

ED56

Correspondence from NDA and LLWR Ltd.

From: Kozich, Hannah L (LLWR) [mailto:Hannah.L.Kozich@llwrsite.com]
Sent: 23 December 2016 12:33
To: Loudon, David; Brett, Sue A
Subject: RE: [OFFICIAL] Cumbria MWLP - proposed radwaste modification

Hi

Having read David's comments, I think that they address anything I might have looked to amend.

Have a good holiday both of you.

Regards

Hannah

From: Loudon, David [mailto:david.loudon@nda.gov.uk]
Sent: 22 December 2016 15:16
To: Brett, Sue A; Kozich, Hannah L (LLWR)
Subject: RE: [OFFICIAL] Cumbria MWLP - proposed radwaste modification

Sue

I've had a quick read through and provided some comments/suggestions.

I'm in the office tomorrow morning and back in from the 3rd January if you need anything else.

Have a good Christmas,

David

From: Brett, Sue A [mailto:Sue.Brett@cumbria.gov.uk]
Sent: 22 December 2016 12:22
To: Hannah.L.Kozich@llwrsite.com; Loudon, David
Subject: Cumbria MWLP - proposed radwaste modification

Hi Hannah and David

Sorry it's taken so long to get back to you with text on the scale and capacity for radioactive wastes.

I attach some draft text. I couldn't keep it to one paragraph, it turned into seven I'm afraid, so I would be very grateful if you could read through it (perhaps condense it) and get back to me with your comments.

If possible, I'd like your views by 6 January, as I have to submit modifications to the Inspector from the 9 January. However, there is some wriggle room, as she's working on her report for 2 weeks.

Thanks in anticipation. Hope you both have a great Christmas break.

Best regards, Sue

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Main modification draft text, to be inserted following paragraph 4.18

Comment [DL1]: It's difficult to see how this would look in the context of the whole of section 4 as this would result in repetition of some of the information below elsewhere in paras 4.11 – 4.46

Unlike conventional wastes (discussed in chapter 3), the County Council cannot aim for net sufficiency in the management of radioactive wastes, other than for HLW; this arises only at Sellafield, from the reprocessing of foreign and domestic spent fuel, and is repatriated or safely stored on site, awaiting a disposal route circa 2089. Assuming all HLW from overseas spent fuel has been exported, a total of around 7,500 HLW containers are expected to be stored in an engineered facility on the Sellafield site; storage capacity in this Vitrified Product Store is 7,960 containers.

The majority ~~Almost all~~ of the ILW safely stored at Sellafield is generated internally, with additional, smaller volumes of wastes from Harwell and Winfrith. ~~The main exception is ILW from Harwell, in the form of plutonium contaminated material (PCM), of which approximately 500m³ has already been delivered to Sellafield, with a further 300m³ planned over the next 3 or 4 years. Sellafield will also receive approximately 2,300 concrete-lined drums from Harwell and around 250 drums of Dragon fuel from the former research reactor at Winfrith, over the next few years.~~ Over the Plan period, it is anticipated that ~~this will together, the Sellafield, Harwell and Winfrith ILW will~~ amount to ~~approximately around~~ 17,000m³. There may also be a small quantity of waste generated (a few hundred m³) during the decommissioning of storage vaults at LLWR. In addition, the Atomic Weapons Establishment (AWE) is engaging with NDA regarding the processing at Sellafield of approximately 1,000m³ of PCM generated at Aldermaston. There are a range of engineered ILW stores at Sellafield, designed specifically for the different waste types (e.g. PCM, beta gamma) and packaging (e.g. drums, concrete boxes); both the current and future planned stores have adequate capacity for ILW management until a disposal route is available circa 2089.

Comment [DL2]: Does the plan need this level of detail?

Sellafield currently has the capacity to manage all of its LLW arisings, which are forecast to be around 80,000m³. On site capabilities include handling, segregation and measurement; metals recycling; and a supercompaction plant. Off-site capabilities include metals recycling (both within and outside the county), incineration (outside the county) and disposal to the LLWR. ~~Additional LLW will have been generated by nuclear sites across the UK, including the Magnox sites, MOD sites and smaller waste producers.~~

Comment [DL3]: Not sure that this sentence adds anything here as the para is talking about SL LLW management

The Repository has planning permission for disposal of LLW until 2055, in the current vaults (8, 9) as well as future vaults (9a, 10, 11); excluding the waste already emplaced in vaults 8 and 9, this provides an overall capacity of around 263,000m³. Imports of LLW into the county over the Plan period are estimated to be around 134,629m³; exports are estimated to be approximately 37,800 m³. This figure is based on extrapolation of current volumes of wastes transferred from Sellafield to alternative routes such as incineration, metal decontamination/melting and VLLW disposal. Therefore, there is sufficient capacity at the Repository over the Plan period.

Comment [DL4]: Very accurate estimate!

Sellafield Ltd anticipate generation of some 96,000 ~~344~~ m³ of VLLW over the Plan period; over two thirds of this volume (61,000 ~~866~~ m³) is planned to be disposed of to its on-site landfill facility, Calder Landfill Extension Segregated Area (CLESA). The remaining 35,000 ~~478~~ m³ is expected to be consigned as VLLW for disposal at an authorised landfill, which is likely to be outside of the county. The CLESA facility at Sellafield, which can only accept the site's own VLLW, has a total capacity of 120,000 m³ and a remaining capacity of 63,000 m³. It is estimated that the CLESA will be full by 2025, but it is planned that a successor will be developed.

Comment [DL5]: Suggest not having such specific figures in the plan (see DL2 above)

Large volumes of VLLW arise annually at nuclear sites, which are generally sent for disposal to permitted landfill, if suitable, at the earliest opportunity after they are generated. For example, in 2015/16 6092m³ VLLW from waste producers across the UK was disposed to suitably permitted landfill sites and, additionally, 3736m³ was disposed by Sellafield to the CLESA. There is one permitted commercial landfill site in the county that is able to accept VLLW – the FCC Environment site at Lillyhall. The planning permission allows disposal at the site until 2029, with a limit of 26,000m³ annually; to date, no VLLW has been disposed of to Lillyhall. It is difficult to forecast the volume of VLLW that might be imported into the county during the Plan period, since VLLW would

only be imported if it was to be disposed of to the Lillyhall facility. It is considered that there is sufficient capacity to manage or dispose of VLLW in the county over the Plan period.

Paragraph 17.7 considers the implementation and monitoring framework for the Local Plan, and expects that one of the main documents to be used to provide evidence on the Plan's performance will be the UK Radioactive Waste Inventory, which is updated every 3 years. The annual Authority Monitoring Report will also provide an opportunity to monitor radioactive waste facilities capacity and progress. The framework will include triggers concerning radioactive waste, which would indicate when a full or partial review of the Plan is required.