



**BRIEF TO WEST CUMBRIA SITES STAKEHOLDER GROUP,
ENVIRONMENTAL SUB-GROUP**

[NOVEMBER 2010 TO MAY 2011]

This brief provides a summary of the outcome of our regulatory activities associated with the environmental monitoring programme during November 2010 to May 2011.

Our nuclear regulators attend meetings of the WCSSG and most of its sub-committees. We are happy to respond to questions raised there, or you can contact us at our Penrith office:

Team Leader (Sellafield), Nuclear Regulation Group (North), Environment Agency, Ghyll Mount, Gillan Way, Penrith, Cumbria, CA11 9BP. Email: nrg.north@environment-agency.gov.uk. Tel: 01768 215705.

We are always looking to improve our reporting and would be happy to hear your views on the format and content of this report.

1 Introduction

This brief provides a summary of the outcome of our regulatory activities associated with the environmental monitoring programme at Sellafield, Windscale, and Calder Hall during November 2010 to May 2011. It should be read in conjunction with our most recent reports to West Cumbria Site Stakeholder Group main committee.

2 Our Regulatory Approach

We aim to do all that we can to facilitate prompt decommissioning and site restoration at Sellafield and in particular to support hazard and risk reduction associated with the major legacy facilities at Sellafield.

In support of this, we ensure that proportionate monitoring is carried out by the operator in accordance with Best Available Techniques (BAT) to demonstrate that the risks to the environment remain at acceptable levels i.e. they are As Low As Reasonably Achievable (ALARA). We also carry out our own independent monitoring programme on non foodstuffs, in conjunction with Food Standards Agency (FSA), who carry out independent monitoring on food stuffs. These independent monitoring programmes combined, provides an additional level of reassurance over and above the operator's monitoring, to demonstrate that levels of radioactivity in the environment are as expected and do not provide an unacceptable level of risk to the public and other receptors.

3 Environmental Monitoring Programme – Inspection

The Environment Agency (EA), supported by the Office of Nuclear Regulation (ONR) carried out a team inspection of Sellafield's environmental monitoring programme in February 2009. The scope of the inspection covered the analytical arrangements of the operator and its contractor, sampling and monitoring, management arrangements and a review of data management integrity and records.

The principal objective of the inspection was to assess Sellafield Ltd's (SL) compliance with the conditions and limitations stipulated in its Environmental Permit.

We concluded that on the whole, SL is carrying out the environmental monitoring programme in accordance with the requirements of its Environmental Permit. However a number of recommendations were identified and an issue related to how SL manages changes to the environmental programme, and its organisational structure and resources raised. SL responded to our inspection in June 2010.

We recently carried out a follow up inspection in March 2011 to review how SL had addressed our recommendations. The objective of this follow up inspection was to sample the evidence base provided in SL's response to gain assurance of the position presented. This comprised a 1 day site visit, where we sampled the status of several environmental monitoring assets and proved a number of elements in the management system. The outcome of this inspection supported and assured the statements made in SL's response.

With respect to SL's response, we acknowledge and conclude that the response is satisfactory. However, we note there are several issues that will and are being reviewed as part of the BAT assessment of the environmental monitoring programme. This is being carried out in FY11\12.

4 Lillyhall, Cumbria Low Level Waste Bag Incident Status

Our joint investigation, with the Department for Transport (DfT), into the mis-consignment of low level radioactive waste to the Lillyhall landfill site continues. We continue to liaise with the ONR on progress.

5 Lillyhall, Cumbria – environmental permit for High Volume Very Low Level Waste disposal

On 6 April 11, we issued an environmental permit to Waste Recycling Limited for its Lillyhall landfill in Cumbria for disposal of High Volume Very Low Level Waste (HV VLLW). This is the first permit issued to a landfill operator since the 2007 Government policy on LLW management. Cumbria County Council, Allerdale and Copeland Borough Councils have raised concerns and have written to Ministers about us granting the permit.

6 Fukushima – incident management

The EA, Scottish Environmental Protection Agency (SEPA), the Northern Ireland Environment Agency (NIEA) and the Health Protection Agency (HPA) are cooperating in monitoring the UK environment for radioactivity. Only minute traces of radionuclides in air and in rainwater have been found, at levels which pose no risk to health or to the environment. Our monitoring data are made available on HPA's web site. We are also working with the DfT and United Kingdom Border Agency (UKBA) to monitor and ensure proper regulation of shipments into the UK from Japan by air and sea. The EA and SEPA have agreed a UK-wide Enforcement Position for radioactive wastes which may arise from decontamination of materials.

Further information can be found at <http://www.environment-agency.gov.uk/homeandleisure/128925.aspx>

7 University of Cumbria - Radiation Protection degree course.

We are working with the University of Cumbria in developing the "environmental / radioactive waste" aspects of the first Radiation Protection degree in the UK.

8 Article 35

Article 35 of the Euratom Treaty requires that each Member State shall establish facilities necessary to carry out continuous monitoring of the levels of radioactivity in air, water and soil and to ensure compliance with the basic safety standards.

An inspection was carried in August 2010, where a European Commission verification team assessed the monitoring arrangements for a selection of on site facilities, environmental monitoring programme elements and arrangements for on site laboratory analysis. This is currently being reported on. A follow up visit is scheduled to take place in August 2011 to inspect the off site monitoring arrangements for both the operator and regulators. The scope of this visit is currently being finalised.

9 Beach Monitoring

We have provided a response, following a recent Freedom of Information (FOI) request by Cumbria Opposed to Radioactivity in the Environment (CORE) regarding the dose monitoring of operatives involved in the implementation of the beach monitoring programme.

We recently issued a briefing note providing an update on beach monitoring which can be found at <http://www.environment-agency.gov.uk/homeandleisure/110563.aspx>.

In November 2010 we held a multi-agency meeting, to gather the views of a number of partner agencies and organisations (including HPA, the FSA, local authorities, and the independent expert Committee on Medical Aspects of Radiation in the Environment). Their views are being taken into account in agreeing the forward work programme, which will:

- continue to focus on beach monitoring, and to consider how it can be improved even further – including carrying out monitoring of the seabed, and carrying out focused assessments to better understand how particle populations are changing with time;
- continue to investigate potential sources of the finds;
- ensure that best techniques are used to control existing site operations so that releases of particles are prevented or minimised;
- undertake detailed laboratory analysis aimed at, where possible, further improving understanding of the source, nature, hazard, composition and radioactive content of the finds;
- update the recently published HPA risk assessment taking into account more recent beach monitoring data.

For 2011/12, SL has proposed a reduction in beach area to be monitored, from 250 Ha to 150 Ha, reflecting the low risks that the HPA report has indicated. We are currently considering whether this reduced programme will be sufficient to meet the objectives of the beach monitoring work, and also whether this change could free up some resources which might be better targeted on developing techniques to monitor the seabed.

The EA will continue to focus on inspecting and auditing SL's arrangements for ensuring that potential releases of particles are adequately prevented or minimised,

and we will provide oversight to ensure that the wider work programme is delivered effectively by SL

We will also maintain our role in co-ordinating independent assessment of the risks that particles present to the public and the environment, and in providing the public and relevant partner organisations (such as local councils) with information and advice. Our work in this area continues to be supported by contributions from a number of partner organisations, including the HPA, and the FSA.

We will continue to work closely with these and other relevant interested parties and agencies as appropriate, and will keep the implications of all types of environmental monitoring results under review.