

Submarine Dismantling Programme (SDP).

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Summary and Recommendation:

On the 13 February 2014 the Ministry of Defence (MOD) published a provisional shortlist of sites that may be suitable for the interim storage of Intermediate level Waste (ILW) that will be removed from ex-Royal Navy nuclear-powered submarines.

MOD will now enter a period of pre-engagement with elected representatives, local authorities and established site stakeholder groups to seek their views on the criteria that should be considered during the main assessment of shortlisted sites and what shape the forthcoming public consultation should take.

Following this pre-engagement, the MOD will publish the final shortlist of sites that will be used as the basis for the public consultation, planned for late 2014.

Recommendation: That Members agree that a Member and Officer of Copeland should attend a workshop run by MOD in Penrith on the 9th April 2014.

1. Background

- 1.1** Members may recall that the MOD ran a consultation in October 2011 to Feb 2012 into the Submarine Dismantling Project (SDP) refer to Appendix one for CBC response to the initial consultation. The first stage of SDP's decision-making addressed the questions of how and where the radioactive waste would be removed from the submarines.
- 1.2** At the time Copeland borough Council responded to the consultation highlighting the need for further consultation with the potential communities storing the ILW.
- 1.3** The MOD formally announced on 22 March 2013 that the following decisions had been made: 'initial submarine dismantling will take place in situ at both Devonport and Rosyth; Reactor Pressure Vessels (RPVs) will be removed and stored intact; and a revised approach to selecting an ILW storage site will be taken forward.'
- 1.4** In the previous consultation only the *type* of site was defined by ownership and its proximity to initial dismantling sites. This is now a further stage of analysis and public consultation, necessary to determine the ILW storage site.

2. Introduction

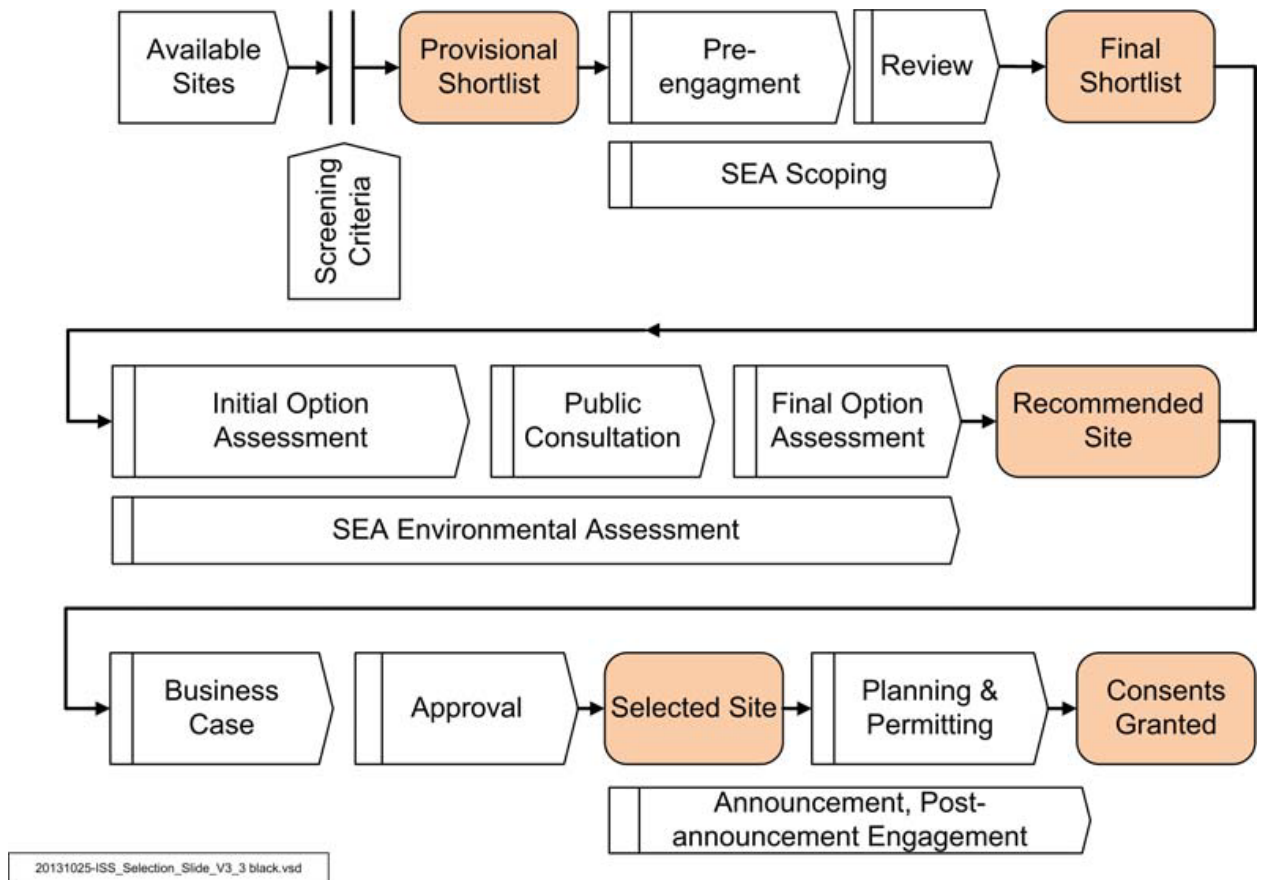
- 2.1** The MOD's SDP is developing a solution for the dismantling of 27 Royal Navy nuclear submarines, once they have left Naval Service and have been defueled, and the safe interim storage of the ILW arising. These submarines include the eleven currently stored afloat at Devonport and seven at Rosyth, as well as nine that are still in service.
- 2.2** Following the publication of the documents, the MOD will enter a period of pre-engagement with local authorities, elected representatives and established site stakeholder groups. This will provide an early opportunity for these parties to understand and comment on the criteria that should be considered during the main assessment of shortlisted sites. It will also help to shape the formal public consultation that the MOD will carry out before any decisions are made.
- 2.3** Following this period of pre-engagement, their aim is to publish the final shortlist of sites in summer 2014. These will then be taken forward as the basis for public consultation, which will be carried out locally, around each candidate site, and nationally. This will be the main opportunity for members of the public to comment on the MOD's decision process and assessment of the shortlisted sites. Details of public consultation events will be widely publicised.
- 2.4** The MOD is holding a stakeholder workshop on the Submarine dismantling project 9th April 2014 Penrith which Copeland have been invited to.

3. Short list of sites:

Site	Owner	Site Licensee
Aldermaston (Berkshire)	MOD	AWE plc
Burghfield (Berkshire)	MOD	AWE plc
Chapelcross (Dumfriesshire)	NDA	Magnox
Sellafield (Cumbria)	NDA	Sellafield Ltd
Capenhurst (Cheshire)	Contractor – Capenhurst Nuclear Services	Capenhurst Nuclear Services ¹

4. The decision making process:

- 4.1** The main elements of the interim ILW Storage Site (ISS) decision making process are shown on the following flowchart:



4.2 The Option Assessment phase comprises the following main activities:

- During Initial Assessment, the shortlisted sites are compared, primarily on the basis of whole life cost and operational effectiveness. Further assessment of a site may be halted at any point if it can be shown to fail an 'unacceptable performance' threshold test;
- SEA studies on the shortlisted sites are completed and the SEA Environmental Report issued;
- Public consultation follows, including dissemination of a Public Consultation Document, plus events for communities associated with shortlisted sites, national stakeholders, and the wider public. Information is gathered for the OCF analysis which complements the whole life cost and operational effectiveness analyses;
- After the public consultation, responses will be considered, the Operational Effectiveness Multi-Criteria Decision Analysis will be 'weighted', the analyses will be completed and the data reports finalised. The SDP will publish a summary of the comments received while retaining the comments received in full, for any interested parties to review; and,

- The Business Case Review Note and supporting documents are prepared, bringing together all the information and arguments. A recommended ILW Storage Site is then identified. After approval, feedback is given to stakeholders and the wider public.

5. Way Forward

- 5.1** As Sellafeld is one of the sites on the short list it is recommended that we remain engaged in the process to ensure that we can influence the decision making process and to best represent the interests of the local community.
- 5.2** Therefore it is proposed that a Member and Officer of Copeland Borough Council attend the workshop in Penrith on the 9th April and update the SNEB Members on progress and any developments at the next meeting.

Appendix One: CBC response to SDP consultation in Feb 2012.

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Please answer as many questions as you wish to – you do not have to answer them all.

Q1. What are your views on the overall objectives for the dismantling submarines that have left service? [chapter 4]

Enter your response here: The long term storage of submarines in ports that require constant human maintenance and intervention is clearly an unfeasible solution. It is agreed that dismantling and then, where possible, recycling the materials and disposing of the hazardous and non-recyclable components in a responsible manner appears to be the most efficient and effective means of dealing with the submarines.

The key issue within the consultation is around the storage/disposal of the intermediate level waste (dismantling itself could be seen as a large recycling project) - but the overall value of the consultation is undermined by the scope of the consultation being limited to discuss types of storage/disposal sites rather than location, as a result of which it is difficult to give a full response to the consultation.

We agree with the need to dismantle these nuclear submarines but we feel the project is avoiding the subject of final disposal route for all the submarine waste.

The storing of ILW until a GDF facility is available needs due consideration. As there is currently no such facility in the planning process it is possible that the storage of ILW may be for a prolonged period of time (much longer than the estimated earliest availability date of 2040). Therefore the process of storing ILW and the proposed interim storage facility must be given due consideration.

The amount of waste that will be generated will be much more than that of one Trafalgar Class Submarine as illustrated in this section. Further information and consideration is needed over disposal of all wastes and the amount generated in order to fully respond to this question.

Q2. What are your views on the options for how the radioactive materials could be removed from the submarine? Do you think any significant options have been left out? [chapter 6]

Enter your response here: The three options outlined appear credible.

However due consideration of the views of host communities needs to be taken into consideration. As West Cumbria is the only area that has expressed an interest in hosting a GDF there would need to be discussions with the community on preference for dismantling and indeed if the local community wants to accept nuclear submarine waste as the inventory for a repository has not been discussed. Copeland Borough Councils initial preferred option is for the waste to be extracted and packaged ready for final storage, this would preferably be carried out at the interim site with the economic benefits being felt by the ILW host community. This option we feel would be the most beneficial in the long term and delivers what the report states "we do not leave the problem of disposal for future generations". The options only deal with the short term impacts of the dismantling and not the impact of long term storage.

Q3. What are your views on the candidate sites for where the radioactive waste is removed from the submarines? Do you think any significant options have been left out? [chapter 6]

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Enter your response here: The feasibility and credibility of these sites storing ILW is not fully examined and should be included in the assessment. CBC would suggest that a final disposal route for the ILW should be concluded before a decision on the sites for the dismantling is made.

The criteria used to assess the original sites is quite limited and it is considered that it does not take account of the full set of criterion upon which the sites should have been assessed on.

Availability of each site to store the ILW removed from the submarines needs further explanation although it is briefly addressed under "Compatibility with site operations", it is not clear as it states it will be the decision of the site owner to prioritise activities and decide whether storage is acceptable".

Transport links to the sites is another key criteria which has been excluded from the process. If the ILW is not to be stored at the site, where it will be removed, then it must be transported to either a NDA or MoD site. The transport links to the area and means of transportation to the proposed site would therefore be an important factor upon which to assess the suitability of the site for the dismantling process.

A particular concern of Copeland Borough Council is how the dismantled parts will be transported to the Interim storage facility - which may be a NDA site and could be at Sellafield in Copeland.

Also final disposal will be in a GDF and as West Cumbria is the only area currently going through the voluntary process it would seem that it is possible that if the GDF goes ahead that the waste is likely to have to be transported to this area at some stage.

Whilst the Council has no objections to the types of sites being assessed it is considered that the process arriving at the final decision has not been thorough and further consideration should be given to the criteria used in the screening candidate sites for initial dismantling assessment. The screening should take into consideration where the ILW will be stored after removal and possible advantages of locating dismantling sites close to storage sites.

The Council has concerns that not all the relevant or correct criteria have been used in the assessment, as transport / storage and disposal of the removed parts are not given due consideration this could have affected the analysis of the options. CBC would prefer that the nuclear submarines are dismantled (where possible) closer to the area where the ILW will be stored so that the socio-economic benefits of dismantling will be felt by the community that bear the burden of hosting the waste.

Given the next stage of the process (storage / disposal) and its possible location it is considered that due consideration has not been given to all the locations.

Q4. What are your views on the options for which type of site is used to store the intermediate level waste from submarine dismantling? Do you think any significant options have been left out? [chapter 6]

Enter your response here:

The information underpinning this section is inadequate therefore it is impossible to give a complete answer. Full disclosure of the proposed storage measures of ILW should be shared with local communities as without this information they are only being given a proportion of the analysis and their responses only relate to the dismantling process and not the storage.

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A more open and transparent process such as the MRWS voluntarism process could be applied, a process supported by Government and one which is open, transparent, understandable of community impacts both negative and positive and not imposed upon the community.

The proposed way forward is to continue working closely with the NDA and wider government to assess whether it would be more cost effective and beneficial to use NDA storage facilities or to develop a new one for SDP.

However, this document does not give any clarification of the multi-criteria decision analysis that will be used to assess the effectiveness of the different options. Without this evidence it is impossible to give an educated response on the viability of the 2 different options. CBC would stress that a consultation on whether it would be more beneficial to use NDA storage facilities or to develop a new facility at other sites, should be carried out once all the information becomes available.

The discussions between MoD and NDA need to be open and transparent in order to instil faith in the process, it is also unclear as to who and when the consultation on the storage of ILW will be carried out.

In section 8.7.6 it states that "Our assessment of the storage site options found that there was little separation between the options to store ILW either at the point of generation or remotely." This is in direct contrast with the non-proliferation of waste policy which advocates managing waste at the site at which it arises and is a policy that Copeland Borough Council would advocate.

Furthermore the economic and environmental implications of transporting the waste needs to be considered. This is only seen as a means for concern in the case of RC separation where the cost and risks of transporting RCs to a remote site would make this option uneconomical.

The SDP document seems to have a presumption in favour of NDA storage facilities. It is felt that full consideration of the potential impacts of transporting the waste and the legacy and implications on the host community must be assessed before this option can be taken forward.

The final destination for the ILW is the GDF facility, the storage facility is seen as an interim measure, however the availability of the GDF is a long way off. Further consideration should also be given to the possible event of a GDF facility not becoming available, what would happen to the waste if this position arises?

Q5. What are your views about the methods used to compare dismantling and storage options, in particular the factors considered to assess their suitability/effectiveness / performance? [chapter 6]

Enter your response here: The different management options for submarine decommissioning have different timings but essentially all result in the same end-point - eventual disposal of ILW in the NDA's GDF. However there is almost no useful information about the radioactive waste inventory of nuclear submarines other than a very simplistic summary of 50 tonnes of ILW steel and 176 tonnes of LLW steel activated with cobalt-60 that would require disposal from a typical Trafalgar Class submarine, along with an assertion that "almost all of the radioactivity in the defueled submarine is fixed within solid metal". We would suggest that this is a limited assessment of the potential risks and hazards that may be encountered when dismantling a submarine.

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As stated in section 6.3.3 "the main difference between the options is the order and timing in which the size- reduction and storage activities are carried out."

The importance and impact of the above listed activities is barely touched on in this report. This is a critical stage in the process and in order to have confidence in the decision making behind the process a greater level of transparency is required.

Again Multi Criteria Decision Analysis (MCDA) has been used to establish which method to take forward as stressed previously in order to have confidence in the process it is vital that the correct criteria are used in the assessment.

A 'Swing weighting' approach has been used to weight the importance of each criteria again the weight attributed to any given criteria can swing the decision in favour of one option over another. Therefore the process of MCDA can be manipulated through the inclusion/exclusion of certain criteria and by attributing less / more weight to other areas, as stated earlier it is considered that transport is a much under rated criteria which needs to be given full consideration. Especially if the chosen dismantling sites are remote from storage of ILW sites.

The weighting of criteria is of particular importance as it raises a question over the robustness of the conclusion that options involving ILW storage at the point of generation show no net advantage.

The 'Operational Analysis Supporting Document' (para 9.2.1) states that The environment criteria and the health and safety criteria "were not found to discriminate significantly between the options. It is considered that this is not a robust assessment of what are fundamental and key points in assessing the dismantling and storage process.

It also states:

"Options involving ILW storage at the point of waste generation showed no net advantages over other storage categories in terms of either OE or WLC. This was because transport impacts (for storage at remote sites) were balanced by operational impacts (for storage at the point of waste generation."

Taking into consideration policy of non-proliferation of waste and the concerns already expressed about the lack of weight attributed to transport and the impacts of storage on the "Remote" host community it is considered that the storage / transport of waste is an area that has not been fully investigated and needs to be fully explored before being progressed any further.

Q6. Do you think we have captured all the potential advantages and disadvantages and if not which others would you propose? [chapter 7]

Enter your response here: As stated throughout this report it is considered that the issue of transporting and storage of waste is one which has been over looked or not weighted suitably and is an area which needs to be readdressed and given due consideration before moving forward with either strategy.

The potential impacts on the community of hosting the storage of ILW have not been captured. There is no data presented on actual submarine decommissioning and waste management costs. There is no financial detail provided to be able to make an informed comment on whether the

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proposals are an effective use of taxpayers' money, therefore the exclusion of the financial information makes it difficult to give a complete response to this consultation.

Community benefits are not covered in this consultation; this is of particular importance if the storage of ILW is not at the dismantling locations as the benefits associated with job creation of dismantling are not then felt within the ILW host community.

Furthermore, a community benefits package should be considered for those areas identified as dismantling sites as the downturn in tourism, perception of the area etc would become very apparent as soon as the nuclear dismantling starts.

Q7. Are there any other significant issues or factors you think we have overlooked? [chapter 7]

Enter your response here:

The fate of the spent fuel seems to be outside the scope of the SDP consultation but nevertheless the transfers are relevant to Copeland Borough Council's overview of the full impacts of defueling and decommissioning of nuclear submarines. It would be extremely beneficial if information could be provided on the MoD spent fuel stored at Sellafield and the future plans for this legacy fuel and the new planned spent fuel storage. It would seem reasonable that with more spent fuel assumed to come to Sellafield that present agreements should be reviewed to ensure maximum benefits for the local community are realised. Presently there are none.

Q8. What are your views on our proposals, and associated rationale, for:

a. how we remove the radioactive waste [chapter 8]

Enter your response here: How the radioactive waste is removed will play a part in how and where it can be stored. As stated in the above questions Copeland Borough Council has concerns over the process and the criteria used to assess these options.

We believe that the 3 options outlined are the most feasible, however a more detailed analysis of the criteria and weighting used to determine which process is progressed is needed to instil faith in the process.

The process has not taken account of the difference in perceived or real impacts. The perceived negative impact on communities has not been given consideration.

b. where we remove the radioactive waste; and [chapter 8]

Enter your response here: There is a presumption throughout the paper that moving the waste to a NDA site is the most feasible solution. This decision has not been fully rationalised and the decision process may be considered flawed if it does not give due consideration to all possible implications for environmental, health and safety and transport impacts. It is considered that to date these considerations have been limited and a much more robust examination is required.

c. which type of site will be used to store Intermediate Level radioactive Waste? [chapter 8]

Enter your response here: Again there is an assumption that an NDA storage site is the more favoured option rather than building a storage facility. Unless it is proven that this is the best solution continued investigation and comparison to developing a new build facility is necessary.

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Q9. Do you have any comments on the next stages of decision making process that will follow this consultation? [chapter 9]

Enter your response here: The next stage of the process must be shown to have revisited the areas that have been highlighted in this consultation as lacking in credibility and needing further examination.

Details on who, when and how consultation on ILW storage will happen are necessary, and as the date for start of the dismantling is 2020 these consultations need to start as soon as possible.

Q10. Do you have any comments about how this consultation has been conducted? Did the consultation provide enough information for you to reach views on the key decisions? Did it meet the seven consultation criteria of the government Code of Practice (outlined at Annex D)?

Enter your response here: The timing of workshops has not been very well co-ordinated to allow for meaningful response to what is an extensive consultation document.

Furthermore the initial consultation document is very simplified with none of the evidence base included. The supporting documents are provided on the internet but there are so many that it becomes a very convoluted process trying to find the evidence or rationale behind any of the decisions made in the overarching SDP document.

The consultation is incomplete as it does not cover the process from start to finish from dismantling to storage as the information provided is incomplete it makes it very difficult to make a full response. Due to the gaps in knowledge and lack of transparency around the final storage of ILW we feel that it fails to meet the government code of practice.

Environmental Questions

Please refer to the Environmental Report and Non-Technical Summary for the information you need to answer the Strategic Environmental Assessment questions.

Q11. Do you think that the Environmental Report has captured the significant environmental effects of the SDP options? If not, what effects do you think we have missed, and why?

Enter your response here: In section 2.3 of the Strategic Environmental Assessment (SEA) Non-technical summary it states that the MoD had identified the sites of Devonport Dockyard and Rosyth Dockyard as potential sites and the document then goes on to assess the environmental impacts in relation to these 2 sites only.

However it is considered that doing an assessment of only the 2 sites is very limited and does not get an overall assessment. In order to give a full indication of the advantages and disadvantages it would be more insightful to have done an assessment of the sites shortlisted. It is recognised that to do an assessment of all 8 sites identified would be time consuming but it is reasonable to expect that an assessment of the 4 sites that were identified through the second stage of the process should have been carried out.

Q12. Is there any other baseline environmental information, relevant to the SEA that we have not included? If so, please provide details.

Enter your response here: Table 3.1 outlines 14 issues of baseline information. We are pleased to see that transport has been included as one of the baseline issues.

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The table, while useful as a summary does not provide any depth as to what is assessed within each baseline. A greater explanation of what each of the baseline headings assessed would be useful. Also how much weight was attributed to each criterion if they were weighted.

An additional criterion of potential to facilitate a storage building to store ILW at point of generation is necessary especially if the NDA option proves not to be credible.

We consider that the sections 4.2 & 4.3 do not fully investigate the feasibility of developing a building to store ILW at the source of generation and further investigation is needed to explore this option.

Q13. Do you agree with the proposed arrangements for monitoring significant effects of the SDP options, detailed in the environmental report? If not, what measures do you propose?

Enter your response here: Provided the potential environmental monitoring measures as outlined in Table 7.3 of the Environmental report are applied to all stages of the process including storage and the impacts of storing the ILW on that community.

Q14. Do you agree with the conclusions of the Report and the recommendations for avoiding, reducing or off-setting significant effects of the SDP options? If not, what do you think should be the key recommendations and why?

Enter your response here: In table 7.2 proposed mitigation measures for submarine dismantling and storage, there is no consideration or mention of the transport of the submarines from the dismantling site to the storage / final disposal destination. In order to ensure sustainability there should be a link between the sites chosen to dismantle the submarines and the location of proposed storage, recycling and disposal as transporting 100s of miles may not be the most environmentally friendly option.

Q15. Are there any other comments you would like to make?

Enter your response here:

- The key issue within the consultation is around the storage/disposal of the intermediate level waste (dismantling itself could be seen as a large recycling project!) - but the overall value of the consultation is undermined by the scope of the consultation being limited to discuss types of storage/disposal sites rather than location

- The consultation in its current scope potentially confuses and misleads recipients through not fully defining the economic/environmental benefits of dismantling with the costs/disbenefits of storage/disposal - the analysis needs to comprehensively analyse the costs and benefits of dismantling/storage/disposal to ensure the economic benefits of dismantling are not accrued by one community and the costs/burden of storage/disposal felt by another

- Lack of a clear Scottish policy on submarine dismantling and the disposal of ILW has undermined the value of the consultation exercise, which would have been more appropriately beneficially held once the Scottish Government has clarified its position particularly in relation to dismantling around Rosyth

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- Lack of a significant input from the NDA on their views on types of site and potential locations for storage/disposal renders the consultation and subsequent analysis incomplete and results in further consultation being required going forward around potential locations for storage/disposal

There are a lot of documents which cover different aspects of this project, which given the size of the project is understandable. However having the information stored in a number of different documents through many different layers has made accessing the information and reasoning process very long and cumbersome. In order to make the process more transparent it would have been useful to highlight the most relevant supporting documents and possibly having a link to them at level 1 alongside the consultation document.

If you wish to add further comment please enter your response here

The consultation is incomplete, it is considered that further time should have been taken before going to consultation to allow for all information in relation to the storage of ILW to be included in this document. Without this information it has been very difficult to make informed responses on the issues discussed in this document.

We would recommend that a full consultation be carried out taken account of the full implications to the process from start to finish from dismantling to storage.

Within the document it states in a foot note that the Scottish policy on storage of ILW is for long-term management in near surface, near-site facilities. It is not, however applicable to waste arising from decommissioning out-of-service nuclear submarines. An explanation of why this policy is not applicable to nuclear submarines would be useful?

Within the process there appears to be a lack of recognition of the impacts, real or perceived on all communities affected by this project.

The long term issue over Scottish independence will occur before 2020 date for the dismantling and options for this need to be considered as the Scottish policy would then have a greater impact on the project.

About you...

- Are you happy for your comments to be published on our website? **Yes**
- If so, do you want to be named alongside your comments when the responses are published on the website? **Yes**
- Please add contact details here
- Are you a Local Resident to Devonport or Rosyth Dockyards? **No**