

Low Level Waste Repository

Our review of the Environmental Safety Case

September 2014

Foreword

This is the fifth in a series of progress reports on the Environment Agency's review of the Low Level Waste Repository's Environmental Safety Case (ESC), leading up to our review of the site's Environmental Permit and a decision on granting a revised Environmental Permit for on-going disposals at the site.



Radioactive waste disposal containers in Vault 8 at LLWR, courtesy of LLW Repository Ltd

Introduction

Low Level Waste (LLW) is generated by the nuclear industry and also by non-nuclear sources such as hospitals. LLW is typically made up of contaminated operational and decommissioning wastes such as protective clothing, paper, metals, rubble and soil. The Low Level Waste Repository near Drigg (LLWR) is used for the disposal, by burial, of radioactive waste. It is currently the only facility in the UK designed to take nearly all types of LLW.

Environmental Safety Case review

LLW Repository Ltd, the operator of the site, is not permitted to dispose of any further radioactive waste until a decision has been made on whether to vary the existing Environmental Permit. The Environment Agency will only authorise further disposals of radioactive waste if we are satisfied that it will be safe for people and the environment, both now and in the longer term. LLW Repository Ltd has aimed to demonstrate this within an

updated ESC, submitted to us in May 2011 as required by the current Environmental Permit.

We have completed a detailed technical review of the ESC since it was submitted in May 2011. Where necessary we sought additional information from LLW Repository Ltd through 'Issue Resolution Forms' (IRFs). We raised 72 IRFs in total, ranging from simple points of clarification to more detailed requirements for further assessment, all of which have now been adequately responded to. We are now satisfied that the ESC and the responses to IRFs provide all the information we require. Our review of the ESC has concluded that it meets the requirements of our regulatory guidance (the GRA¹) and that it provides adequate technical evidence to support a decision on the Environmental Permit variation application, subject to further consultation comments and information.

We are now in the process of concluding and documenting our findings, which we will publish before we consult on any draft Environmental Permit decision.

Environmental Permit variation

In October 2013 we informed LLW Repository Ltd that they had provided sufficient information for us to complete our review of the ESC. As a result they submitted an application to vary their Environmental Permit to allow continued disposal of radioactive waste at the site. In summary the application sought:

- to allow further disposals of radioactive waste at the site where it meets the Waste Acceptance Criteria defined by the ESC and in accordance with the ESC;
- to remove annual radiological limits on disposals, but to limit disposals against a lifetime radiological capacity for the site; and

¹ Near Surface Disposal Facilities on Land for Solid Radioactive Wastes. Guidance on Requirements for Authorisation. February 2009. Northern Ireland Environment Agency, Scottish Environment Protection Agency, Environment Agency.

- to remove a number of other specific restrictions in the current Environmental Permit, including a blanket restriction on the disposal of complexing or chelating agents².

Further details on the application are available at <http://llwrsite.com> along with supporting documentation including the ESC, responses to IRFs and a 'developments report' which summarises developments in understanding since May 2011.

We ran a consultation on this application between 20 November 2013 and 19 February 2014. We received 29 responses.

Since October 2013 we have also reviewed the information supporting the application. This led us to identify two areas we required further information. The first related to the methods used to assess the impacts of disposals via the groundwater pathway. The second related to the assessment of impacts upon the adjacent Drigg Coast Special Area of Conservation (SAC) and Site of Special Scientific Interest. We have since received additional information on these and concluded that our questions have been adequately addressed.

Due to the significance of the application and the potential for further disposals at the repository to impact upon the adjacent Drigg Coast SAC we have also undertaken an 'Appropriate Assessment' as required by the Conservation of Habitats and Species Regulations and also the Countryside and Rights of Way Act and other conservation duties we hold. Our assessments have determined that future operations at the site, as currently applied for, would not adversely impact the integrity of the SAC. We are consulting with Natural England on our assessment.

A draft decision on the permitting of the LLWR for further disposals will take account of all the information and consultation responses referred to above, along with any other evidence available to us. We will consult on a draft Decision Document and draft Environmental Permit, around the end of 2014. Following this consultation we will reach a decision and prepare a Decision Document and varied Environmental Permit. We will issue these once other requirements have been met, such as

² Complexing and chelating agents are chemicals which may enhance the solubility and hence mobility of radionuclides in the environment. Such agents are often used as decontamination agents.

an Article 37 opinion having been received (see below). We anticipate reaching a final decision early in 2015³.

Planning permission

For future waste disposals and capping of the vaults and the trenches, LLW Repository Ltd would need both an Environmental Permit from the Environment Agency and planning permission from Cumbria County Council. We have been consulted by Cumbria County Council upon an application by LLW Repository Ltd for the construction, operation and closure of new disposal vaults out to Vault 14. We initially raised a number of objections to the proposals on the grounds of lack of information in the application. LLW Repository has since provided further information and we have now removed all of our objections.

We have worked closely with Cumbria County Council to keep them informed of our permitting progress and to coordinate assessments of any potential adverse impacts on nature conservation interests that we are each required to undertake as competent authorities. We understand Cumbria County Council is working towards reaching a planning decision in the autumn of 2014.

Article 37 of the Euratom Treaty

Due to the scope of the changes LLW Repository Ltd propose to the Environmental Permit for the LLWR, UK Government must seek a positive opinion from the European Commission (EC) with regards to an Article 37 submission under the Euratom Treaty. The submission must demonstrate negligible impacts on other European member states. LLW Repository Ltd is currently working with the Department of Energy and Climate Change (DECC) to prepare a submission. We cannot issue a varied Environmental Permit to the operator until a positive opinion from the EC has been received.

Communications & engagement

We have been open and transparent throughout this review and permitting process and we will continue to keep you informed of our roles and responsibilities. LLW Repository Ltd has a responsibility to communicate effectively with community members, groups and professional

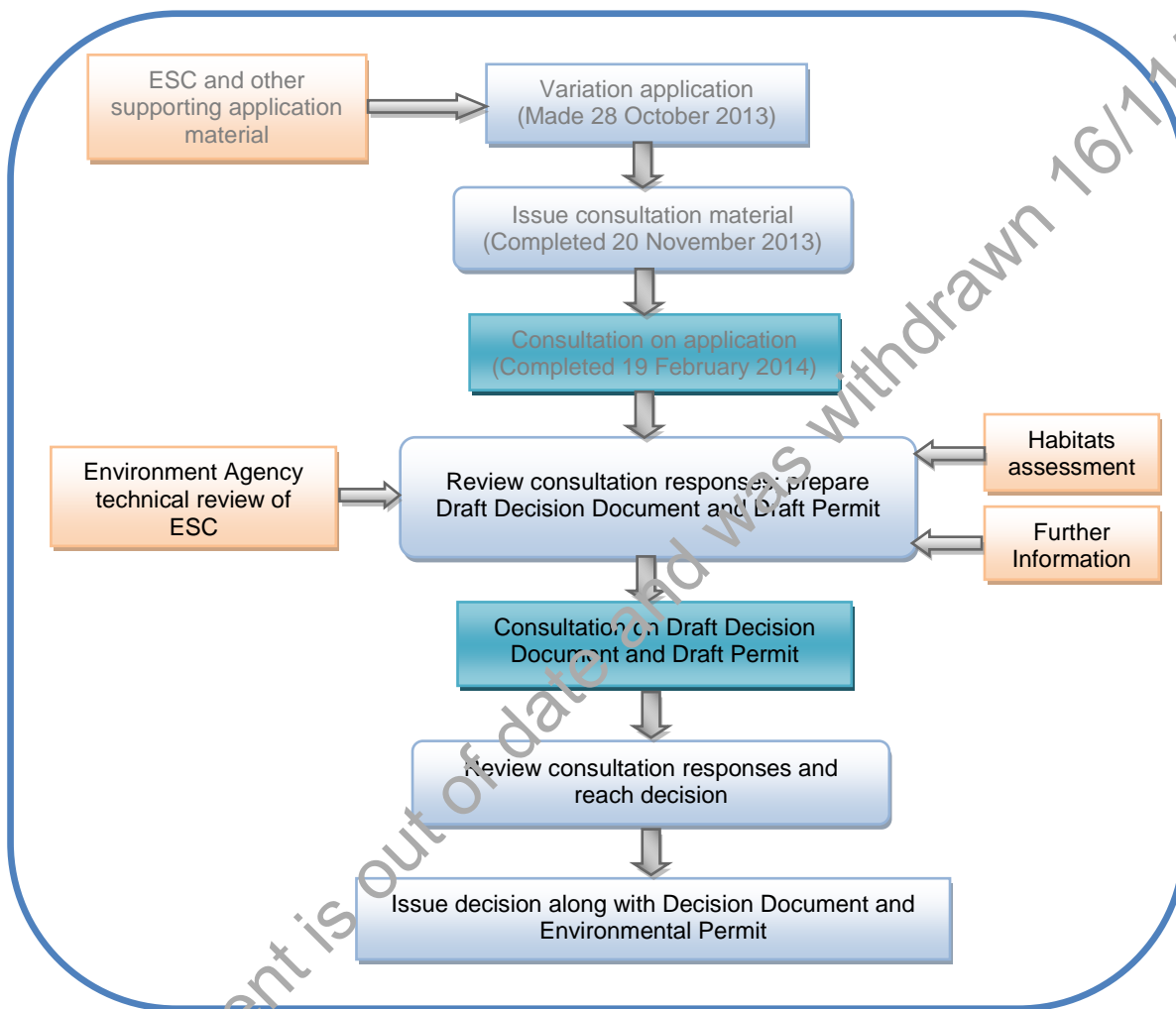
³ Final timescales are dependent upon a number of factors such as the scope and scale of consultation responses and receipt of a positive opinion on an Article 37 submission.

partners throughout their application process and we continue to assist them in doing so.

During the first consultation on the application, which started in November 2013, we held two events to help facilitate input by consultees. A seminar involving a wide range of invited local and national stakeholders, where information was provided and important issues were discussed, and a community 'drop-in' session at Drigg village hall to enable local stakeholders to seek

information and ask questions. We have also continued to attend the LLWR sub-group of the West Cumbria Site Stakeholder Group and have met with other groups when requested, such as the DECC NGO Forum and Drigg and Carleton Parish Council.

We welcome questions or input to our review process. If any individuals or groups would like to find out more about our review, we would welcome any requests for meetings or information.



Environmental Permit variation consultation process

Opportunities to comment

When we consult upon our draft Decision Document and draft Environmental Permit we will communicate details of how to respond to our consultation. During this consultation we anticipate holding a further community drop-in session within the Drigg area.

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