

Outline Contents of SD:SPUR Information Paper

Good Practice Tools for Use in the Development of Strategies, Plans and Procedures for the Management of Decommissioning Wastes and Potentially Re-Usable Items

1 INTRODUCTION

- The paper provides information about the main good practice tools that are available in the UK to assist in the development of strategies, plans and procedures for managing decommissioning wastes and potentially re-usable items on nuclear and defence sites.
- The tools include guidance, codes of practice and protocols issued by government departments and agencies and other organisations.
- The decommissioning wastes covered are those of interest to SD:SPUR, namely radiologically clean, excluded, exempt and low activity solid wastes.
- The potentially re-usable items covered are buildings, including their fixtures and fittings, plant and equipment.
- The paper begins with a description of the framework in which site-specific management strategies are developed, the principal stages in their development and implementation, and the key considerations at each of these stages. It then summarises the main good practice tools and the ways in which they can be used, and indicates possible future work on the application and development of tools.

VERSION CONTROL

DOCUMENT TITLE: **Good Practice Tools for Use in the Development of Strategies,
Plans and Procedures for the Management of
Decommissioning Wastes and Potentially Re-Usable Items**

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HISTORY: **First draft**

2 DEVELOPMENT AND IMPLEMENTATION OF SITE STRATEGIES FOR MANAGING DECOMMISSIONING WASTES AND ITEMS

2.1 Framework in which Site Strategies are Developed

- Description of framework, referring to Figure 1 (attached).
- Summary of the responsibilities of the various organisations, referring to Table 1 (attached).

2.2 Stages in the Management of Decommissioning Wastes and items

- Description of the stages, using the flow diagram in Figure 2 (attached).

2.3 Key Considerations at Management Stages

- Summary of the key considerations, see Table 2 (attached).

3 GOOD PRACTICE TOOLS

- In each sub-section, a brief description of the tool, referring readers to the Appendix for more details, and a summary of the waste management stages at which it can be used and the key considerations that it can help to address (referring to Figure 2 and Table 2).
- Final sub-section is a summary.

3.1 SD:SPUR Guidance

3.2 NDA Guidance on Integrated Waste Strategies

3.3 ICE/WRAP Demolition Protocol

3.4 DTI Code of Practice on Site Waste Management Plans

3.5 Nuclear Industry Clearance and Exemption Code of Practice

3.6 WRAP Quality Protocol for Aggregates from Inert Waste

3.7 Summary of the Good Practice Tools

- See Table 3 (attached).

4 POSSIBLE FUTURE DEVELOPMENTS

4.1 New Tools being Developed

- WRAP protocols for other materials
- *Working Group: Are there any other new tools being developed that should be mentioned here?*

4.2 Future Applications of Existing Tools

- WRAP protocols input to revision of European Waste Framework Directive
- *Working Group: Are any other applications planned or in progress?*

4.3 Updating of Existing Tools

- *Working Group: Are there any major updates planned for the next year or so?*

4.4 Developments Required

- *Working Group: Have you identified any urgent needs for new tools?*

5 REFERENCES

- Will include details of websites where tools and documents are available.
- Acronym list (see Table 4 attached).

APPENDIX – FURTHER DETAILS OF GOOD PRACTICE TOOLS

- Details for each main tool, with references to case studies where possible.

Table 1 Responsibilities for Development of Strategies, Plans and Procedures

<i>Level</i>	<i>Development Activity</i>	<i>Responsible Organisation</i>
1	National policies (UK-wide or separately for England, Wales, Scotland and Northern Ireland)	Central government, devolved administrations
2	Regulatory frameworks (UK-wide or separately for England, Wales, Scotland and Northern Ireland)	Central government, devolved administrations, regulators
3	Multi-site strategies for decommissioning, waste management, management of contaminated land	Liability holders (NDA, MoD)
4	Site strategies for decommissioning, waste management, management of contaminated land	Operators
5	Site waste management strategies (all categories of radioactive and non-radioactive waste)	Operators
6	Site management plans for various types of waste	Operators
7	Site waste management procedures	Operators
8	Site/plant work instructions	Operators

Table 2 Key Considerations at Stages in the Management of Decommissioning Wastes and Items

<i>Stage</i>	<i>Key Consideration</i>	<i>Details</i>
1. Initial characterisation	Waste quantities	Quantities of each major type of radioactive and non-radioactive waste.
	Numbers of items	Numbers of each major type of potentially re-usable contaminated and uncontaminated item.
	Nature	Physical and chemical nature of wastes and items.
	Radioactivity content	Concentrations and total activities of important radionuclides in wastes and items; judgements on importance should take into account stakeholder views and have in mind candidate management options.
	Hazardous content	Concentrations and total quantities of non-radioactive hazardous substances in wastes and items.
	Confidence levels	Confidence levels on measurements and estimates, taking into account detection limits and sampling limitations.
	Level of detail	Characterise in enough detail to formulate and compare possible strategies.
	Further work	Estimate costs and doses/risks to workers of further characterisation (for use in strategy development).
2. Developing management strategy	Stakeholder involvement	In consultation with stakeholders, plan how they are to be involved in strategy development.
	Guiding principles	Identify guiding principles to be used in identifying candidate strategies and assessing and comparing them (eg sustainability, protecting human health and the environment, precautionary action, avoiding irreversible effects, use of best scientific data, proximity principle).
	Objectives & targets	General objectives can be useful in strategy development (eg from waste hierarchy) but numerical targets should only be set once strategy has been decided.
	Methodology	Use BPEO-type methodology to provide input to decision on preferred strategy, with special attention to various aspects of sustainability.
	Consistency	Ensure that strategy for managing clean, excluded, exempt and low activity wastes and items is consistent with site's decommissioning strategy, IWS and strategy for managing contaminated land.
	Financial costs	Best given separate consideration when comparing candidate strategies.

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<i>Stage</i>	<i>Key Consideration</i>	<i>Details</i>
3. Further Characterisation	Level of detail	Key considerations are as for initial characterisation but now enough detail is needed to select and implement management options for each type of waste and item.
4. Selecting management options for wastes and items	Stakeholder involvement	In consultation with stakeholders, plan how they are to be involved in selecting management options for all or some types of wastes and items.
	Guiding principles	Identify guiding principles to be used in identifying candidate options and assessing and comparing them (eg sustainability, protecting human health and the environment, precautionary action, avoiding irreversible effects, use of best scientific data, proximity principle).
	Methodology	Use BPEO-type methodology to provide input to decisions on preferred options for each waste type, with special attention to various aspects of sustainability.
	Consistency	Ensure that options are consistent with site management strategy for decommissioning wastes and items.
	Financial costs	Best given separate consideration when comparing candidate options.
5. Implementing management options	Verification	Plans, procedures and work instructions should include means of verifying that they have been followed. Particularly important when sentencing wastes and items as clean, excluded or exempt.
	Information	Stakeholders should be kept informed of progress and any changes to plans.
6. Managing residual wastes	As stages 1, 3, 4, 5	See stages 1, 3, 4, 5

Table 3 Summary of Good Practice Tools

<i>Good Practice Tool</i>	<i>Major Uses (management stage)</i>
SD:SPUR Guidance	Developing site strategies and selecting management options for types of waste and item (2, 4, 6)
NDA IWS Guidance	Developing site strategies and selecting management options for types of waste and item (2, 4, 6)
ICE/WRAP Demolition Protocol	Developing site strategies, selecting and implementing management options for types of waste and item (2, 4, 5, 6)
DTI Code of Practice on Site Waste Management Plans	Developing site strategies, selecting and implementing management options for types of waste and item (2, 4, 5, 6)
Nuclear Industry Clearance and Exemption Code of Practice	All (1-6)
WRAP Quality Protocol for Aggregates from Inert Waste	Characterisation, selecting and implementing management options for types of waste (1, 3, 4, 5, 6)

Table 4 Key to Acronyms

(to be completed)

Acronym	Meaning
C&EWG	Clearance and Exemption Working Group
CIRIA	Construction Industry Research and Information Organisation
CoP	code of practice
DE	Defence Estates
DTI	Department of Trade and Industry
ICE	Institution of Civil Engineers
IWS	integrated waste strategy
MoD	Ministry of Defence
NDA	Nuclear Decommissioning Authority
SoLA	Substances of Low Activity Exemption Order (made under the Radioactive Substances Act)
SWMP	site waste management plan
WRAP	Waste and Resources Action Programme

Figure 1 Framework in which Site Strategies are Developed

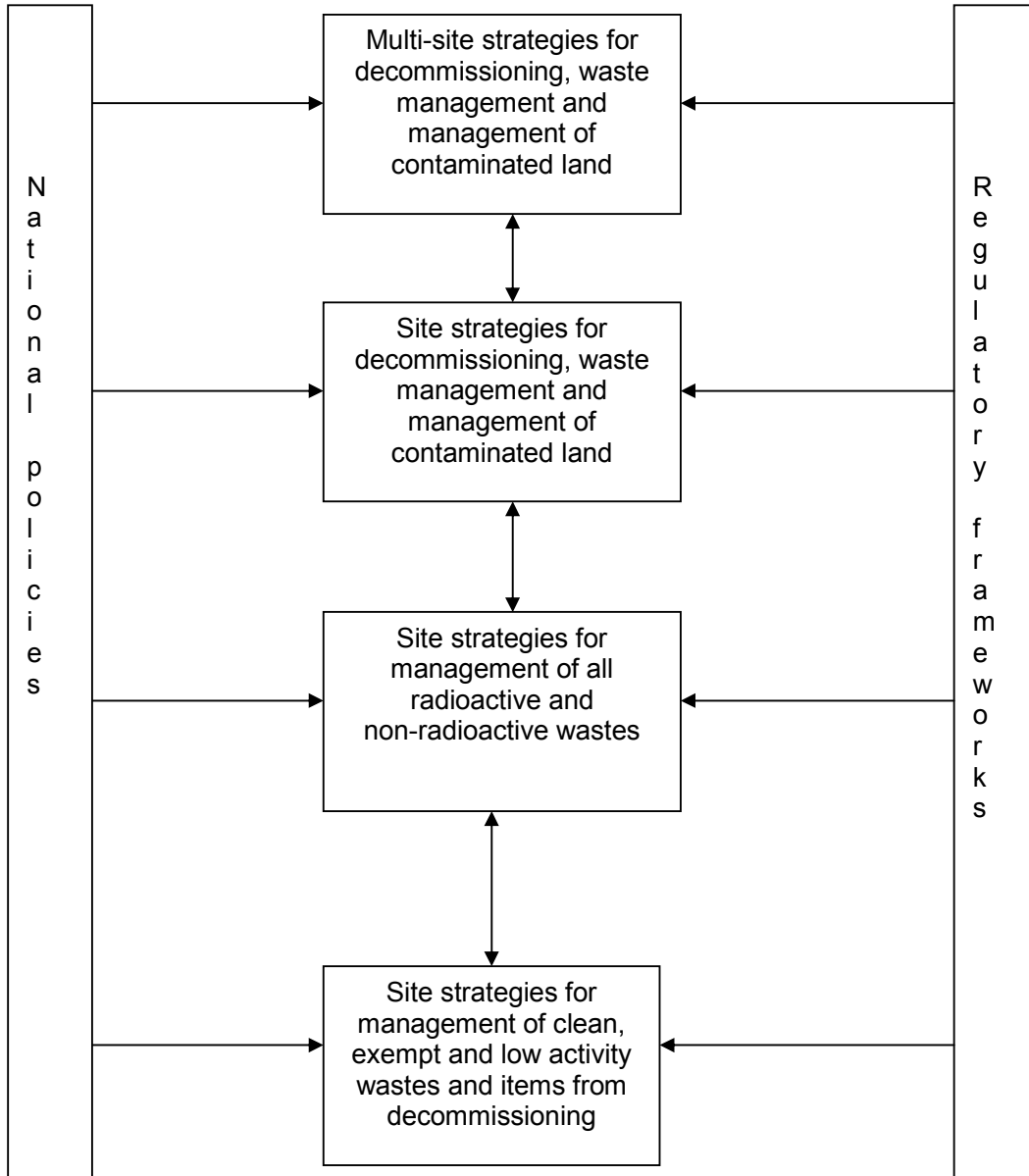


Figure 2 Flow Diagram for Management of Decommissioning Wastes and Items

