

D/DE/SCE/05230



## **PROJECT ISOLUS**

# **MoD COASTAL SITE EVALUATION REPORT**

## GLOSSARY

AONB	Area of Outstanding National Beauty
DE	Defence Estates, Ministry Of Defence
ILW	Intermediate Level (nuclear) Waste
ISOLUS	Interim Storage Of Laid-Up Submarines
JSP	Joint Services Publication
MoD	Ministry Of Defence
NII	The Nuclear Installations Inspectorate of The Health and Safety Executive
NGO	Non-Government Organisation
OGD	Other Government Department
RC	Reactor Compartment
RN	Royal Navy
SSSI	Site of Special Scientific Interest
TLBH	Top-level Budget Holder
UK	United Kingdom Of Great Britain And Northern Ireland
UXO	Unexploded Ordnance (Ammunition, Bombs, Explosives)
WSA	Warship Support Agency



## CONTENTS

GLOSSARY	Page 2
CONTENTS	Page 3
EXECUTIVE SUMMARY	Page 4
THE ISOLUS PROJECT	Page 5
SITE EVALUATION REQUIREMENT	
4. Aim of the Evaluation	Page 5
5. Functional Requirement	Page 5
6. Constraints	Page 5
7. Additional Information	Page 5
SITE EVALUATION PROCESS	
8. Aim of the Report	Page 5
9. Conduct of the Evaluation	Page 5
10. Methodology	Page 5
11. Key Issues	Page 7
12. Evaluation Process	Page 8
13. Results	Page 8
ANNEXES:	
A    Stage 1 Development of Evaluation Criteria	
B    Stage 2 Identification of Sites	
C    Stage 3 Evaluation Results	
D    Stage 4 Evaluation Results	
E    Stage 5 Evaluation Results	

## MoD SITE EVALUATION REPORT

### EXECUTIVE SUMMARY

1. The aim of the Interim Storage of Laid-up Submarines (ISOLUS) project is to provide interim storage of radioactive waste from decommissioned Royal Navy (RN) nuclear powered submarines pending final processing/disposal of the resultant intermediate level waste (ILW) when a national facility is available.
2. One of the options being considered is the interim storage of de-fuelled reactor compartments prior to dismantling and packaging radioactive waste products for final disposal. It is therefore necessary to identify and evaluate coastal sites in the UK owned by MoD where these processes could take place.
3. The aim of the MoD Site Evaluation is to assess the suitability of all MoD coastal sites in the UK for storage and/or dismantling of decommissioned nuclear submarine Reactor Compartments (RC).
4. The Evaluation was divided into 6 stages as follows:
  - Stage 1 - Development of Evaluation Criteria.
  - Stage 2 - Identification of MoD Sites.
  - Stage 3 - Initial evaluation to eliminate unsuitable sites.
  - Stage 4 – Detailed evaluation of the remaining suitable sites.
  - Stage 5 – Warship Support Agency (WSA) Review
  - Stage 6 – MoD Site Evaluation Report (This document)
5. A total of 118 sites were identified at Stage 2 and submitted for evaluation at Stage 3. Of these, 24 potential sites and 3 reserve sites were assessed as being suitable and subsequently underwent detailed evaluation at Stage 4. Following this stage, 9 sites were recommended to WSA as suitable for further evaluation at Stage 5.
6. Following WSA Review it is recommended that of the 118 MoD owned coastal sites considered, only one, DM Coulport, meets the selection criteria in full.



## MoD SITES EVALUATION REPORT

### THE ISOLUS PROJECT

1. The aim of the ISOLUS project is to provide interim storage of nuclear waste from decommissioned RN nuclear powered submarines pending final processing/disposal of the resultant intermediate level waste (ILW) when a national facility is available.
2. One of the options being considered is the interim storage of de-fuelled reactor compartments prior to dismantling and packaging radioactive waste products for final disposal.
3. It is therefore necessary to identify and evaluate coastal sites in the UK owned by MoD on which the storage and dismantling of RC could take place prior to final disposal.

### SITE EVALUATION REQUIREMENT

4. Aim of the Site Evaluation. The aim of the MoD Site Evaluation (the Evaluation) is to assess the suitability of all MoD coastal sites in the UK for storage and/or dismantling of decommissioned nuclear submarine RC, to provide a short list of sites to be offered to bidders and to summarise the process in a report.
5. Functional Requirement. The Evaluation is to:
  - Include all MoD sites within UK less than 10km from access to sea or estuary
  - Be systematic and rigorous.
6. Constraints. The Evaluation is to:
  - Be carried out as a desk exercise.
  - Take full account of the National Interest and Public Accountability.
7. Additional Information. The Evaluation was undertaken by DE on behalf of the ISOLUS Project in consultation with the ISOLUS Project Manager.

### SITE EVALUATION PROCESS

8. Aim of the Report. The aim of the MoD Site Final Evaluation Report is to provide a management paper for the ISOLUS Project on the Site Evaluation aims, process and results and make recommendations.
9. Conduct of the Evaluation. In taking account of the National Interest and Public Accountability, the evaluation process was conducted on a “need to know” basis within the ISOLUS Project. Other MoD specialists were included only when necessary, to ensure that information released to the Public Domain was timely and completely accurate.

10. Methodology.

a. The evaluation process was divided into 6 stages:

- Stage 1 - Development of Evaluation Criteria.
- Stage 2 - Identification of MoD sites.
- Stage 3 - Initial evaluation to eliminate unsuitable sites.
- Stage 4 – Detailed evaluation of the remaining suitable sites.
- Stage 5 – WSA Review
- Stage 6 – MoD Site Evaluation Report (this document)

b.

Stages 1 to 4 were conducted by the Evaluation Team at Annex A during 2002/3. Stage 5 was undertaken exclusively by WSA.

c. Evaluation Stages.

(1.) Stage 1 – Development of Evaluation Criteria. Evaluation Criteria, including a list of assumptions, were developed and agreed by the Evaluation Team and are at Annex A.

(2.) Stage 2 - Identification of Sites.

(a)

The sites initially selected were based on the Evaluation Team’s specialist personal knowledge of the MoD Estate. The list was revised at later stages as a result of consultation within MoD. However, given the sensitivity of the evaluation, this consultation was necessarily limited.

(b)

A list of MoD sites and the Site Serial Numbers used throughout the Site Evaluation process is at Annex B. The Core Site Number refers to the site's designation on the Defence Estate Core Site project database.

(3.) Stage 3 – Initial Evaluation.

- (a.) The “A” evaluation criteria at Annex A were applied on a “pass” or “fail” basis and were intended to enable those sites that are clearly unsuitable to be set aside.
- (b.) The “B” evaluation criteria at Annex A were applied on a relative merit basis to the sites that achieved a “pass” at Stage 3.
- (c.) All scores were allocated by the Evaluation Team working collectively.
- (d.) The scores were weighted to reflect the importance placed by MoD on Sustainability. Both weighted and un-weighted scores are shown at Appendices 1 and 2 to Annex C. Weighting was developed by the Evaluation Team specialists.
- (e.) A total of 27 sites were recommended for further detailed evaluation.

(4.) Stage 4 – Detailed Evaluation.

- (a.) Additional site-specific information was obtained following completion on 3 April 2003 of the MoD Core Sites project in respect of the following;

- Topography
- Possible future use
- Security of tenure
- Environmental designations

The sites recommended at Stage 3 were re-evaluated against Stage 2 criteria by the Evaluation Team on 19 December 2003.

- (b.) A total of 9 were recommended for further detailed evaluation. The results are at Annex E.

(5.) Stage 5 – WSA Review.

(a) In order to produce a final list, WSA officials considered in more detail the capacity required to accommodate a storage facility (a minimum of 10 hectares/25 acres), the impact of existing agreements to use the sites for other MoD purposes and the adequacy of direct access from the sea.

(b) Based on the Stage 4 recommendations, WSA consulted with key stakeholders and reviewed the Stage 4 results. Of the 9 sites recommended for further review, only one, DM Coulport, was considered suitable by WSA. The results are at Annex E.

(7.)

Stage 6 – MoD Sites Evaluation Report. The final MoD Sites Evaluation Report (this document) describes the whole site evaluation process and the results, making recommendations.

## 11. Key Issues.

a.

Site Selection. The criteria take account of the anticipated expectations and aspirations of identified stakeholders.

b. Evaluation Criteria. The following were noted:

(1.)

Security of Tenure. There was uncertainty about the security of tenure of some sites. MoD must be confident about security of tenure for both site and access before proceeding with any site.

(2.)

Storage Location. It was perceived that storage of RC at a remote, secluded location would be preferable. It was not anticipated that this would pose a problem for the labour market that was considered to be reasonably mobile.

(3.)

National Parks. In all areas, there was a presumption against the use of sites in a National Park where another site could possibly be used.

(4.)

Airfields. In all areas, there was a presumption against the storage or dismantling of RC on or adjacent to a flying field where another site could possibly be used.

- (5.) Designated Areas. Possible sites which have a specific designation such as Area of Outstanding Natural Beauty (AONB) or Site of Special Scientific Interest (SSSI) required further careful assessment against other suitable sites.
- (6.) Topography. Site topography had to be suitable for both storage and cost-effective access.
- (7.) Ammunition Storage. RC can be stored in ammunition storage areas although full account was taken of the requirements of Joint Service Publication (JSP) 482 "Military Explosives Regulations". Personnel permanently working on any task in close proximity to ammunition processing or storage require additional qualifications not relevant to the nuclear related work by virtue of the proximity of the ammunition. This may not be cost effective though need not compromise safety.
- (8.) Unexploded Ordnance. There was a presumption against the use of any site that has been used for live firing and that has a high risk that unexploded ordnance will be present on the site or its approaches.
- (9.) Nuclear Licensing. There was a presumption that sites that were not authorised or licensed for nuclear related activity should be carefully considered against other suitable sites as the risk to the project of failure to obtain licensing approval may be very high. However, they were not excluded for this reason alone.

12.

Evaluation Process. The site selection process followed the general principles adopted by the MoD Core Site process. Emerging best practice was followed at all times. It should be noted that information from industry bids and further estate strategy principles recently emerged which considerably assisted refinement of the future site evaluation process.

13.

Results. A total of 118 sites were submitted for evaluation at Stage 3. Of these, 24 sites and 3 reserves were assessed as being suitable and subsequently underwent detailed evaluation at Stage 4. Following WSA review of the recommended 9 sites at Stage 6, only DM Coulport meets the selection criteria in full.

**STAGE 1 - DEVELOPMENT OF EVALUATION CRITERIA**

1. General. The development of Evaluation Criteria is Stage 1 of the Project.
2. Stage 3 Evaluation and Criteria.
  - a. Possible answers are 'Pass', 'Fail', or '?' (needs further investigation). A 'Fail' answer against any criterion will render the site unacceptable.
    - (1.) A1 – Security of Tenure. MoD needs to have long-term (at least 100 years) security of tenure of the site.
    - (2.) A2 - Usable Space. There needs to be sufficient usable spare space on the site to accommodate the development. There will need to be space for buildings 150m x 50m and 60m x 60m with appropriate access between the buildings and between the buildings and the waterfront. In all a total of 10 hectares/25 acres is required.
    - (3.) A3 - Sea Access. The site needs to have feasible and cost-effective heavy load access from the sea.
    - (4.) A4 - Development Costs. Development of the land facilities, including the heavy load access between the shore and the storage area, needs to be feasible and cost-effective.
    - (5.) A5 - Safety Hazard. There should be no safety hazard at the site for which there is no cost-effective engineering solution.
      - a. Flooding
      - b. Coastal erosion
      - c. Live firing/bombing
      - d. Flying operations
      - e. Explosives storage and handling
      - f. Unexploded ordnance, especially below the high water mark
      - g. Safety of sea transport
      - h. Security especially against terrorism

i. Any other natural hazards

(6.)

A6 – Compatibility of Use. The presence of the facility should not inhibit the site's current principal operational function

(7.)

A7 – Joint Use with Allies. Development of the site should not breach agreements with NATO or other countries.

If the site does not meet all the selection criteria, it is excluded from further consideration.

b. The following should also be identified:

a.

Sites which could be attractive if a small area of additional land could be purchased at reasonable cost.

b.

Sites which are considered only to be suitable for either interim land storage or for the dismantling/packaging facility. This may be because of space limitations or for other reasons.

3.

Stage 4 Evaluation and Criteria. Overall category and proposed marking scheme for those sites which have passed Stage 3 evaluation.

a.

B1 – Site Category. The site should be categorised as a "Core Site" or it should be a low value Non Core site.

[0 = Low value Core Site]

[3 = High value Core Site]

[5 = Low value Non-Core Site]

[7 = High value Non-Core Site]

b.

B2 – Safety Hazards. Ideally there should not be major safety hazards to be overcome. Safeguards against any hazards present should be cost effective and economic to provide. The following marking applies to each of categories a to j.

[0 = negligible hazard to overcome]

[3 = hazard can be overcome by routine and economic measures]  
[5 = hazard can be overcome only by costly and/or protracted measures]

- a. Flooding
- b. Coastal erosion
- c. Live firing/bombing
- d. Flying operations
- e. Explosives storage, handling or transport
- f. Hazardous activities by other parties (not MoD) nearby
- g. Unexploded ordnance especially below high water
- h. Safety of sea transport
- i. Security, especially against terrorist threat
- j. Any other natural hazards

c.

B3 – Environment. The development should not cause adverse effects on the environment or on sites of archaeological or heritage value. The following marking applies to each of categories a to g.

[0 = negligible adverse effect caused]  
[3 = moderate effect requiring mitigation]  
[5 = major effect requiring considerable mitigation]  
[7 = severe effects likely to be beyond mitigation]

- a. Capital and maintenance dredging (barge/tug draught of 2.5 m assumed)
- b. Construction of berthing facility
- c. Sea defence and flood defence measures
- d. Land-side facilities (buildings, roads and other infrastructure)
- e. Consequences of an accidental release of pollutants (e.g. rapid or widespread transmission to receptors via an important aquifer).
- f. Effect on archaeology and cultural heritage
- g. Effect on existing land use (re-use of brown-field land preferred).

d.

B4 – Development. The development should benefit rather than cause adverse economic and quality of life effects on the Local Community. The following marking applies to each of categories a to g.

[0 = beneficial effect]  
[3 = negligible adverse effect]  
[5 = moderate adverse effect]

[7 = major adverse effect]

- a. Benefit local economy by creating new employment without damaging local businesses such as fishing, & tourism.
- b. Effects of an influx of personnel (Increased economic activity should outweigh effects of increased pressure on local housing, amenities and services)
- c. The required skilled workforce should be available/ can be retained close to the site
- d. Effects of construction, operation and decommissioning (e.g. noise, dust, vibration and fumes).
- e. Impairment of landscape quality or visual impact.
- f. Local infrastructure (road and/or rail) should be suitably developed for construction and operation.
- g. Increase in traffic and transport.

e.

B5 – Effect on Future Plans. The presence of the facility should not inhibit future planned development of the site.

[0 = Not likely to pose a significant future constraint]

[3 = likely to constrain future development]

[5 = Likely to severely constrain future development]

f. B6 - Planning Clearance.

[0 = 70% chance of planning approval within 2 years]

[3 = 50% chance of planning approval within 5 years]

[5 = <25% chance of planning approval within 5 years]

g.

B7 - Construction, Operation and Decommissioning. Construction, operation and decommissioning of the facility should be as economical as possible. The following marking applies to each of categories a to l.

[0 = not needed/minimal cost or time implication]

[2 = below average cost/time]

[5 = not significantly above or below average cost/time]

[7 = likely to exceed average cost/time]

[10 = likely to substantially exceed average cost/time]

- a. Relocation of existing facilities (if needed)
- b. Purchase of new land (if needed)
- c. Clean up of contaminated ground
- d. Capital dredging
- e. Berth construction

- f. Land-side construction
- g. Maintenance - dredging and coastal
- h. Maintenance – land
- i. Security
- j. Decommissioning
- k. Cost of Planning approvals
- l. Cost of Licensing approvals

h.

Note that Criteria B3 and B4 jointly cover the principal sustainability issues for the proposed site development.

i.

Generally, yes/no answers are not possible and answers will require judgements to be made.

j. Weighting has been applied to Criteria B3 and B4 to reflect the MoD's commitment to sustainable solutions wherever possible.

4.

Assumptions. The following assumptions have been made in developing the evaluation criteria:

a. Reactor Compartment.

(1.)

The de-fuelled reactor compartment is a cylindrical section of the submarine pressure hull, measuring 8m x 10m weighing approximately 750 tonnes. Both ends of each reactor compartment will be sealed with a membrane, the thickness of which can be determined by the storage location and conditions.

(2.)

An area 150m x 50m will be required on which to house a building up to 15m high required to carry out the dismantling process.

(3.)

The storage site will hold a maximum of 37 de-fuelled reactor compartments (27 existing plus an assumed number of 10 Astute Class).

b.

Airfields. The storage and processing of nuclear waste within the perimeter of an operational airfield poses risk to both nuclear and flight safety. This risk is quantifiable and should be taken into account in detailed evaluation.

- c. National Parks. It is considered highly unlikely that planning permission would be granted for a new nuclear waste storage or processing operation within a National Park. This risk is difficult to quantify but should be taken into account in detailed evaluation.
- d. Nuclear Site Licensing. It is considered highly unlikely that regulators will grant a license/authorisation for a nuclear waste storage and processing in any site not already so licensed. This risk is quantifiable and should be taken into account in detailed evaluation.
- e. Unexploded Ordnance. There is a risk of the presence of unexploded ordnance below the high water mark in a number of areas lying off or forming part of current and disused coastal military ranges. This could affect the safety of dredging operations or sea transport. The risk associated with accidental detonation of UXO is difficult to quantify and impact of such detonation could be very high.
- f. Sea Access. Given the size and weight of reactor compartments, it is considered that transportation further than a few hundred metres over relatively flat land of a complete reactor compartment will neither cost-effective nor acceptable to the public. Therefore sites that:
- Do not have coastal access for a suitable barge or
  - Are not level enough for transporting a reactor compartment from barge to storage/processing installations
- should not be evaluated further.
- g. Compatibility of Use. Compatibility of use will depend on the future plans of the Top Level Budget Holder responsible for site usage. This will require further investigation on a site by site basis.
- h. Explosives Storage. A reactor compartment may be stored in an explosives storage area classified as “Dangerous Goods” under Joint Services Publication (JSP) 482 “Ministry of Defence Explosives Regulations”. Any process related to dismantling of the compartments and the design of buildings in which it was carried out would be subject to the requirements of JSP 482 and relevant civil

lian health and safety regulations. This should be taken into account in detailed evaluation.

i.

Land Purchase. It is the Ministry of Defence's policy to reduce the area of land that it owns. The purchase of additional land should only be considered as a last option in the event that none of the existing Ministry of Defence sites is suitable. Sites requiring the purchase of additional land should be highlighted.

j.

National Interest. It is anticipated that site evaluation process, including all documents, will be released in the Public Domain at some stage of the project. It is in the National Interest to ensure that any such information is released in a timely fashion and is completely accurate.

**STAGE 2 – IDENTIFICATION OF SITES**

The following coastal sites were identified by the Evaluation Team:

<b>Serial</b>	<b>Site</b>	<b>Core</b>	<b>Site Name</b>
	<b>Serial</b>	<b>Site No.</b>	
1	001	-	RNAS Portland
2	002	CS-110	RAF Valley
3	003	CS-230	DM Crombie
4	004	-	Aultbea/Mellon Charles
5	005	-	DERA Shoeburyness
6	006	CS-227	Marchwood Military Port
7	007	CS-242	DM Coulport
8	008	CS-255	HMNB Clyde
9	009	CS-244	HMNB Devonport South Yard
10	010	CS-243	HMNB Rosyth
11	011	CS-233	DM Longtown
12	012	CS-576	DERA Kirkcudbright Ranges
13	013	CS-499	DERA West Freugh
14	014	-	DERA South Uist
15	015	CS-480	Cape Wrath Bombing Range
16	016	CS-314	Tain Bombing Range
17	017	CS-384	Fort George Barracks
18	018	CS-123	RAF Kinloss
19	019	-	Blackdog Range
20	020	CS-569	Barry Budden Range
21	021	CS-124	RAF Leuchars
22	022	CS-100	Hythe Ranges
23	023	CS-490	DERA Eskmeals
24	024	CS-296	RAF Cowden
25	025	-	DM Fairlie
26	026	CS-475	NATO POL Depot Loch Ewe
27	027	CS-251	OFD Gairlochhead
28	028	-	Greenock, Grand Harbour
29	029	CS-017	RM Chivenor
30	030	CS-473	Pembroke Dock
31	031	CS-180	Braunton Burrows, ATURM
32	032	-	Tonfanau (Gwynedd)
33	033	CS-493	Llanbedr
34	034	CS-482	DERA Aberporth
35	035	CS-495	Pendine Beach
36	036	CS-260	NATO POL Depot Loch Striven
37	037	-	RAF Machrihanish

<b>Serial</b>	<b>Site</b>	<b>Core</b>	<b>Site Name</b>
	<b>Serial</b>	<b>Site No.</b>	
38	038	-	HMNB Portsmouth
39	039	CS-552	Lydd Camp
40	052	-	RAF Hythe, Hampshire
41	053	CS-504	Penhale Training Camp
42	A01	CS-078	Castlemartin Range
43	A02	CS-532	Penally Training Camp
44	A03	CS-532	Manorbier Range
45	A04	CS-477	DM Gosport
46	A05	CS-308	RAF Portreath
47	A06	CS-535	RAF Sealand Ranges
48	A07	CS-575	Garelohead Training Camp
49	A08	CS-125	RAF Lossiemouth
50	A09	CS-115	RAF Boulmer
51	A10	CS-307	RAF Pembry Sands
52	A11	CS-313	RAF Benbecula
53	A12	CS-283	RAF St Athan
54	A13	CS-176	NRTE Vulcan
55	A14	CS-229	DM Beith
56	A15	CS-244	OFD Thanckes
57	A16	CS-364	DM Glen Douglas
58	A17	CS-243	HMNB Rosyth HMS Caledonia
59	A18	CS-474	NATO POL Depot Cambletown
60	A19	-	HMS Daedalus
61	A20	CS-179	Portsmouth, Fort Blockhouse
62	A21	CS-334	JSMTC Indefatigable
63	A22	CS-406	Thorney Island
64	A23	CS244	HMNB Devonport HMS Raleigh
65	A24	CS-423	Fingringhoe Ranges
66	A25	-	Glen Mallan Jetty
67	B01	CS-538	Tregantle Fort
68	B02	CS-633	HMNB Devonport Bull Point
69	B03	CS-470	HMNB Devonport Weston Mill Lake
70	B04	CS-366	HMNB Devonport North Yard
71	B05	CS-245	HMNB Devonport Morrice Yard
72	B06	CS-232	DM Ernesettle
73	B07	CS-583	Plymouth, HMS Cambridge
74	B08	-	HMNB Rosyth St Mary's Marsh
75	B09	CS-193	Plymouth, Stonehouse Barracks
76	B10	CS-641	Fort George Ranges
77	B11	CS-276	RAF Fairbourne
78	B12	-	JSMTC Tywyn (Gwynedd)
79	B13	CS-019	RM Lympstone
80	B14	CS-020	RM Poole, Top Camp
81	B15	CS-254	Greenock, Navy Buildings

<b>Serial</b>	<b>Site</b>	<b>Core</b>	<b>Site Name</b>
	<b>Serial</b>	<b>Site No.</b>	
82	B16	CS-508	Chepstow, Beachley Barracks
83	B17A	-	Ballykinler, Northern Ireland
84	B17B	-	McGilligan, Northern Ireland
85	B18	CS-201	Horsea Island
86	B19	CS-111	Airduig
87	B20	CS-066	Altcar Training Camp
88	B21	CS-614	Anthorn Radio Station
89	B22	CS-023	Barons Point Range
90	B23	CS-024	Lulworth and Bovington Ranges
91	B24	CS-198	Dartmouth, Britannia RN College
92	B25	CS-054	Gosport, Browdown Camp
93	B26	CS-081	Brawdy, Cawdor Barracks
94	B27	CS-501	Applecross
95	B28	CS-516	Fremington Training Camp
96	B29	CS-487	DERA Grove Point
97	B30	CS-519	Halton Training Area (Lancs)
98	B31	CS-488	DERA Kyle of Lochalsh
99	B32	CS-484	Loch Fyne
100	B33	CS-485	Loch Goil
101	B34	CS-106	Mona Airfield
102	B35	CS-116	RAF Buchan
103	B36	CS-298	Donna Nook
104	B37	-	Holbeach
105	B38	CS-630	Stoke Holy Cross
106	B39	CS-312	Wainfleet (Kent)
107	B40	CS-221	Crimond
108	B41	CS-183	Predanick
109	B42	CS-486	Rona
110	B43	CS-060	Sir John Moore Barracks
111	B44	CS-589	Templeton Training Area
112	B45	CS-202	Portsmouth, Tipnor Training Area
113	B46	CS-192	RM Turnchapel
114	B47	CS-546	VernYates Training Area
115	B48	CS-200	Portsmouth, Whale Island
116	B49	CS-544	Wyke Regis Training Area
117	B50	CS-322	Yantlett Range (Kent)
118	B51	-	Arbroath RM Condor

STAGE 3 EVALUATION RESULTS

Ser.	Site Serial	Core Site No.	Site Name	Comment	Possible Site	Unweighted Scores	Weighted Scores	Ranking (based on Weighted Results)
1	008	CS-255	HMNB Clyde	• A2? A6? Insufficient space in relationship to future needs? Contractorised facility. More investigation needed.	Yes	64	85	1
2	007	CS-242	DM Coulport	• A2? A3? A5e? Check on space up the hill.	Yes	73	94	2
3	B03	CS-470	HMNB Devonport Weston Mill Lake	• In built-up area?	Yes	82	108	3
4	009	CS-244	HMNB Devonport South Yard	• A2?. Insufficient space in relationship to future needs? Contractorised facility. More investigation needed.	Yes	85	114	4
5	A13	CS-176	NRTE Vulcan	• A2? C1? Insufficient space. Local authority keen to bring work in.	Yes	83	116	5
6	002	CS-110	RAF Valley	• A1? A4? A5d? Future operational intentions uncertain. Active flying operations. Mitigation work may be required. Extend of MoD ownership uncertain.	Yes	96	126	6
7	030	CS-473	Pembroke Dock	• A1? A6? Extent of MoD ownership uncertain. Not compatible with existing activity?	Yes	93	127	7
8	B10	CS-641	Fort George Ranges	•	Yes	100	130	8
9	003	CS-230	DM Crombie	• A6? Compatible with future use?	Yes	113	148	9
10	004	-	Aultbea/Mellon Charles	• A6? Requires demolition of existing facilities.	Yes	113	154	10
11	A04	CS-477	DM Gosport	• A5e? A3? Narrow harbour	Yes	119	172	11
12	B02	CS-633	HMNB Devonport Bull Point	•	Yes	130	172	11
13	A19	-	HMS Daedalus	• A4? A6? Future use not yet clear.	Yes	123	174	13
14	029	CS-017	RM Chivenor	• A4? Stranding? SSSI, AONB, SAC, Heritage Coast.	Yes	128	185	14
15	022	CS-100	Hythe Ranges	• A2? 1 x scheduled monument, 464 acres flood plain. Stable?	Yes	142	186	15
16	011	CS-233	DM Longtown	• A3? A5e? Heavy contamination. Tidal access and moving channel.	Yes	134	192	16
17	A22	CS-406	Thorney Island	• A4? DDT barrels, SSSI, SAC, RAMSAR, all harbour is part of a PFI.	Yes	141	203	17

Ser.	Site Serial	Core Site No.	Site Name	Comment	Possible Site	Unweighted Scores	Weighted Scores	Ranking (based on Weighted Results)
18	B18	CS-201	Horsea Island	•	Yes	153	217	18
19	013	CS-499	DERA West Freugh	• A5f? Possible UXO offshore. All on dunes/SSSI.	Yes	155	221	19
20	017	CS-384	Fort George Barracks	• A6? Not compatible with current use?	Yes	159	229	20
21	020	CS-569	Barry Budden Range	• A6? Not compatible with current use? New purpose built accommodation for 500.	Yes	166	237	21
22	035	CS-495	Pendine Beach	• A5f? A6? Possible UXO affecting dredging. DSTL requirements not yet known.	Yes	161	237	22
23	053	CS-504	Penhale Training Camp	• A2? A3? Dunes, SSSI, SAC, Euro Coast. Mineshafts etc.	Yes	162	241	23
24	014	-	DERA South Uist	• A3? A5f? A5g? SAC, SSSI dunes & otters. West coast is exposed.	Yes	182	258	24
25	037	-	RAF Machrihanish	• A3? A5d? C1? Possible future flying operations. No access from sea. Buy more adjacent land?	Reserve	103	131	
26	039	CS-552	Lydd Camp	• A5b? A6? Current use to be confirmed. Coastal erosion.	Reserve	110	137	
27	019	-	Blackdog Range	• A1? A6? Not compatible with current use? Extent of MoD ownership uncertain.	Reserve	118	145	
28	B19	CS-111	Airduig	• Fail/More details	No	-	-	-
29	B20	CS-066	Altcar Training Camp	• Fail A1	No	-	-	-
30	B21	CS-614	Anthorn Radio Station	• Fail A3	No	-	-	-
31	B27	CS-501	Applecross	• More details	No	-	-	-
32	B51	-	Arbroath RM Condor	• Fail A2	No	-	-	-
33	B17A	-	Ballykinler, Northern Ireland	• Fail A1	No	-	-	-
34	B22	CS-023	Barons Point Range	• Fail/More details	No	-	-	-
35	031	CS-180	Braunton Burrows, ATU RM	• Fail A1. Not owned by MoD. Lease expires in 11 years.	No	-	-	-
36	B26	CS-081	Brawdy, Cawdor Barracks	• Fail A3, A6	No	-	-	-
37	015	CS-480	Cape Wrath Bombing Range	• Fail A5c, A5d & A6. Rocky cliffs. Not compatible with existing activity.	No	-	-	-

Ser.	Site Serial	Core Site No.	Site Name	Comment	Possible Site	Unweighted Scores	Weighted Scores	Ranking (based on Weighted Results)
38	A01	CS-078	Castlemartin Range	• Fail A1 & A6. National Park. Only place in UK where Challenger tank can fire on the move.	No	-	-	-
39	B16	CS-508	Chepstow, Beachley Barracks	• Fail A2	No	-	-	-
40	B40	CS-221	Crimond	• Fail A3	No	-	-	-
41	B24	CS-198	Dartmouth, Britannia RN College	• Fail A2	No	-	-	-
42	034	CS-482	DERA Aberporth	• Fail A2. Too little low, flat land.	No	-	-	-
43	023	CS-490	DERA Eskmeals	• Fail A1. National Park.	No	-	-	-
44	B29	CS-487	DERA Grove Point	• Fail A1	No	-	-	-
45	012	CS-576	DERA Kirkcudbright Ranges	• Fail A2. Topographically unsuitable. Has advantage of deep water.	No	-	-	-
46	B31	CS-488	DERA Kyle of Lochalsh	• Fail A2, A3, A6	No	-	-	-
47	005	-	DERA Shoeburyness	• Fail A5a, A5b & A5f. UXO. Prone to flooding and coastal erosion.	No	-	-	-
48	A14	CS-229	DM Beith	• Fail A3. No sea access	No	-	-	-
49	B06	CS-232	DM Ernesettle	• Fail A3	No	-	-	-
50	025	Sold	DM Fairlie	• Fail A1. Sold	No	-	-	-
51	A16	CS-364	DM Glen Douglas	• Fail A2. Insufficient space close to jetty. Free space not accessible from sea.	No	-	-	-
52	B36	CS-298	Donna Nook	• Fail A1, A3, A5c, A5f, A6	No	-	-	-
53	A24	CS-423	Fingringhoe Ranges	• Fail A5a. Salt-marsh. Major flooding and environmental issues.	No	-	-	-
54	B28	CS-516	Fremington Training Camp	• Fail A2, A3	No	-	-	-
55	A07	CS-575	Garelothead Training Camp	• Fail A3. No sea access.	No	-	-	-
56	A25	-	Glen Mallan Jetty	• Not compatible with current use? Reserve list.	No	-	-	-
57	B25	CS-054	Gosport, Browndown Camp	• Fail A5h	No	-	-	-

Ser.	Site Serial	Core Site No.	Site Name	Comment	Possible Site	Unweighted Scores	Weighted Scores	Ranking (based on Weighted Results)
58	028	-	Greenock, Grand Harbour	• Fail A2. Insufficient space.	No	-	-	-
59	B15	CS-254	Greenock, Navy Buildings	• Fail A2	No	-	-	-
60	B30	CS-519	Halton Training Area (Lancs)	• Fail A2, A6	No	-	-	-
61	A23	CS244	HMNB Devonport HMS Raleigh	• Fail A2 & A6 NRTA core site. Incompatible future use.	No	-	-	-
62	B05	CS-245	HMNB Devonport Morrice Yard	• Fail A2	No	-	-	-
63	B04	CS-366	HMNB Devonport North Yard	• Fail A2	No	-	-	-
64	038	-	HMNB Portsmouth	• Fail A2. Not enough space. Some land already leased to private companies.	No	-	-	-
65	010	CS-243	HMNB Rosyth	• Fail A2. Insufficient space.	No	-	-	-
66	A17	CS-243	HMNB Rosyth HMS Caltonia	• Fail A2. Insufficient space	No	-	-	-
67	B08	-	HMNB Rosyth St Mary's Marsh	• Fail A3	No	-	-	-
68	B37	-	Holbeach	• Fail A2, A3, A5c, A5f, A6	No	-	-	-
69	A21	CS-334	JSMTC Indefatigable	• Fail A3. No sea access.	No	-	-	-
70	B12	Child site	JSMTC Tywyn (Gwynedd)	• Fail A2. No sea access	No	-	-	-
71	033	CS-493	Llanbedr	• Fail A3 & A5f. No sea access. Possible UXO affecting dredging.	No	-	-	-
72	B32	CS-484	Loch Fyne	• Fail A1	No	-	-	-
73	B33	CS-485	Loch Goil	• Fail A1, A6	No	-	-	-
74	B23	CS-024	Lulworth and Bovington Ranges	• Fail A3	No	-	-	-
75	A03	CS-532	Manorbier Range	• Fail A2. Too little flat land close to sea level.	No	-	-	-

Ser.	Site Serial	Core Site No.	Site Name	Comment	Possible Site	Unweighted Scores	Weighted Scores	Ranking (based on Weighted Results)
76	006	CS-227	Marchwood Military Port	• Fail A2 & A6. 2 Public Inquiries. Almost unique embarkation site. Insufficient space.	No	-	-	-
77	B17B	-	McGilligan, Northern Ireland	• Fail A6	No	-	-	-
78	B34	CS-106	Mona Airfield	• Fail A3, A5d	No	-	-	-
79	A18	CS-474	NATO POL Depot Cambeltown	• Fail A2. Insufficient space close to sea level.	No	-	-	-
80	026	CS-475	NATO POL Depot Loch Ewe	• Fail A2 & A7. Too small and steep.	No	-	-	-
81	036	CS-260	NATO POL Depot Loch Striven	• Fail A2. Insufficient spare flat land close to sea level.	No	-	-	-
82	027	CS-251	OFD Gairlochhead	• Fail A2 & A4. Insufficient flat land.	No	-	-	-
83	A15	CS-244	OFD Thanckes	• Fail A2. Insufficient space	No	-	-	-
84	A02	CS-532	Penally Training Camp	• Fail A1. National Park.	No	-	-	-
85	B07	CS-583	Plymouth, HMS Cambridge	• Fail A1, A2	No	-	-	-
86	B09	CS-193	Plymouth, Stonehouse Barracks	• Fail A3	No	-	-	-
87	A20	CS-179	Portsmouth, Fort Blockhouse	• Fail A2. Insufficient space. Crown Estate	No	-	-	-
88	B45	CS-202	Portsmouth, Tipnor Training Area	• Fail A2	No	-	-	-
89	B48	CS-200	Portsmouth, Whale Island	• Fail A2, A6	No	-	-	-
90	B41	CS-183	Predanick	• Fail A1, A3	No	-	-	-
91	A11	CS-313	RAF Benbecula	• Fail A2 & A6. Insufficient space. Mostly sold off. Commercial flying operations. No sea access.	No	-	-	-
92	A09	CS-115	RAF Boulmer	• Fail A3. No sea access.	No	-	-	-
93	B35	CS-116	RAF Buchan	• Fail A3	No	-	-	-

Ser.	Site Serial	Core Site No.	Site Name	Comment	Possible Site	Unweighted Scores	Weighted Scores	Ranking (based on Weighted Results)
94	024	CS-296	RAF Cowden	• Fail A5b & A5f. UXO and severe erosion.	No	-	-	-
95	B11	CS-276	RAF Fairbourne	• Fail A2	No	-	-	-
96	052	-	RAF Hythe, Hampshire	• Fail A2 & A6. No plans to vacate. Incompatible with current use.	No	-	-	-
97	018	CS-123	RAF Kinloss	• Fail A5b. Coastal erosion. Gone before end of time-scale. Active flying station.	No	-	-	-
98	021	CS-124	RAF Leuchars	• Fail A2 & A6. Has a long-term future. Active flying operations. Insufficient space.	No	-	-	-
99	A08	CS-125	RAF Lossiemouth	• Fail A3. No sea access.	No	-	-	-
100	A10	CS-307	RAF Pembry Sands	• Fail A5c, A5d, A6. Air weapons range for Hawk.	No	-	-	-
101	A05	CS-308	RAF Portreath	• Fail A2 & A3. Insufficient flat land. Cliffs	No	-	-	-
102	A06	CS-535	RAF Sealand Ranges	• Fail A3. Difficult sea access.	No	-	-	-
103	A12	CS-283	RAF St Athan	• Fail A3. No sea access. Aerospace park.	No	-	-	-
104	B13	CS-019	RM Lympstone	• Fail A6	No	-	-	-
105	B14	CS-020	RM Poole, Top Camp	• Fail A3, A4	No	-	-	-
106	B46	CS-192	RM Turnchapel	• Fail A6	No	-	-	-
107	001	Sold	RNAS Portland	• Fail A1. Site has been sold.	No	-	-	-
108	B42	CS-486	Rona	• Fail A1	No	-	-	-
109	B43	CS-060	Sir John Moore Barracks	• Fail A3	No	-	-	-
110	B38	CS-630	Stoke Holy Cross	• Fail A2, A3	No	-	-	-
111	016	CS-314	Tain Bombing Range	• Fail A5c & A6. Range	No	-	-	-
112	B44	CS-589	Templeton Training Area	• Fail A3	No	-	-	-
113	032	Sold	Tonfanau (Gwynedd)	• Fail A1. Site sold.	No	-	-	-
114	B01	CS-538	Tregantle Fort	• Fail A6	No	-	-	-
115	B47	CS-546	VernYates Training Area	• Fail A1, A6	No	-	-	-
116	B39	CS-312	Wainfleet (Kent)	• Fail A3, A5c, A5f, A6	No	-	-	-
117	B49	CS-544	Wyke Regis Training Area	• Fail A2, A6	No	-	-	-
118	B50	CS-322	Yantlett Range (Kent)	• Fail A5a, A5b, A6	No	-	-	-

Appendices:

1. Unweighted Scores
2. Weighted Scores

STAGE 3 UNWEIGHTED SCORES

Evaluation Criteria	Site name	RAF Valley	DM Crombie	Aulbea	DM Couport	HMNB Clyde	South Yard	DM Longtown	West Freugh	South Uist	Ft. George Barrac	Blackdog Range	Barry Budden	Hythe Ranges	RM Chivenor	Pembroke Dock	Pendine Beach	Macrihanish	Lydd Camp	Penhale Camp	DM Gosport	NRTE Vulcan	HMS Daedalus	Thorney Island	Bull Point	Weston Mill Lake	Ft. George Range	Horsea Island		
		Raw Scores																												
	<b>Unweighted Totals</b>	96	113	113	73	64	85	134	155	182	159	118	166	142	128	93	161	103	110	162	119	83	123	141	130	82	100	153		
	<b>Details</b>																													
B1	Site Category	0	0	0	0	0	0	0	5	5	0	5	0	3	0	0	5	0	0	0	0	0	0	3	5	0	0	0		
B2	Safety Hazards	a. Flooding	3	0	0	0	0	5	3	3	3	3	3	5	5	0	3	3	5	0	3	0	0	3	0	0	3	3		
		b. Coastal Erosion	3	0	0	0	0	3	3	3	3	5	5	5	3	0	3	3	5	3	0	0	0	0	0	0	3	3		
		c. Live Firing/Bombing	0	0	0	0	0	0	0	3	3	0	5	3	0	0	0	0	3	0	0	0	0	0	0	0	0	3	0	
		d. Flying operations	0	0	0	0	0	3	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	3	3	5	5	0	0	
		e. Explosives storage	0	5	0	5	3	5	5	0	3	0	0	0	0	0	0	0	0	0	0	5	0	0	0	3	3	0	0	
		f. Hazardous from others	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	0	0	3	0	0	0	
		g. UXO, incl. below water	0	0	0	0	0	0	0	3	5	3	0	3	3	0	0	5	0	0	0	3	0	0	0	3	0	3	3	
		h. Safety of Sea Transport	3	3	3	3	3	3	5	3	5	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	0	0	3
		i. Security against terrorists	5	0	5	0	0	0	0	5	5	3	5	5	5	0	5	5	5	3	5	0	0	5	3	0	0	3	3	
		j. Other natural hazards	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	
B3	Environment	a. Dredging; capital & maint.	3	5	0	0	0	3	7	7	7	7	*	7	3	7	0	7	*	*	7	7	0	5	7	5	3	0	7	
		b. Construction of berthing facilities	3	3	0	0	0	3	7	7	7	7	*	7	3	5	3	7	*	*	7	7	3	5	7	5	3	0	7	
		c. Sea & flood defence	3	3	0	0	0	0	7	7	7	7	*	7	3	5	0	7	*	*	7	7	0	0	7	5	0	3	5	
		d. Land side facilities	0	0	0	0	0	0	3	7	7	3	*	7	3	0	0	7	*	*	7	0	0	0	3	0	0	3	7	

Evaluation Criteria	Site name	RAF Valley	DM Crombie	Aulbea	DM Coulport	HMNB Clyde	South Yard	DM Longtown	West Freugh	South Uist	Ft. George Barrac	Blackdog Range	Barry Budden	Hythe Ranges	RM Chivenor	Pembroke Dock	Pendine Beach	Macrihanish	Lydd Camp	Penhale Camp	DM Gosport	NRTE Vulcan	HMS Daedalus	Thorney Island	Bull Point	Weston Mill Lake	Ft. George Range	Horsea Island		
			e. Consequence of accidents	3	3	0	3	3	5	7	7	7	7	*	7	3	7	5	7	*	*	7	5	3	5	7	5	5	5	7
	f. Archaeological & Cultural	0	0	0	0	0	0	0	0	0	3	*	0	3	0	3	3	*	*	0	0	0	3	0	3	0	0	3		
	g. Effects on existing land use	0	0	0	0	0	0	0	7	7	7	*	7	3	0	0	7	*	*	7	0	5	0	0	0	0	3	0		
B4	Development	a. Benefit to local economy	3	3	5	3	3	3	3	0	0	5	3	3	3	5	3	5	0	3	5	3	3	5	3	0	0	0	5	
		b. Influx of personnel	3	3	3	3	3	3	3	3	5	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	0	3	
		c. Availability of skills	3	3	7	0	0	0	5	5	7	5	5	5	3	5	5	5	5	3	5	3	0	5	5	0	0	0	0	
		d. Effects of new facilities	3	3	5	3	3	3	3	3	3	3	3	5	3	5	3	3	3	3	5	3	5	5	3	5	3	3	5	
		e. Impairment of landscape	0	3	7	3	3	3	5	7	7	7	7	7	5	5	3	7	7	5	7	5	5	5	7	5	3	5	5	
		f. Local Infrastructure	3	3	7	3	3	3	3	3	7	3	3	3	3	5	3	5	5	5	7	5	3	5	5	3	3	5	3	
		g. Increase in traffic	3	3	7	3	3	3	5	3	5	3	3	3	3	5	3	3	5	5	5	5	5	3	5	5	3	3	3	7
B5	Future Plans	0	5	5	5	5	5	0	0	0	3	5	3	3	3	0	0	0	3	3	3	5	0	3	0	5	0	0		
B6	Planning Clearance	3	5	3	0	0	3	5	5	5	5		5	3	3	3	5			5	5	0	5	5	5	3	3	5		
B7	Construction, operation and decommissioning	a. Relocate existing	0	7	5	5	5	2	0	0	0	7	7	5	7	0	0	0	0	5	5	0	0	0	0	0	2	0	0	
		b. Purchase of new land	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	7	0	0	0	0	7	0	
		c. Clean-up of contamination	5	7	5	2	2	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	0	5	7	5	0	0	5	
B7	Construction, operation and decommissioning (Continued)	d. Capital dredging	5	5	2	2	0	2	7	5	7	5	5	5	5	5	2	5	5	5	5	5	0	5	5	10	5	2	10	
		e. Berth Construction	5	2	2	5	0	2	5	5	7	5	5	5	7	5	2	5	5	5	5	5	5	5	5	7	5	2	7	
		f. Land side construction	2	5	5	5	5	5	5	5	7	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	2	7	5	
		g. Coastal maint	5	5	2	0	0	2	7	7	7	5	7	5	7	7	2	5	7	7	5	5	0	5	5	5	5	2	5	7
		Land-side maint.	5	5	5	5	5	5	5	7	5	5	5	5	5	5	5	5	5	5	5	0	5	5	5	5	5	5	5	
		i. Security	5	0	7	0	0	0	0	7	7	7	7	7	7	7	0	7	7	5	5	7	0	2	7	5	2	0	5	5
		j. Decommissioning	5	5	7	5	5	2	5	7	7	5	5	7	5	5	5	5	5	5	5	5	5	5	5	5	2	5	5	5
		k. Cost of Planning Approvals	5	7	7	5	5	7	7	7	7	7	7	7	7	5	7	5	7	7	7	7	7	5	7	7	10	7	7	10
l. Cost of Licensing Approvals	7	7	7	5	5	5	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	5	7	7	10	7	7	10		

**STAGE 3 WEIGHTED SCORES**

Evaluation Criteria	Site Name	Weighting	Site Name																											
			RAF Valley	DM Crombie	Aulitbea	DM Coulport	HMNB Clyde	South Yard	DM Longtown	West Freugh	South Uist	Ft. George Barrac	Blackdog Range	Barry Budden	Hythe Ranges	RM Chivenor	Pembroke Dock	Pendine Beach	Macrihanish	Lydd Camp	Penhale Camp	DM Gosport	NRTE Vulcan	HMS Daedalus	Thorney Island	Bull Point	Weston Mill Lake	Ft. George Range	Horsea Island	
<b>Final Weighted Totals</b>			126	148	154	94	85	114	192	221	258	229	145	237	186	185	127	237	131	137	241	172	116	174	203	172	108	130	217	
<b>Details</b>		<b>Adjusted Scores</b>																												
B1	Site Category	1	0	0	0	0	0	0	0	5	5	0	5	0	3	0	0	5	0	0	0	0	0	3	5	0	0	0		
B2	Safety Hazards	a. Flooding	1	3	0	0	0	0	5	3	3	3	3	3	5	5	0	3	3	5	0	3	0	0	3	0	0	3	3	
		b. Coastal Erosion	1	3	0	0	0	0	3	3	3	3	5	5	5	3	0	3	3	5	3	0	0	0	0	0	0	3	3	
		c. Live Firing/Bombing	1	0	0	0	0	0	0	0	3	3	0	5	3	0	0	0	0	3	0	0	0	0	0	0	0	3	0	
		d. Flying operations	1	0	0	0	0	3	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	3	3	5	5	0	0	
		e. Explosives storage	1	0	5	0	5	3	5	5	0	3	0	0	0	0	0	0	0	0	0	5	0	0	0	3	3	0	0	
		f. Hazardous from others	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	0	0	3	0	0	0	
		g. UXO, incl. below water	1	0	0	0	0	0	0	3	5	3	0	3	3	0	0	5	0	0	0	3	0	0	0	3	0	3	3	
		h. Safety of Sea Transport	1	3	3	3	3	3	3	5	3	5	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	0	0	3
		i. Security against terrorists	1	5	0	5	0	0	0	5	5	3	5	5	5	0	5	5	5	3	5	0	0	5	3	0	0	3	3	
		j. Other natural hazards	1	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
B3	Environment	a. Dredging; capital & maint.	2	6	10	0	0	6	14	14	14	14		14	6	14	0	14			14	14	0	10	14	10	6	0	14	
		b. Construction of berthing facilities	2	6	6	0	0	6	14	14	14	14		14	6	10	6	14			14	14	6	10	14	10	6	0	14	
		c. Sea & flood defence	2	6	6	0	0	0	14	14	14	14		14	6	10	0	14			14	14	0	0	14	10	0	6	10	

Evaluation Criteria	Site Name	Weighting	Site Name																											
			RAF Valley	DM Crombie	Aultbea	DM Coulport	HMNB Clyde	South Yard	DM Longtown	West Freugh	South Uist	Ft. George Barrac	Blackdog Range	Barry Budden	Hythe Ranges	RM Chivenor	Pembroke Dock	Pendine Beach	Macrihanish	Lydd Camp	Penhale Camp	DM Gosport	NRTE Vulcan	HMS Daedalus	Thorney Island	Bull Point	Weston Mill Lake	Ft. George Range	Horsea Island	
		d. Land side facilities	2	0	0	0	0	0	6	14	14	6		14	6	0	0	14			14	0	0	0	6	0	0	6	14	
		e. Consequence of accidents	2	6	6	0	6	6	10	14	14	14		14	6	14	10	14			14	10	6	10	14	10	10	10	14	
		f. Archaeological & Cultural	2	0	0	0	0	0	0	0	0	6		0	6	0	6	6			0	0	0	6	0	6	0	0	6	
		g. Effects on existing land use	2	0	0	0	0	0	0	14	14	14		14	6	0	0	14			14	0	10	0	0	0	0	6	0	
B4	Development	a. Benefit to local economy	2	6	6	10	6	6	6	6	0	10	6	6	6	10	6	10	0	6	10	6	6	10	6	0	0	0	10	
		b. Influx of personnel	2	6	6	6	6	6	6	6	10	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	0	6	
		c. Availability of skills	2	6	6	14	0	0	10	10	14	10	10	10	6	10	10	10	10	6	10	6	0	10	10	0	0	0	0	
		d. Effects of new facilities	2	6	6	10	6	6	6	6	6	6	6	10	6	10	6	6	6	6	10	6	10	10	6	10	6	6	10	
		e. Impairment of landscape	2	0	6	14	6	6	6	10	14	14	14	14	10	10	6	14	14	10	14	10	10	10	14	10	6	10	10	
		f. Local Infrastructure	2	6	6	14	6	6	6	6	14	6	6	6	6	10	6	10	10	10	14	10	6	10	10	6	6	10	6	
		g. Increase in traffic	2	6	6	14	6	6	6	10	6	10	6	6	6	10	6	6	10	10	10	10	6	10	10	6	6	6	14	
B5	Future plans		1	0	5	5	5	5	0	0	0	3	5	3	3	3	0	0	0	3	3	3	5	0	3	0	5	0	0	
B6	Planning Clearance		1	3	5	3	0	0	3	5	5	5	5	5	3	3	3	5			5	5	0	5	5	5	3	3	5	
B7	Construction, operation and decommissioning	a. Relocate existing	1	0	7	5	5	5	2	0	0	0	7	7	5	7	0	0	0	5	5	0	0	0	0	0	2	0	0	
		b. Purchase of new land	1	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	7	0	0	0	0	7	0	
		c. Clean-up of contamination	1	5	7	5	2	2	5	5	5	5	5	5	5	5	5	5	5	5	5	5	0	5	7	5	0	0	5	
B7	Construction, operation and decommissioning (Continued)	d. Capital dredging	1	5	5	2	2	0	2	7	5	7	5	5	5	5	2	5	5	5	5	0	5	5	10	5	2	10		
		e. Berth Construction	1	5	2	2	5	0	2	5	5	7	5	5	5	7	5	2	5	5	5	5	5	5	5	7	5	2	7	
		f. Land side construction	1	2	5	5	5	5	5	5	5	7	5	5	5	5	5	5	5	5	5	5	5	5	5	5	2	7	5	
		g. Coastal maint	1	5	5	2	0	0	2	7	7	7	5	7	5	7	7	2	5	7	7	5	0	5	5	5	5	2	5	7
		Land-side maint.	1	5	5	5	5	5	5	5	7	5	5	5	5	5	5	5	5	5	5	0	5	5	5	5	5	5	5	5
		i. Security	1	5	0	7	0	0	0	0	7	7	7	7	7	7	0	7	7	5	5	7	0	2	7	5	2	0	5	5
		j. Decommissioning	1	5	5	7	5	5	2	5	7	7	5	5	7	5	5	5	5	5	5	5	5	5	5	5	2	5	5	5
		k. Cost of Planning Approvals	1	5	7	7	5	5	7	7	7	7	7	7	7	5	7	5	7	7	7	7	5	7	7	10	7	7	10	
		l. Cost of Licensing Approvals	1	7	7	7	5	5	5	7	7	7	7	7	7	7	7	7	7	7	7	7	5	7	7	10	7	7	10	



## STAGE 4 EVALUATION RESULTS

Ser.	Site Serial	Core Site No.	Site Name	Comment	Possible Site	% Suitability	Ranking
1	007	CS-242	DM Coulport	<ul style="list-style-type: none"> <li>The site has 160 acres of spare capacity though would have to be re-licensed/authorised</li> <li>Storage of 3 waste containers would be possible per ring</li> <li>It would be very difficult to transport reactor compartments up the hill and the site was originally excluded on this assumption. However, storage would be possible at the bottom of the hill.</li> <li>The site is adjacent to National Park</li> </ul>	Yes	80	1
2	037	-	RAF Machrihanish	<ul style="list-style-type: none"> <li>This site to be held on to for MoD rattle space and has poor sea access. However and an engineered solution would be possible.</li> <li>Ownership of foreshore is an issue, adjacent to golf links.</li> <li>Local authority is Argyle and Butte council.</li> <li>Part of the site has an environmental designation.</li> </ul>	Yes	70	2
3	008	CS-255	HMNB Clyde	<ul style="list-style-type: none"> <li>The ship-lift is suitable for extraction of the submarine only, not to cut up.</li> <li>The site would be ideal for a bidder without an identified site.</li> <li>Cut-up would be possible on shore in lay-up area adjacent to the ship-lift however the lay-up area between the ship-lift/Northern Utilities Building and Rowmore point is currently used for other operational.</li> <li>It is recommended that the site user is consulted.</li> <li>Sea access and road access both available</li> </ul>	Yes	60	3
4	A13	CS-176	NRTE Vulcan	<ul style="list-style-type: none"> <li>Department of Trade and Industry owns the site; MoD occupies it.</li> <li>There is not enough room on NRTE Vulcan site land would need to be leased from UK (AEA)</li> <li>Road and rail access is good and it would be possible to build a pier to land RC from a barge prior to transporting them up the hill</li> <li>Access from Sand Bay may be possible though purchase of additional land would be required</li> </ul>	Yes	50	4
5	030	CS-473	Pembroke Dock	<ul style="list-style-type: none"> <li>This site has been subject to Land Quality Assessments. The results are not known by the Ev</li> </ul>	Yes	40	5

Ser.	Site Serial	Core Site No.	Site Name	Comment	Possible Site	% Suitability	Ranking
				<p>valuation Team members.</p> <ul style="list-style-type: none"> <li>• There is limited spare capacity on the site and it is not in a National Park.</li> <li>• It is understood that the Local Authority is interested in acquiring part of site.</li> <li>• The site has deep water access.</li> <li>• Obtaining planning permission for RC storage could be a problem.</li> <li>• The MoD currently owns the site although it may only remain in MoD Estate for a further five years. Part has been leased to SERCO although some may have been sold off (the old oil fuel depot).</li> <li>• Seems an attractive site with only a small local population.</li> </ul>			
6	004	-	Aultbea/Mellon Charles	<ul style="list-style-type: none"> <li>• This is a high profile site although it is to remain under consideration at the Client's request</li> </ul>	Yes	25	6
7	BO3	CS-470	HMNB Devonport Weston Mill Lake	<ul style="list-style-type: none"> <li>• This site is located adjacent to a built-up area with a primary school close by.</li> <li>• Local residents are actively interested in the future use of the site.</li> <li>• Part of the site may be contaminated.</li> <li>• The site is unlikely to be suitable for storage of waste though cut-out/cut-up may be possible.</li> <li>• The site is currently being considered for other development.</li> <li>• It is in the flight path of Flag Officer Sea Training aviation.</li> <li>• The "Warships in Harbours" study 16 years ago is understood to have precluded similar use.</li> <li>• This is potentially a very difficult site for which to gain approvals. However, it should not be disregarded for this reason only.</li> </ul>	Yes	20	7
8	B10	CS-641	Fort Gorge Ranges	<ul style="list-style-type: none"> <li>• This site is topographically suitable and has access potential to a ready made heavy lift dockyard at an adjacent oil-rig yard. The latter is not owned by MoD and marine access would need to be obtained. The site is otherwise not viable.</li> <li>• Some buildings on site may be listed.</li> <li>• There are other difficult disposal issues associated with the site.</li> </ul>	Yes	15	8
9	009	CS-244	HMNB Devonport South Yard	<ul style="list-style-type: none"> <li>• This site is located adjacent to a built-up area and includes listed buildings and commercial residential property. It overlooked by tower blocks and other city dwellings.</li> <li>• Local residents are actively interested in the future use of the site.</li> <li>• Part may be returned to city for alternative use though HMNB could expand toward this area. There could be a conflict of interest.</li> <li>• The sea aspect presents security difficulties.</li> <li>• Some of the slip-ways are "Listed buildings".</li> </ul>	Yes	10	9

Ser.	Site Serial	Core Site No.	Site Name	Comment	Possible Site	% Suitability	Ranking
10	A04	CS-477	DM Gosport	<ul style="list-style-type: none"> <li>This site is located adjacent to a built-up area and includes a SSSI.</li> <li>The site is only a 2 berths and has never been authorised or licensed for nuclear use.</li> <li>Access is via a narrow channel.</li> <li>Storage or dismantling of RC is incompatible with existing use of the site.</li> </ul>	No		
11	A19	-	HMS Daedalus, Gosport	<ul style="list-style-type: none"> <li>HMS Daedalus is part of the strategic reserve of land for Government/MoD use. The site includes three large sites for rattle space. Home Office has an interest and DHE are using it for ho using in support of MoD.</li> <li>Until recently it had been empty for a number of years although Police and HM Coast guard use the site for flying operations.</li> <li>Some parts of the site are rented out to civilian use</li> <li>The site is located adjacent to a built-up area.</li> <li>It is necessary to cross a public road between a public beach and the site.</li> </ul>	No		
12	B02	CS-633	HMNB Devonport Bull Point	<ul style="list-style-type: none"> <li>The site is incompatible with existing use due to proximity of munitions barges and includes SSSI/SESACS designations.</li> </ul>	No		
13	A22	CS-406	Thorney Island	<ul style="list-style-type: none"> <li>This site may have DDT related issues and includes SSSI/Ramsar designations.</li> <li>It has a low probability of environmental permission for moving this size of load</li> <li>The use of the site for RC storage is incompatible with the current use as a special forces training area.</li> </ul>	No		
14	B18	CS-201	Horsea Island	<ul style="list-style-type: none"> <li>This site has SSSI designations.</li> <li>Through this is a naval base, access would be very difficult and it is in direct view of M275 motorway.</li> <li>Horsea Island is a SPA site and has environmental, planning and development cost issues.</li> <li>Dredging would be possible but difficult</li> <li>Northern half of the harbour is a candidate for a SAC/SSSI designation.</li> </ul>	No		
15	002	CS-110	RAF Valley	<ul style="list-style-type: none"> <li>Ownership of the foreshore is an issue</li> <li>The MoD is likely to keep this site in the long term</li> <li>There is a conflict of interest with existing use as a flying training area.</li> </ul>	No		
16	003	CS-230	DM Crombie	<ul style="list-style-type: none"> <li>The site could not be used for cut-up/cut-out as this activity is incompatible with existing use as an ammunition depot.</li> <li>The site lies within Chancellor of the Exchequer's constituency</li> <li>The site has SSSI/AONB designations.</li> </ul>	No		

Ser.	Site Serial	Core Site No.	Site Name	Comment	Possible Site	% Suitability	Ranking
17	011	CS-233	DM Longtown	<ul style="list-style-type: none"> <li>The sea approach includes unstable navigation and access could be difficult.</li> <li>The site could not be used for cut-up/cut-out as this activity is incompatible with existing use as an ammunition depot.</li> </ul>	No		
18	013	CS-499	DERA West Freugh	<ul style="list-style-type: none"> <li>QINETIQ has a long lease on the site.</li> <li>Use of the site for storage of RC is incompatible due to the risk of unexploded ordnance.</li> <li>A public road crosses the access from sea to airfield.</li> </ul>	No		
19	014	-	DERA South Uist	<ul style="list-style-type: none"> <li>Access to the sea is difficult.</li> <li>Use of the site for storage of RC is incompatible due to the risk of unexploded ordnance and use for live firing.</li> </ul>	No		
20	017	CS-384	Fort George Barracks	<ul style="list-style-type: none"> <li>The site has poor sea access and storage or cut-up of RC is incompatible with use as a barracks.</li> </ul>	No		
21	019	-	Blackdog Range	<ul style="list-style-type: none"> <li>Incompatible use with live firing range and adjacent civilian use.</li> </ul>	No		
22	020	CS-569	Barry Budden Range	<ul style="list-style-type: none"> <li>Sea access to the site difficult</li> <li>Incompatible use with live firing range, the "Bisley of Scotland", and adjacent civilian leisure use.</li> </ul>	No		
23	022	CS-100	Hythe Ranges	<ul style="list-style-type: none"> <li>This land is on a 25 year duration lease.</li> </ul>	No		No
24	029	CS-017	RM Chivenor	<ul style="list-style-type: none"> <li>Storage of RC is incompatible with existing use in that a number of RN units are to be relocated here the site will be built up as MoD "Core Site".</li> <li>Just under 250 hectares forms a flood plain and unsuitable for RC storage.</li> <li>This site has SSSIs/AONB designation.</li> </ul>	No		
25	035	CS-495	Pendine Beach	<ul style="list-style-type: none"> <li>This DSTL range site has poor sea access with unstable coast and heavily contaminated sand dunes.</li> <li>Commercial farming of ragworm has been tried.</li> </ul>	No		
26	39	CS-552	Lydd Camp	<ul style="list-style-type: none"> <li>Just under 464 acres forms a flood plain and unsuitable for RC storage.</li> <li>The coast line comprises shifting shingle providing difficult access.</li> <li>Incompatible use with live firing range,</li> <li>This site has a Ramsar designation.</li> <li>Flooding and sea level rise may threaten the site in the future.</li> </ul>	No		
27	053	CS-504	Penhale Training camp	<ul style="list-style-type: none"> <li>Storage of RC would be incompatible with environs (a key tourist area)</li> <li>This site has SAC European coast, SSSI and World Heritage site designations</li> <li>The site is topographically difficult with some cliff lines.</li> </ul>	No		



## STAGE 5 EVALUATION RESULTS

Ser.	Site Serial	Core Site No.	Site Name	Comment	Suitable
1	007	CS-242	DM Coulport	<ul style="list-style-type: none"> <li>This site did not fail any of the site selection criteria but did have some hazards that would require detailed consideration when evaluating any proposals for the site.</li> </ul>	Yes
2	037	-	RAF Machrihanish	<ul style="list-style-type: none"> <li>DE confirmed that the MoD does not have any ownership or rights of tenure over the strip of land between the sea and the site, therefore it was not considered further as it does not meet the "Sea Access" criterion.</li> </ul>	No
3	008	CS-255	HMNB Clyde	<ul style="list-style-type: none"> <li>The Naval Base Commander determined that the presence of the facility would impact significantly on the operational capability and flexibility, most notably in respect of the strategic deterrent, therefore it was not considered further as it failed the "Compatibility of Use" criterion.</li> </ul>	No
4	A13	CS-176	NRTE Vulcan	<ul style="list-style-type: none"> <li>This site only has an area of 8.56 hectares and is currently being used by the DPA for the Reactor Shore Test Facility in the ISOLUS time frame. This site was not considered further as it failed the "Usable Space" criterion.</li> </ul>	No
5	030	CS-473	Pembroke Dock	<ul style="list-style-type: none"> <li>The Project Manager for Marine Services Current Business determined that the site covers an area of approximately 7 hectares, in addition the usable space is reduced by a mast pond that occupies an area of 0.675 hectares. This site was not considered further as it failed the "Usable Space" criterion.</li> </ul>	No
6	004	-	Aultbea/Mellon Charles	<ul style="list-style-type: none"> <li>DE Scotland determined that the site was 7.5 hectares, therefore this site was not considered further as it fails on the "Usable Space" criterion.</li> </ul>	No
7	BO3	CS-470	HMNB Devonport Weston Mill Lake	<ul style="list-style-type: none"> <li>The Naval base Commander determined that there is no spare space that could be utilised without unacceptable detriment to his customers, therefore it was not considered further as it failed the "Compatibility of Use" criterion.</li> </ul>	No
8	B10	CS-641	Fort Gorge Ranges	<ul style="list-style-type: none"> <li>This site does not meet the criteria for direct sea access, therefore it was not considered further as it does not meet the "Sea Access" criterion.</li> </ul>	No
9	009	CS-244	HMNB Devonport South Yard	<ul style="list-style-type: none"> <li>The Naval Base Commander determined that part of the south yard enclave was being handed back to Plymouth City Council on the 1<sup>st</sup> April 2005 in accordance with a ministerial directive. The remaining area contains listed buildings that make it impractical to position the required facilities, therefore it was not considered further as it failed the "Usable Space" criterion.</li> </ul>	No