.
- Importance of the issue (see Haszeldine) means researching a potential show-stopper could be left too late.

[www.nuclearwasteadvisory.co.uk](http://www.nuclearwasteadvisory.co.uk)

Nuclear Waste  
Advisory Associates  Want the whole picture ?  
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**No.68:** Colloids.

- EC JRC says “...*there are still considerable knowledge gaps as far as the other elements [apart from uranium] are concerned*”.
- RWMD says it believes there is a considerable amount of information available on radionuclides other than uranium.
- A major disagreement between RWMD and EC JRC which needs to be resolved.

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**No.37:** work on corrosion rates of steel and copper required.

- The EC JRC says despite extensive work - more work needed on **rate of corrosion** and the **behaviour of corrosion products**.

- New work on copper corrosion could mean packages would have to be 1 metre thick instead of 5cm.

- RWMD simply says "...*these claims have been contested.*" but worryingly Swedish NGO office for Nuclear Waste Review (MKG) has expressed surprise at choice of consultant for RWMD corrosion report – someone who promotes copper.

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**No.77:** Sorption

EC JRC – to get a completely accurate measure of retardation, calculation is extremely complex – too complex for overall performance assessment models.

The RWMD is confident the NEA Sorption Project can come up with a hybrid model which is reasonable compromise between an overly complex sophisticated sorption model and the simple  $K_d$  approach.

Illustrates complexities involved in developing a GDF Safety Case. How many other models have to be "dumbed down"?

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Conclusions

Only looked at 4 of 101 issues.

Gives an idea of full extent of work required

A myriad of complex interlocking and interdependent issues

Firmly believe the RWMD's work and the interests of communities is best served by rigorous external analysis to enhance confidence and highlight uncertainties.

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#### **Input from Gavin Thomson of the EA**

Gavin summarised the key issues raised in Document 154 (Regulators comments on the NWAA Issues Register and the Genewatch Rock Solid Report (draft version)) which lays out the regulators' position on the Issues Register and 'Rock Solid'.

The EA first of all advised that they have met and exchanged correspondence with NWAA regarding the Issues Register. They also noted the importance of maintaining the proper accountabilities during the MRWS process, and, whilst it is the role of the developer to maintain a safety case and address the associated technical issues, it is the role of the EA to review this safety case. The EA has been operating its own scrutiny programme for some time, and this has now been developed by the regulators into a joint Issues Resolution Process which will focus on regulatory matters and will hopefully address some of the points raised. (For further information see: [http://www.environment-agency.gov.uk/static/documents/Business/Joint\\_EA\\_HSE\\_DfT\\_IRP\\_Summary\\_i1.2\\_3101\\_2011.pdf](http://www.environment-agency.gov.uk/static/documents/Business/Joint_EA_HSE_DfT_IRP_Summary_i1.2_3101_2011.pdf).)

With regard to the NWAA Issues Register, there are 101 issues and five process concerns. Document 154 responds to three of these concerns which relate to the EA, including: the EA's regulatory focus; the permissioning schedule; and a suggestion that the environmental permitting programme has deregulated the EA responsibilities.

With regard to the report, 'Rock Solid', the EA is aware of all of the issues within it and believes that some of the issues can only be addressed during site-specific studies.

There was a reminder that the EA has various mechanisms for engaging with communities and that they remain committed to this.

**The questions and points of discussion that followed the presentations are summarised in 6.2 – 6.9 below.**

### **6.2 – Concerns re usefulness to the Partnership of the responses and the debate**

A discussion was held about the issues raised in the presentations and the dilemma facing the Partnership with regard to what it can do with the information. It was acknowledged that, whilst it is good that there is a group that are raising all the issues and that the NDA is addressing the issues, there is a feeling in the Partnership of being “none the wiser” as a result of having heard and seen everything, and the difficulties in being able to get a handle on the issues were highlighted.

Concerns were expressed that the Partnership was in danger of going into too much technical detail, and it was suggested that there is a need for an overview position, as well as help to deal with/filter the details and understand the consequences of the issues.

### **6.3 – Request for referencing and clarity about timescales**

There was a request for further work to be done by the NDA to provide the following:

- Referencing in the responses to provide some rationale as to why each party believes what was stated.
- Clarity about which issues are seen as priorities, i.e. are the most important to safety case development.
- Where it says further work will be/needs to be done, clarity about the specific point in the process at which this work will be done.

In addition, it was noted that reference is made in the peer review report of the DSSC (see Document 161) to a register of uncertainties, and it was felt that this could serve as a useful tool for uncertainty management. It was suggested that it would be useful to have a link between the NDA’s responses to the issues in the NWAA Issues Register and this register of uncertainties, including clear indications of where the issues appear in the uncertainties.

### **6.4 – Dealing with the responses**

The NDA responded to say that the reason the Partnership has not yet seen the analysis of the prioritisation of the issues is that the NDA hasn’t taken the NWAA issues through that process yet. They further noted that, out of the 101 NWAA issues, there are 54 that are already being addressed as part of the NDA’s work programme, there are 31 which they recognise and plan to do in the future when there is a site (or sites), and there are 16 that they did not agree needed any further work. The NDA’s detailed report provides referencing to underpin their rationale on these.

The NDA also confirmed that a register of uncertainties is part of the generic DSSC. They agreed that it is a very good idea to link this register of uncertainties into the Issues Register, and agreed to look at how that can be done.

With regard to managing uncertainties, the NDA noted that, in their view, some uncertainties are not an issue in that the uncertainty can be lived with, but some are absolutely key and are driving the NDA’s research programme. NWAA reiterated the view that it is important to explain the rationale behind these judgements in more detail, especially where it is something that does not matter, or can be lived with, at this stage.

NWAA expressed their desire to work together on this, and to work towards agreement through dialogue rather than polarised debate.

The Partnership noted that the way in which the issues are responded to will help them to see how, and whether, they can be resolved. It was also agreed that, for the majority of

Partnership members, it is not about getting into the detail of the Issues Register, but more simply about understanding how it will be managed, knowing what the process is for resolving the issues, and determining how that information can be made visible and accessible for a large number of people.

### **6.5 – DECC input**

DECC stated that they supported the comments that had been made in 6.2 above and agreed that it is important to have easily accessible information in the public domain that people can understand. They noted that it was very pleasing to see a process like this developing, and to hear that the process will be able to recognise some of the uncertainties. They also supported some of the points that had been made about how people can tell what's right, what's wrong and who to trust, and agreed that processes need to be in place to sift out things that are big issues, small issues and not issues at all.

In relation to the discussion that had been held about the peer review of the NDA's work (see 5.4 above) DECC noted that they also had some concerns arising from the peer review statement, and suggested that it may demonstrate that there is some work to be done in the NDA to make that process more effective.

### **6.6 – Partnership requirements for different levels/layers of information**

It was suggested by the Partnership that there is a need for a *single* place where all of the information from all sources is openly accessible, so that anybody who has got a concern knows where to go to find the information. Appropriate information should be provided for different levels of audience, so that a high level summary in lay terms is available, but for those who want to drill down on a particular issue that can also be done.

There also needs to be clear information regarding e.g. the timeline over which the NDA proposes to manage the issues, the status of each issue, and, if the importance of that issue is disputed, the related arguments.

NWAA reiterated the issue of providing detailed referencing, although it was also acknowledged that this is not always possible as some of the sources are copyrighted.

### **6.7 – NDA response**

The NDA acknowledged the messages about the need for visibility in what they are doing and the processes that they adopt for dealing with issues. They advised that they are intending to publish the potential issues list, in which they will be clear about what they have done with those issues, and that they are also committed to publishing their own issues register. There was a warning that the list of issues and responses will be very long as, at a minimum, it will have over 100 items on it, and there was acknowledgement of the fact that the more the NDA publishes, the harder it might be to make the information easily accessible.

It was noted that some of the comments that had been made about referencing had already been picked up in the previous comments made by Professor Stuart Haszeldine on the NDA's R&D plans (see meeting report from 3<sup>rd</sup> March 2011 – Document 150, Section 4).

With regard to comments made about the need for a hierarchy of documentation, they made reference to existing documents that they have already published in various formats including e.g. the different levels of documentation for the DSSC referred to in Section 5.1 above.

### **6.8 – Suggestions for a way forward**

It was acknowledged by the Partnership that the NDA is clearly making efforts with its documentation/published material, but it was agreed that there is a greater need for transparency and accessibility with regard to some of the information. It was also noted that, whilst it may not be the Partnership's job to do that, it is certainly in their interest for it to be done. The NDA welcomed any further suggestions for documents that might be useful, and suggested that it might also be useful to set up a dialogue to discuss what else could be done to improve the information and communications that they produce.

It was noted by one member that the problem with communications in document format is that they only provide a "snapshot" in time and as the information develops and the work progresses they can soon be out of date. A suggestion was made that the most practical way to deal with this might be to set up a website which can be updated on a regular, ongoing basis, so that people can visit it to get the most up to date position.

There was a further suggestion from NWAA that it might be useful for the Partnership to ask stakeholders and members of the public what information they want and in what form.

### **6.9 – Agreements and way forward**

It was agreed that the NDA will set up a meeting including themselves, NWAA, 3KQ and Partnership members, to discuss a way forward for providing a more accessible and transparent way of communicating the NDA's responses to the Issues Register and how this links with managing uncertainties. This may, in turn, inform the NDA's wider communication of uncertainties and issues arising.

## 7. Way Forward and Actions

### 7.1 – Impacts and perceptions research

The work of the Impacts Sub-Group, as set out in the Work Programme, has been satisfactorily completed at this stage of the process, although this is subject to the Partnership's Assessment meetings on this criterion, the outcomes of PSE2 and the possibility of further input on transport movements from the NDA. A group of Partnership members are taking part in a visit to the facilities at Bure in France, and will provide an update to the Partnership afterwards.

### 7.2 – PSE2 Report

The PSE Sub-Group will consider the Partnership's responses to the key questions that were discussed, and will redraft the report with a view to the final version being signed off at the 24<sup>th</sup> May 2011 Partnership meeting. Any further comments on the PSE2 Report and responses to the key questions, should be notified to the Programme Manager by Friday 22<sup>nd</sup> April.

### 7.3 – The NDA's generic Disposal System Safety Case

CoRWM will provide an update to the Partnership on the work that has been requested of them by DECC to review RWMD's technical capability (associated with the DSSC and the NDA's R&D programme) once the scope of this work has been developed/agreed (likely to be some time after June). DECC and CoRWM will also discuss how this work overlaps with the Partnership's Work Programme. The NDA will continue its review of their peer review process and will keep the Partnership updated about developments.

### 7.4 – NWAA Issues Register and 'Rock Solid'

The NDA will set up a meeting to discuss a way forward for communicating the NDA's responses to the Issues Register and how this links with managing uncertainties.

### 7.5 – Dates

The forward programme of meeting dates is provided below. Members of the public are welcome to observe the Partnership meetings (right hand column). Please contact the Secretariat for details and registration on 0800 048 8912.

| Steering Group meetings 2011: | Partnership meetings 2011:                                  |
|-------------------------------|---|
| 28 April                      |   |
| 17 May                        | 24 May<br>( <i>Braithwaite Village Hall, near Keswick</i> ) |
| 9 June                        | 23 June<br>( <i>Egremont Market Hall</i> )                  |
|                               | 7 July<br>( <i>Market Hall, Wigton</i> )                    |
| 21 July                       |   |
| 4 August                      | 18 August<br>( <i>Millom School Hall</i> )                  |
| 1 September                   |   |
| 15 September                  | 29 September<br>( <i>The Copeland Centre, Whitehaven</i> )  |
| 13 October                    |   |
| 27 October                    | 10 November<br>( <i>The Wave, Maryport</i> )                |

|                                      |  |
|--------------------------------------|--|
| 24 November                          | 15 December<br>(The Copeland Centre, Whitehaven) |
| <b>Steering Group meetings 2012:</b> | <b>Partnership meetings 2012:</b>                |
|                                      | 12 January<br>(venue tbc)*                       |
|                                      | 26 January<br>(The Oval Centre, Salterbeck)      |
| 9 February                           |  |

**\* Please note that this meeting has been added to the programme and replaces a Steering Group meeting on the same date.**

**7.6 – Actions.** The following actions were agreed:

|    | <b>Action</b>  | <b>Who</b>  | <b>By when</b>   |
|----|--|---|--|
| 1  | Check when the note from Steve Smith will be circulated regarding long-term visioning exercises undertaken in overseas projects.   | Rhuari  | 18 Apr   |
| 2  | Discuss Cumbria Tourism's request for further information regarding the likely "scale" of transport movements (including overseas comparisons) to determine whether any additional/new information is needed. Provide further information if required. | NDA & Richard Greenwood, in liaison with Stewart Kemp | 16 May for provision of further information from NDA if required |
| 3  | Consider revisions to Document 163.  | Stewart Kemp  | End May  |
| 4  | Advise any additional/subsequent comments on the PSE2 Report to the Programme Manager – <b><i>please note that no further comments can be accepted after this deadline.</i></b>  | <b>All</b> to Rhuari                                  | 22 Apr   |
| 5  | Request any further copies of GVA's CD/NDA's DVD if required.  | <b>All</b> to Jane                                    | 20 Apr   |
| 6  | Provide an update to the Partnership on CoRWM's work to review RWMD's technical capability (associated with the DSSC and the NDA's R&D programme) once the scope has been developed/agreed.  | Mark Dutton   | After June   |
| 7  | Agree date for a meeting to discuss the NDA's response to the Issues Register, including managing uncertainties, and the communication of this.  | Alun Ellis  | 16 May   |
| 8  | Circulate draft meeting report to Partnership attendees.   | Jane  | 26 Apr   |
| 9  | Comment on draft meeting report.   | All attendees   | 5 May  |
| 10 | Circulate final draft of meeting report and publish on website.  | Jane  | 12 May   |

## 8. Public Questions/Comments

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### 8.1 – Question re parallels with Fukushima in Japan

A question was asked about the similarities between the recent incidents at Fukushima and the Japanese nuclear industry ignoring the known earthquake dangers, and West Cumbria ignoring the unsuitability of the area's geology.

#### **NDA response**

The NDA responded by saying that there are a number of assumptions and assertions behind the question, and noted that it is too early to comment on what has happened in Japan and the extent to which they did or did not take into account the potential for seismic events (which the plant did survive) and the subsequent tsunami. They stressed that the NDA is not ignoring factors such as this in their design and that their safety cases will be subject to scrutiny by the regulators and members of the public.

#### **NII/ONR response**

The Nuclear Installations Inspectorate/Office for Nuclear Regulation stated that there is a large section about earthquakes on the safety assessment principle section of its website, showing what needs to be taken into account with regard to seismic activity. They requested for it to be put on the record that earthquakes have been considered in the UK, and have been considered for a long time, but acknowledged that the issue of whether they have been considered enough is always a matter for debate.

#### **Environment Agency response**

The EA stated that their guidance includes a number of requirements relating to the Environmental Safety Case which the EA would need to approve and accept before they would issue a permit. They would not permit a site if they did not deem that it would meet the EA's requirements, and those requirements include the geology of a site. As part of this, the developer must identify the potential for seismic activity and account for that as part of the safety case.

#### **Partnership response**

The Programme Manager responded to say that the Partnership is still looking very closely at the question of geology, and that it has gone to a great deal of effort to publish the related information and generate debate on this subject out in the community. The Partnership has also asked the NDA to do further work on this issue, and David Smythe is putting together a more detailed response to the letter from CoRWM (see the External Documents section at <http://www.westcumbriamrws.org.uk/documents.asp>). All of this input will be considered by the Partnership and it will also be in the public domain. Assurance was therefore given that the issue of geology is not being ignored, but the Partnership is not stopping its activity on the basis of assertions from a small number of sources saying that the geology is not suitable.

### 8.2 – Concerns re old mine workings

Concerns were expressed about the fact that West Cumbria is full of old mine workings and that no mention had been made of these in the BGS report on its screening study of West Cumbria (see Document 116). It was noted that previous requests for further information that were made at the geology seminar held in November 2010 (see 4.5 above and Document 123) had not yet been provided.

#### **NDA response**

The NDA responded to say that one of the criteria that the BGS looked at was the potential interaction between a GDF and natural resources as the basis for exclusion, particularly coal and iron workings. This means that areas where there are extensive

coal fields and iron ore have been excluded, so the probability of interaction with old mine workings has been reduced. As the process moves forward into identifying and assessing sites, any possibility of interaction between old mine workings will be picked up during those stages.

#### **Offer of further discussion/information**

A copy of the BGS report was given to the questioner with an offer to discuss the findings and the excluded areas separately over lunch.

#### **8.3 – Availability of documents to members of the public attending the meeting**

The Partnership was asked whether it would be possible for documents that are circulated in advance of the meeting to also be available on the Partnership website in advance, to enable members of the public to consider them beforehand.

#### **Partnership response**

The Partnership agreed to consider how this could be managed. It was confirmed that the current policy is to only publish documents on the Partnership website once they have been finalised, but they agreed to consider the options, including the pros and cons of distributing and/or publicising draft documents.

#### **8.4 – Query re agenda item on Task 3b(iv)**

Clarification was sought about the agenda item relating to Task 3b(iv) ('Consider potential impacts of a GDF and recent research results.') as only tasks 3b(i) and (ii) had been mentioned during the discussions in the morning (see Section 3 above).

#### **Partnership response**

It was confirmed that the purpose of the agenda item today relating to Task 3b(iv) was to consider and take a view on the impacts research that had been identified in tasks 3b(i) – (iii). It was also noted that the agenda item today was to consider whether the Impacts Sub-Group had completed its work, and that further work was planned by the Technical Review Group to consider the Partnership's judgements on the research and other related work.

#### **8.5 – Comment re adverse impacts during the construction phase, and clarity regarding when certain issues will be assessed**

A member of the public considered that Document 163 made no reference to the adverse impacts that host communities would suffer during the construction phase e.g. noise, dust etc.

#### **Partnership response**

The Impacts Sub-Group explained that the 'Schedule of Impacts to be Assessed' lists the issues and the physical impacts previously agreed by the Partnership for investigation. Construction impacts were included. If the process reaches Stage 4, Strategic Environmental Assessments by the NDA, which include specific construction impacts, would be prepared for each potential identified site.

#### **Offer for further information/discussion**

The questioner responded to say that this is not clearly shown in the documents. Whilst assurance was given that the Partnership is aware of the issues, it was agreed that a further conversation would take place during lunch regarding the clarity of the information in the documentation.

#### **Further question**

A further point was made about Document 163, in relation to the number of times there is a question as to whether something can be assessed at this stage (prior to a decision

about participation) and whether further assessment might therefore be needed or carried out later. It was noted that it is not clear in the documentation whether these things that have been noted as needing to be assessed, actually can be assessed, and/or are ever going to be assessed. Concerns about people being asked to make a decision about whether to proceed without knowing the answer to these questions were noted.

### **Partnership response**

Whilst some further explanation was provided it was agreed that Cumbria CC would help address any outstanding points.

### **8.6 – Concerns re amount of information for the Partnership to consider**

Concerns were expressed about how many Partnership members in the room had had the time to read all of the information for the meeting and digest it, and that they were now being asked to make comments on the documents including e.g. the PSE Report. In relation to this it was noted that the way the Partnership puts information out might be indicative of the lack of questions from members.

### **8.7 – Potential for goalposts to be moved**

The Partnership was asked if there is any danger of the goalposts being moved regarding the areas that have been identified as unsuitable at this stage, and whether there is a “cast-iron guarantee” that a facility would not be sited in those areas.

### **DECC response**

DECC responded to say that there is no danger of the screening report being changed in the future, and stated that, whilst the underground facilities will not be situated in screened out areas, the above ground facilities could be located above.

### **8.8 – Comments re visibility and transparency of information**

There was agreement from a member of the public about the need for visibility, accessibility and transparency of information (in relation to the discussions in Section 6 above). There was also agreement about the need to publish the NDA’s issues and risk registers on a website, and the Partnership was encouraged to make it clear that they believe that these documents should be accessible so that they and others (including other public bodies and NGOs) can scrutinise them.

With regard to the discussions about trust and confidence in the NDA, a point was made about the ownership of the NDA website, and the need for a truly independent oversight body was stated.

### **DECC response**

DECC responded to say that they would expect the NDA to act as a “good neighbour” and engage openly with the community. They also pointed out that the new planning regime enables public scrutiny. In response to a request to produce a paper explaining the process that the public can go through, they pointed out that, whilst a paper on this topic was produced for the Partnership meeting in January (see Document 134 – Planning Roles and Processes, and Document 139 – Meeting Report from 19<sup>th</sup> January 2011, Section 3), the planning decision could take place in 10 – 15 years in the future. Whilst public guidance is therefore available, the detail is likely to change/evolve over that period of time.

### **NDA response**

The NDA reiterated that the voluntarism and partnership approach runs right the way through the MRWS process, and stated that the challenge for the NDA is about how they will manage that throughout.

### **8.9 – Question regarding information during PSE re the scale of the project**

A question was asked (by a non-West Cumbrian) about what information was given out during PSE2 about the scale of the project including e.g. the inventory, new build waste, information about above-ground facilities etc.

#### **Partnership response**

It was confirmed that this did depend on the sort of engagement strand that people/stakeholders chose to engage in. It was also noted that, currently, there isn't a lot of information to give on some of these issues. Whilst it is something that the Partnership has tried to strike the right balance with, there were some concerns during PSE2 about information provision that the Partnership will be seeking to address. An offer was made to provide further information to the questioner about the information that was provided.

## 9. Acronyms/Abbreviations

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|                  |   |
|------------------|---|
| ABC/Allerdale BC | Allerdale Borough Council                             |
| BGS              | British Geological Survey                             |
| CALC             | Cumbria Association of Local Councils                 |
| CBC/Copeland BC  | Copeland Borough Council                              |
| CCC/Cumbria CC   | Cumbria County Council                                |
| CoRWM            | Committee on Radioactive Waste Management             |
| CSP              | Community Siting Partnership                          |
| DECC             | Department of Energy and Climate Change               |
| DfT              | Department for Transport                              |
| DMB              | Decision Making Body                                  |
| DSSC             | Disposal System Safety Case                           |
| DtP              | Decision to Participate                               |
| EA               | Environment Agency                                    |
| EoI              | Expression of Interest                                |
| FAQ              | Frequently Asked Questions                            |
| FoE              | Friends of the Earth                                  |
| GDF              | Geological Disposal Facility                          |
| GDIB             | Geological Disposal Implementation Board              |
| HSE              | Health & Safety Executive                             |
| ILW              | Intermediate Level Waste                              |
| IPC              | Infrastructure Planning Commission                    |
| LDNPA            | Lake District National Park Authority                 |
| LGA              | Local Government Association                          |
| LLW              | Low Level Waste                                       |
| LLWR             | Low Level Waste Repository                            |
| MoU              | Memorandum of Understanding                           |
| MRWS             | Managing Radioactive Waste Safely                     |
| NALC             | National Association of Local Councils                |
| ND               | Nuclear Directorate (a department of the HSE)         |
| NDA              | Nuclear Decommissioning Authority                     |
| NEA              | Nuclear Energy Agency                                 |
| NGO              | Non-Governmental Organisation                         |
| NII              | Nuclear Installations Inspectorate (of the HSE)       |
| NNPS             | Nuclear National Policy Statement                     |
| NWAA             | Nuclear Waste Advisory Associates                     |
| NWDA             | North West Development Agency                         |
| NuLeAF           | Nuclear Legacy Advisory Forum                         |
| NWAT             | Nuclear Waste Assessment Team (of the EA)             |
| OCNS             | Office for Civil Nuclear Security                     |
| OECD             | Organisation for Economic Cooperation and Development |
| ONR              | Office for Nuclear Regulation                         |
| PSE              | Public and Stakeholder Engagement                     |
| RoW              | Right of Withdrawal                                   |
| RWMD             | Radioactive Waste Management Directorate (of the NDA) |
| SEA              | Strategic Environmental Assessment                    |
| SLC              | Site Licence Company                                  |
| ToRs             | Terms of Reference                                    |
| UKSO             | UK Safeguards Office                                  |
| UNECE            | United Nations Economic Commission for Europe         |
| WCSF             | West Cumbrian Strategic Forum                         |
| WCSP             | West Cumbria Strategic Partnership                    |
| WCSSG            | West Cumbria Sites Stakeholder Group                  |

## Appendix 1 – Agenda for the 14<sup>th</sup> April 2011 meeting

**Objectives** of the meeting are to:

1. Review the NDA's Generic Disposal System Safety Case – Task 1b(i).
2. Understand NDA and regulator response to technical issues raised by NWAA and others – Task 1a(v).
3. Consider potential impacts of a GDF and recent research results – Task 3b(iv).
4. Reflect on PSE2, evaluation and report – Task 6a(v).

| Time  | Item  | Agenda Notes   |
|-------|---|--|
| 08.45 | Arrivals / Registration   |  |
| 09.15 | Welcome<br>Agenda setting<br>Updates and actions                                    | Richard Harris, 3KQ<br><br>NB Updates sheet circulated beforehand  |
|       | <b>Impacts and Perceptions Research</b>   | - Update from the Impacts Sub-Group<br>- Presentation from 'GVA', research consultants on key findings<br>- Questions and discussion<br><b>(Doc 163)</b>   |
|       | <b>Public and Stakeholder Engagement Round 2:<br/><br/>Evaluation and Reporting</b> | - Presentation from the Partnership's independent evaluators on PSE2<br>- Presentation from the PSE Sub-Group on the main 'headlines' and key questions from the report<br>- Discussion/deliberation on the main headlines<br>- Agree next steps toward responding to PSE2 and informing the assessment process<br><b>(Docs 157 and 158)</b> |
|       | <b>Public Questions</b>   |  |
| 12.45 | Lunch   | (approx. timing)   |
|       | <b>Generic Disposal System Safety Case</b>  | - Overview presentation from the NDA<br>- Regulatory review update<br>- Independent Review Panel report<br>- Questions and discussion<br><b>(Docs 160 and 161)</b>   |
|       | <b>NWAA Issues Register and Rock Solid Report</b>                                   | - Brief introduction to the NWAA Issues Register and 'Rock Solid'<br>- NDA generic response to the issues raised (using examples to illustrate)<br>- NWAA comments<br>- Questions and discussion<br><b>(Doc 159 and 154)</b>   |
|       | <b>Public Questions</b>   |  |
| 16.00 | Close   |  |

***Bold type indicates papers sent out in advance of the meeting.***

## Appendix 2 – Attendees on 14<sup>th</sup> April 2011

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|                          |                                       |                         |
|--------------------------|---------------------------------------|-------------------------|
| Mike Davidson            | Allerdale Borough Council             | (Steering Group member) |
| Richard Griffin          | Allerdale Borough Council             | (Steering Group member) |
| Tim Heslop               | Allerdale Borough Council             |                         |
| Charles Holmes           | Allerdale Borough Council             |                         |
| Sam Standage             | Allerdale Borough Council             |                         |
| Guy Richardson           | CALC                                  |                         |
| Geoff Smith              | Allerdale CALC                        |                         |
| Chris Shaw               | Allerdale/Copeland CALC               | (Steering Group member) |
| Keith Hitchen            | Copeland CALC                         | (Steering Group member) |
| Jason Gooding            | Carlisle City Council                 |                         |
| Revd Dr Lindsay Gray     | Churches Together in Cumbria          |                         |
| Ian Curwen               | Copeland Borough Council              |                         |
| Paul Walker              | Copeland Borough Council              |                         |
| Rob Johnston             | Cumbria Chamber of Commerce           |                         |
| Kieran Barr              | Cumbria County Council                |                         |
| Paul Feehily             | Cumbria County Council                |                         |
| Gerald Humes             | Cumbria County Council                |                         |
| Stewart Kemp             | Cumbria County Council                | (Steering Group member) |
| Tim Knowles (am only)    | Cumbria County Council                | (Steering Group member) |
| Marcus Swift             | Prospect Union                        |                         |
| Richard Greenwood        | Cumbria Tourism                       |                         |
| Mike Tonkin              | Eden District Council                 |                         |
| Robert Morris-Eyton      | National Farmers Union                |                         |
| Fred Barker              | NuLeAF                                |                         |
| Simon Rowley             | South Lakeland District Council       |                         |
| <b>Observing Members</b> |                                       |                         |
| Andrew Craze             | DECC                                  |                         |
| Bruce Cairns             | DECC                                  |                         |
| Brian Clark              | CoRWM                                 |                         |
| Mark Dutton              | CoRWM                                 |                         |
| Gavin Thomson            | Environment Agency                    |                         |
| Alun Ellis               | NDA RWMD                              |                         |
| Elizabeth Atherton       | NDA RWMD                              |                         |
| Mick Bacon               | ONR                                   |                         |
| <b>Apologies</b>         |                                       |                         |
| Carni McCarron-Holmes    | Allerdale Borough Council             |                         |
| Yvonne Clarkson          | Copeland Borough Council              |                         |
| Allan Holliday           | Copeland Borough Council              |                         |
| John Kane                | Copeland Borough Council              |                         |
| Steve Smith              | Copeland Borough Council              | (Steering Group member) |
| Elaine Woodburn          | Copeland Borough Council              | (Steering Group member) |
| David Southward          | Cumbria County Council                |                         |
| Peter Kane               | GMB/Unite Unions                      | (Steering Group member) |
| Paul McKenna             | Isle of Man Government                |                         |
| Robert Allison           | Lake District National Park Authority |                         |
| Judith Cooke             | Lake District National Park Authority |                         |

David Moore                                      West Cumbria Sites  
Stakeholder Group                              (Steering Group member)

**Facilitators, Secretariat and Presenters**

Rhuari Bennett                                  3KQ (Programme Manager)  
Richard Harris                                  3KQ (Facilitator)  
Jane Dalton                                      3KQ (Report Writer)  
Sharon Walker                                  Copeland Borough Council (Secretariat)  
Rob Hickey                                      GVA (Presenter)  
Lucy Bailey                                      NDA (Presenter)  
Steve Barlow                                    NDA (Presenter)  
Pete Wilkinson                                  NWAA (Presenter)  
Pete Roche                                      NWAA (Presenter)

**Other**

Paul Gardner                                    Osprey Communications (Communications Adviser)  
Gareth Powells                                  Wood Holmes (Partnership Evaluators)

**Members of the Public and Stakeholders** who attended for all or part of the meeting

Rob Edwards  
Jim Furness  
Fergus McMorrow  
Jean McSorley  
D Robertson  
Joe Sandwith  
David Wood  
Sam Baines                                      CoRWM Secretariat  
Dube Nokuthula                                  CoRWM Secretariat  
John Rennilson                                  CoRWM  
Steve Reece                                      NDA  
Bill Turner                                        HSE  
Clive Williams                                  Environment Agency

**Other Members, Not in Attendance**

Ken Williams                                    Barrow Borough Council  
Tony Markley                                    Cumbria County Council  
Clare Feeney-Johnson                          South Lakeland District  
Council

## Appendix 3 – How Members Represent their Organisations on the Partnership

All Partnership members recognise the need to update the organisations that they represent and proactively feed their views in. This is essential to prevent Partnership members becoming 'detached' from their organisation in terms of understanding, as well as maintaining the credibility of the representative role that members commit to fulfilling. The table below sets out how each organisation undertakes to do this.

*Note the gaps will be filled as reporting mechanisms are clarified.*

| Organisation                        | Nominated Representatives and preferred contact details  | Mechanisms Used  |
|-------------------------------------|--|--|
| Allerdale BC                        | <p>Mike Davidson (councillor)<br/> <a href="mailto:mike.davidson@allderdale.gov.uk">mike.davidson@allderdale.gov.uk</a><br/>           Sam Standage (councillor)<br/> <a href="mailto:sam.standage@allderdale.gov.uk">sam.standage@allderdale.gov.uk</a><br/>           Tim Heslop (councillor)<br/> <a href="mailto:tim.heslop@allderdale.gov.uk">tim.heslop@allderdale.gov.uk</a><br/>           Carni McCarron-Holmes (councillor)<br/> <a href="mailto:carni.mccarron-holmes@allderdale.gov.uk">carni.mccarron-holmes@allderdale.gov.uk</a><br/>           Charles Holmes<br/> <a href="mailto:charles.holmes@allderdale.gov.uk">charles.holmes@allderdale.gov.uk</a><br/>           Richard Griffin<br/> <a href="mailto:richard.griffin@allderdale.gov.uk">richard.griffin@allderdale.gov.uk</a></p> | <p>Verbal progress report provided to the following meetings:<br/>           - Corporate Management Team/ Heads of Service.<br/>           - Regeneration Portfolio Holders.<br/>           - Regeneration Managers Group (for further cascade).<br/>           - Partnerships and Communities Directorate.</p> <p>Formal report for endorsement, or decision, would be via:<br/>           - Nuclear Issues Task Group.<br/>           - Executive Committee Council.</p> |
| Barrow BC                           | <p>Ken Williams (councillor)<br/> <a href="mailto:kenwilliams@barrowbc.gov.uk">kenwilliams@barrowbc.gov.uk</a><br/>           Phil Huck<br/> <a href="mailto:philhuck@barrowbc.gov.uk">philhuck@barrowbc.gov.uk</a></p>  | Verbal update given to Leader after each Partnership meeting.  |
| CALC (Allerdale)                    | <p>Chris Shaw<br/> <a href="mailto:chris.shaw@calc.org.uk">chris.shaw@calc.org.uk</a><br/>           Geoff Smith (councillor)<br/> <a href="mailto:geoffandhelen@tesco.net">geoffandhelen@tesco.net</a></p>  | Regular written and verbal report to CALC's Allerdale Association meetings.  |
| CALC (Copeland)                     | <p>Chris Shaw<br/> <a href="mailto:chris.shaw@calc.org.uk">chris.shaw@calc.org.uk</a><br/>           Keith Hitchen (councillor)<br/> <a href="mailto:keith.hitchen@btinternet.com">keith.hitchen@btinternet.com</a></p>  | Regular written and verbal report to CALC's Copeland Association meetings.   |
| CALC (Cumbria)                      | <p>Guy Richardson<br/> <a href="mailto:guy.richardson@calc.org.uk">guy.richardson@calc.org.uk</a></p>  | Regular written and verbal report to CALC's Executive Committee meetings.  |
| Carlisle City Council               | <p>Jason Gooding<br/> <a href="mailto:jasong@carlisle.gov.uk">jasong@carlisle.gov.uk</a></p>   |  |
| Chamber of Commerce (Cumbria)       | <p>Robert Johnston<br/> <a href="mailto:rob@cumbriachamber.co.uk">rob@cumbriachamber.co.uk</a></p>   |  |
| Churches Together in Cumbria (CTiC) | <p>Revd Dr Lindsay Gray<br/> <a href="mailto:lgray782@btinternet.com">lgray782@btinternet.com</a></p>  |  |

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|---------------------------------------|--|--|
| Copeland BC                           | <p>Elaine Woodburn (councillor)<br/> <a href="mailto:ewoodburn@copelandbc.gov.uk">ewoodburn@copelandbc.gov.uk</a><br/> Allan Holliday (councillor)<br/> <a href="mailto:allan.holliday@copeland.gov.uk">allan.holliday@copeland.gov.uk</a><br/> John Kane (councillor)<br/> <a href="mailto:john.kane@copeland.gov.uk">john.kane@copeland.gov.uk</a><br/> Yvonne Clarkson (councillor)<br/> <a href="mailto:yvonne.clarkson@copeland.gov.uk">yvonne.clarkson@copeland.gov.uk</a><br/> Paul Walker<br/> <a href="mailto:paul.walker@copeland.gov.uk">paul.walker@copeland.gov.uk</a><br/> Steve Smith<br/> <a href="mailto:steve.smith@copeland.gov.uk">steve.smith@copeland.gov.uk</a><br/> Ian Curwen<br/> <a href="mailto:ian.curwen@copeland.gov.uk">ian.curwen@copeland.gov.uk</a></p> | <ul style="list-style-type: none"> <li>- Leader's update to full Council.</li> <li>- Update to Nuclear Working Group.</li> <li>- Update to Executive at key milestones.</li> <li>- Update to MRWS Task Group when needed.</li> </ul>   |
| Cumbria County Council                | <p>Tim Knowles (councillor)<br/> <a href="mailto:timothy.knowles@cumbriacc.gov.uk">timothy.knowles@cumbriacc.gov.uk</a><br/> Tony Markley (councillor)<br/> <a href="mailto:anthony.markley@cumbriacc.gov.uk">anthony.markley@cumbriacc.gov.uk</a><br/> David Southward (councillor)<br/> <a href="mailto:david.southward@virgin.net">david.southward@virgin.net</a><br/> Gerald Humes (councillor)<br/> <a href="mailto:gerald.humes@cumbriacc.gov.uk">gerald.humes@cumbriacc.gov.uk</a><br/> Paul Feehily<br/> <a href="mailto:paul.feehily@cumbriacc.gov.uk">paul.feehily@cumbriacc.gov.uk</a><br/> Stewart Kemp<br/> <a href="mailto:stewart.kemp@cumbriacc.gov.uk">stewart.kemp@cumbriacc.gov.uk</a></p>  | <ul style="list-style-type: none"> <li>- 6-weekly written report to Nuclear Issues Working Group (NIWG).</li> <li>- Quarterly report to Cabinet.</li> <li>- Monthly report to Nuclear Issues Programme Board.</li> <li>- Possible insert in weekly briefing to all staff.</li> <li>- Link to Partnership website.</li> <li>- Attending Allerdale and Copeland Local Area Committees on request.</li> </ul>   |
| Cumbria Tourism                       | <p>Richard Greenwood<br/> <a href="mailto:rgreenwood@cumbriatourism.org">rgreenwood@cumbriatourism.org</a></p>   | <ul style="list-style-type: none"> <li>- Keep the rest of the organisation and the wider membership of CT informed.</li> <li>- Updates to Senior Management Team (as and when relevant).</li> <li>- Reports to the Executive Board and, where necessary, formal endorsement of CT's position on any decisions which need to be taken.</li> <li>- Email and Viewpoint (quarterly magazine to all members).</li> <li>- Presentation from the Partnership at a Commercial Members Meeting.</li> </ul> |
| Eden District Council                 | <p>Mike Tonkin (councillor)<br/> <a href="mailto:mike.tonkin@eden.gov.uk">mike.tonkin@eden.gov.uk</a></p>  | <ul style="list-style-type: none"> <li>- Report to members on 'Outside Bodies' website.</li> <li>- Presentation to members as Environment Portfolio Holder.</li> </ul>   |
| GMB/Unite Unions                      | <p>Peter Kane<br/> <a href="mailto:peter.kane@sellafieldsites.com">peter.kane@sellafieldsites.com</a></p>  | <ul style="list-style-type: none"> <li>- Updates given to Shop Stewards Committee.</li> <li>- Forward on newsletters to members.</li> </ul>  |
| Lake District National Park Authority | <p>Robert Allison<br/> <a href="mailto:robert.allison@lakedistrict.gov.uk">robert.allison@lakedistrict.gov.uk</a><br/> Judith Cooke<br/> <a href="mailto:judith.cooke@lakedistrict.gov.uk">judith.cooke@lakedistrict.gov.uk</a></p>  |  |
| National Farmers Union                | <p>Robert Morris-Eyton<br/> <a href="mailto:rmorriseyt@aol.com">rmorriseyt@aol.com</a></p>   | <ul style="list-style-type: none"> <li>- Link to Partnership website and Robert's contact details placed on NFU website.</li> <li>- 2 principal officers that cover West Cumbria updated that the process is happening and to forward any queries to Robert.</li> </ul>  |

|                                 |  |  |
|---------------------------------|--|--|
| NuLeAF                          | Fred Barker<br><a href="mailto:fbarker@gn.apc.org">fbarker@gn.apc.org</a>  | <ul style="list-style-type: none"> <li>- Written report to each NuLeAF Steering Group.</li> <li>- Referenced in e-bulletin.</li> <li>- Website has a GDF section which signposts Partnership meeting reports.</li> </ul>   |
| Prospect Union                  | Marcus Swift<br><a href="mailto:mjs17@sellafieldsites.com">mjs17@sellafieldsites.com</a>   | <ul style="list-style-type: none"> <li>- Make the Partnership an agenda item at Sellafield Site Representatives Meetings, and either the General Purposes Committee or Branch Executive Council.</li> <li>- Send all appropriate papers to Prospect members in the Sellafield Limited Branch.</li> <li>- Collate questions, comments, points and general feedback.</li> <li>- Provide reports to Prospect's national SET Committee.</li> </ul> |
| South Lakeland District Council | Simon Rowley<br><a href="mailto:s.rowley@southlakeland.gov.uk">s.rowley@southlakeland.gov.uk</a><br>Clare Feeney-Johnson<br><a href="mailto:c.feeneyjohnson@southlakeland.gov.uk">c.feeneyjohnson@southlakeland.gov.uk</a> | Forward minutes and newsletters to Senior Management Team and Portfolio Holder.  |
| WCSSG                           | David Moore<br><a href="mailto:dmoore@copelandbc.gov.uk">dmoore@copelandbc.gov.uk</a>  | <ul style="list-style-type: none"> <li>- Quarterly verbal updates to SSG.</li> <li>- Paragraph in quarterly newsletter.</li> <li>- Link on website to Partnership site.</li> </ul>   |
| <b>Observing Members:</b>       |  |  |
| CoRWM                           | Brian Clark<br><a href="mailto:briandclark@btinternet.com">briandclark@btinternet.com</a><br>Mark Dutton<br><a href="mailto:lizmark@lizmark1.co.uk">lizmark@lizmark1.co.uk</a>   | <ul style="list-style-type: none"> <li>- Verbal update to all plenary meetings.</li> <li>- Circulate key papers to Committee.</li> <li>- Insert in e-bulletin as appropriate.</li> </ul>   |
| DECC                            | Bruce Cairns<br><a href="mailto:bruce.cairns@decc.gsi.gov.uk">bruce.cairns@decc.gsi.gov.uk</a><br>Andrew Craze<br><a href="mailto:andrew.craze@decc.gsi.gov.uk">andrew.craze@decc.gsi.gov.uk</a>                           | <ul style="list-style-type: none"> <li>- Report to various meetings and colleagues with an interest in the process.</li> <li>- Advise Ministers who take Government decisions in this area.</li> </ul>   |
| Environment Agency              | Gavin Thomson<br><a href="mailto:gavin.thomson@environment-agency.gov.uk">gavin.thomson@environment-agency.gov.uk</a>  | Report key points arising to various colleagues in nuclear regulation and NW region.   |
| Isle of Man Government          | Paul McKenna<br><a href="mailto:paul.mckenna@gov.im">paul.mckenna@gov.im</a>   | Presentation on geological disposal given to Council of Ministers in 2009. Regular updates/scientific advice to Isle of Man Government.  |
| NDA                             | Alun Ellis<br><a href="mailto:alun.ellis@nda.gov.uk">alun.ellis@nda.gov.uk</a><br>Jay Redgrove<br><a href="mailto:jay.redgrove@nda.gov.uk">jay.redgrove@nda.gov.uk</a>   | <ul style="list-style-type: none"> <li>- Monthly reporting to RWMD and central communications staff.</li> <li>- Dissemination of Partnership minutes and Meeting Reports to staff.</li> </ul>  |
| Office for Nuclear Regulation   | Mick Bacon<br><a href="mailto:mick.bacon@hse.gsi.gov.uk">mick.bacon@hse.gsi.gov.uk</a>   | <ul style="list-style-type: none"> <li>- Contact reports distributed after each contact (meeting or otherwise).</li> <li>- Regular report to related project groups.</li> <li>- Briefings taken before each meeting depending on agenda.</li> </ul>  |