

## **SD:SPUR Meeting on Related Initiatives, CIRIA, 22 September 2006**

*Present<sup>1</sup>:* John Barritt (WRAP)  
Andrew Craze (NDA, by video link)  
David Owen (C&EWG)  
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### *Background and Objectives of the Meeting*

In the light of information gained during site visits, the SD:SPUR steering group has identified a need to explore the links (and any overlaps) between the various policy initiatives, codes of practice and good practice management tools that are relevant to the management of decommissioning wastes. Those of particular interest are: integrated waste strategies (IWSs), the nuclear industry code of practice on clearance and exemption (C&EWG CoP), the WRAP quality protocol for the production of aggregates from inert waste, and the ICE/WRAP demolition protocol. The meeting was held to:

- set out the background, primary focus and scope of each initiative
- begin to identify links between them and investigate how they are and could be used
- consider the outline content of a draft paper

### *Scope of SD:SPUR Learning Network and Guidance*

The learning network is intended to cover all activities in the formulation and further development of strategies, plans and procedures for the management of radiologically clean, SoLA exempt and low activity decommissioning wastes at nuclear and defence sites, including re-using assets (which avoids creating wastes). As shown in Table 1, these activities range from the very broad (development of national policies) to the very detailed (preparing work instructions for a specific stage in the management of a specific waste). At present, the SD:SPUR guidance focuses on levels 5-6 in Table 1, ie on the development of site waste management strategies and plans, but it is intended to extend it to the development of more practical approaches (level 7). Discussions within the network may well have influenced developments at higher levels.

### *WRAP Quality Protocol*

The existing WRAP quality protocol is for the production of aggregates from inert waste. It is widely used in road building and maintenance (where it is written into Highways Agency contracts) and is also in use in other parts of the construction industry and at some nuclear sites. The protocol helps to identify when inert waste has been recovered fully and gives assurance that recovered aggregate products are of adequate standard. Its structure is being used in an Environment Agency/WRAP project to produce quality protocols for 10 other materials, including some non-hazardous wastes and wastes from remediation of contaminated land. The outcome of these projects will feed into the process of defining 'recovery' in revisions to the European Waste Framework Directive.

### *ICE/WRAP Demolition Protocol*

The demolition protocol is about carrying out a pre-demolition audit to identify those materials in a building that could be recovered and specifying the amounts of recovered material to be used in the new building to be erected on the site of the one that is to be demolished. There are examples of it being used in large development projects (such as the area around Wembley) and there is a case study of its use at Wylfa.

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<sup>1</sup> See Table 2 for key to acronyms.

### *Other WRAP Tools*

There are a number of other WRAP tools that are available to assist in the recovery and re-use of various materials. These include a new-build tool that indicates where materials with recycled content may be used within construction.

### *Site Waste Management Plans*

As part of their work on sustainability in the construction industry, in 1994 DTI issued a voluntary code of practice on site waste management plans (SWMPs). This is intended to encourage organisations to assess, before the start of the development, the extent to which waste production can be reduced and waste recycling increased. Over the next year or two DTI will introduce regulations to make the production of SWMPs mandatory for developments of value over £200k and require more detailed SWMPs for developments over £500k (The Clean Neighbourhoods and Environment Act 2005 includes a clause that enables DTI to make the regulations by statutory instrument). It is unclear how or whether such regulations will apply to nuclear sites. DE already have sustainability instructions that are similar in intent to SWMPs and include sustainability clauses in their contracts.

### *C&EWG CoP*

The nuclear industry's code of practice on clearance and exemption fills a need for consistency and compliance in the release of materials from the controls on radioactive wastes. Its use has been made mandatory via a decision of the Nuclear Industry Safety Directors' Forum, which has given the working group a broad remit to carry out other tasks on clearance and exemption. The CoP is aimed at people who write site procedures and has been well-received at this level. There have been requests for the C&EWG to produce outline working level procedures and templates for clearance certificates. A C&EWG website is being created to help to share experience and good practice, and collect comments for use in future reviews and revisions of the CoP.

### *IWS*

The concept of IWSs arose prior to the formation of the NDA when the nuclear industry and its regulators recognised the need for site-wide, forward looking plans for the management of all wastes. The NDA requires all its sites to have an IWS and has issued a specification and guidance for the production of IWSs. British Energy and MoD nuclear-licensed sites are also producing IWSs, at the prompting of HSE and the environment agencies. It is understood that non-licensed MoD nuclear sites will follow suit. The aim in producing an IWS is to identify the 'optimum' option for each type of radioactive and non-radioactive waste (solid, liquid and gaseous), taking into account all the other wastes. A range of factors has to be considered in the identification of the optimum, as do the views of various stakeholders. The current (second) issue of the IWS guidance mentions the SD:SPUR guidance, C&EWG CoP and WRAP. The next iterations of the NDA sites' IWSs are due in March 2007 (except that for Sellafield) and it is intended that the overview documents will be published.

### *Way Forward*

It was agreed that two SD:SPUR papers are probably needed: one that describes the various initiatives in some detail, and one that shows the framework for managing decommissioning wastes and how the initiatives are and can be used within it. The second paper could also be used by SD:SPUR in planning future work, including the production of new guidance.

Marion Hill  
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Table 1 Activities in the Development of Strategies, Plans and Procedures for the Management of Decommissioning Wastes

<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 to Acronyms

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