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## **TOPIC PAPER 3**

### **Proposed Sites for Low Level Radioactive Wastes**



#### **CUMBRIA MINERALS AND WASTE DEVELOPMENT FRAMEWORK**

#### **REPEATED SITE ALLOCATIONS POLICIES AND PROPOSALS MAP**

***This Topic Paper is in response to Issue 3 of the  
Inspector's Issues and Questions (ED 81)***

### **HEARING SESSION 2**

**TUESDAY 24 APRIL  
(13.30 to 17.00)**

**Committee Room 1  
County Offices, Kendal**



## **Policy 6: Proposed Sites for Low Level Radioactive Wastes**

***Whether the identified sites are justified, effective and consistent with national policy and the Core Strategy.***

### **QUESTIONS**

- 3.1 As a result of the debate during the previous examination (see RSAP10, paragraphs 69 to 90), the County Council proposed that to ensure that the DPD was consistent with the adopted Core Strategy and thus sound, it should not include provision for the management of high volume very low level radioactive waste (HV-VLLW). Have circumstances changed to require a different approach now in order for this DPD to be sound?**
1. In the earlier submitted version of these policies, the County Council had sought to include a policy for VLLW. However, it became clear during the Examination in 2010 that this would be regarded as inconsistent with Core Strategy paragraph 8.28 and, therefore, unsound (CSD14). Accordingly, the County Council accepted that the policy identifying provision for these wastes should not be included.
  2. Whilst there are still current proposals for disposing of HV-VLLW within the county, the County Council is not aware of any change in circumstances that would enable the identification of sites for such wastes to be consistent with the Core Strategy. One change that has happened, is that the Environment Agency has recently recategorised some of the wastes which used to fall within this description. This is described in the paragraphs below. The changes do not have implications relating to the consistency of the Site Allocations Policies with the Core Strategy.
- 3.2 Similarly, has there been any change in the recorded circumstances at Lillyhall to support the contention of Waste Recycling Group and Energy Solutions that without their proposed change (inclusion in the DPD of Lillyhall landfill for the management of HV-LLW) the DPD would be unsound?**
3. There have been four main, interrelated, changes in circumstances at Lillyhall:-
    - Environmental Permitting;
    - Recategorising of waste streams;
    - More detailed inventory of Low Activity Low Level Waste (LALLW);
    - “Out of scope” and “exempt” wastes.
  4. In the County Council’s opinion, none of these changes support the contention that the Site Allocations Policies would be unsound if they do not make provision for the management of High Volume Very Low Level Waste.
  5. The first change is that in April 2011, the Environment Agency granted an Environmental Permit (LD197) for the landfill to receive up to 582,000 m<sup>3</sup> of Very Low Level Radioactive Waste. This would be at a permitted rate of up to 26,000 m<sup>3</sup>/year subject to it being part of a total of 67,000 m<sup>3</sup>/year of all wastes (i.e. approx 40%). That implies around 1.3 million m<sup>3</sup> of total waste inputs over the

- additional 20 year life to 2031 anticipated in the Permit, but which does not have planning permission.
6. The second main change is that, in connection with the Environmental Permitting Regulations, the Environment Agency has recently reassessed risks associated with specific nuclides and has recategorised some wastes. This has meant that substantial volumes of what were previously (V)LLW are not now regarded as radioactive wastes of any type. These are now referred to as “out of scope” wastes.
  7. The activity limit thresholds have also been changed for wastes with slightly higher activity levels, and which are still described as radioactive, but which are “exempt” from the radioactive waste provisions of the Environmental Permitting Regulations.
  8. The third main change is that LLWR Ltd has undertaken a more detailed assessment of the inventory for wastes which have activity levels below 200 becquerels/gram. These are wastes which would not require the highly engineered facilities that are provided at the Low Level Waste Repository near Drigg.
  9. In its presentation to the NuLeAF annual seminar, on 9 March 2012, LLWR Ltd included its estimates that there will be around 15 to 20,000 m<sup>3</sup>/year of Low Activity Low Level Wastes (LALLW) arisings from nuclear decommissioning over the next 15 years or so. Such lower activity level wastes are those which may be able to go to conventional landfills with appropriate Environmental Permits. LLWR Ltd also demonstrated that there is currently considerable over-capacity for disposing of these wastes.
  10. Wastes above the 200Bq/g activity threshold for LALLW are the ones that LLWR Ltd would accept for storage in Vault 9 at the Repository. It is proposing around 1 million m<sup>3</sup> of disposal capacity for them at the Repository in a current planning application that is being considered by the County Council.
  11. The fourth main change relates to the type of Environmental Permit that may be required for the lower activity level wastes. Although more detailed assessment of the radioactive waste inventory is needed before a definite conclusion can be reached, it seems that around 50% of what were HV-VLLW wastes may now fall within the “out of scope” category. The example of which the County Council has direct experience, is that the volume of HV-LLW that the Chapelcross power station site in Scotland was proposing to send to Lillyhall has been reduced by 75% as a result of the recategorisation of out of scope and exempt wastes.
  12. Such wastes do not have to go to a disposal facility, such as Lillyhall or Kingscliffe in Northamptonshire, that has an Environmental Permit under the radioactive substances part of the Environmental Permitting Regulations. Subject to planning and other regulatory controls, they could be able to be disposed of at the nearest appropriate conventional landfills to where they arise. An additional CMWDF Site Allocations Policy is not necessary for such wastes.
  13. Planning application proposals for disposing of them in Cumbria would be considered under Core Strategy Policy 8: Provision for waste. With regard to the wording of that policy, and to wastes arising within Cumbria, it is highly relevant that Sellafield’s decommissioning is not programmed before 2030. That is beyond, not only the MWDF plan period, but also the period anticipated in the Environmental Permit for Lillyhall. Potential decommissioning wastes for disposal within the plan period would, therefore, be from outside the county. The

only current proposal, of which the County Council is aware, is to send decommissioning wastes 80km or so to Lillyhall from the Chapelcross power station site in Scotland.

14. The Environmental Permit application for that consigning site is still being considered by the Scottish Environmental Protection Agency (SEPA). The County Council has made representations against that application, which is inconsistent with its policies, including Core Strategy Policy 1, with regard to waste miles, and Policy 8, with regard to wastes from outside the county.
15. A less significant change is in connection with the capacity of the Lillyhall landfill. The 1995 planning permission gave Phase 3 of the landfill a life for around a further 8 years, requiring that it is restored by 2014. At that time, the capacity was estimated by the applicant to be just under 1 million cubic metres.
16. Waste Recycling Group (WRG), the owners of the site since 2005, requested a Screening Opinion from the County Council for a proposal to extend this to 2024. In connection with this request, WRG provided an estimate that the remaining capacity in the approved non-inert part of the landfill was just under 1.4 million m<sup>3</sup> (May 2011).
17. The inaccuracy in the planning application had already been noted and Core Strategy policy had been based on an estimate of around 1.5 million m<sup>3</sup>, which is not significantly different from the current estimate. WRG have stated that recent inputs to this landfill have comprised commercial, industrial and asbestos wastes at around 33,000 m<sup>3</sup>/year.
18. It should be made clear that the Core Strategy estimate of need for additional landfill capacity did not include any provision for landfilling of nuclear decommissioning wastes. This is because significant decommissioning within Cumbria is not programmed within the plan period and because of the uncertainties about the wastes.

**3.3 The deliverability of the two identified sites (CO35 and CO36) was debated during the previous examination and the conclusions set out in RSAP10, paragraphs 83 to 93. Has there been any change in circumstances to indicate that the submitted DPD would be unsound if the two sites were to remain identified in the policy?**

19. The changes of which the County Council is aware are that:-
  - LLWR Ltd has submitted a planning application which includes the proposed provision of around 1 million cubic metres of disposal capacity for LLW, at CO35, the Low Level Waste Repository, and
  - the NDA has stated that assessments will be undertaken of the potential of the nuclear sites, where decommissioning wastes will arise, to provide on-site waste management facilities.

On-site disposal is one of the options that is identified in the LLW Strategy (LD191) and these assessments are welcomed by the County Council, which has been requesting them for some time. The assessment of the Sellafield complex is programmed to commence in early 2013.

20. Neither of these changes indicate that the Site Allocations Policies would be unsound if these two sites remain identified in Policy 6. In the opinion of the County Council, they strengthen the case for their inclusion in policy.

21. With regard to the LLWR planning application (ref 4/11/9007), the proposals would be for the type of LLW that requires highly engineered containment facilities. In November 2011, the County Council formally requested further information in accordance with Regulation 22 of the Environmental Impact Assessment Regulations. The applicant is currently preparing that information.
22. It is most unlikely that the planning application will be able to be reported to the County Council's committee for a decision before September 2012. This has always been understood. It is because the Environment Agency will not be able to provide a consultation response to long-outstanding questions by the County Council about the site until it has completed its technical assessment of the Environmental Safety Case (ESC). The ESC, previously referred to as the post-closure safety case, was submitted to the Agency in parallel with the submission of the planning application to the County Council; it is required in connection with Environmental Permitting.
23. The applicant anticipates that the planning application proposals would provide capacity until 2079, whilst the ESC submission also identifies a larger scheme with a potential operational life to 2130.