



EUROPEAN COMMISSION  
DIRECTORATE-GENERAL FOR ENERGY  
DIRECTORATE D - Nuclear Energy  
**Radiation Protection**

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**Main Conclusions of the Commission's Article 35 verification at:**

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**SELLAFIELD NUCLEAR REPROCESSING PLANT**

**LILLYHALL VERY LOW LEVEL  
RADIOACTIVE WASTE REPOSITORY**

**CUMBRIA  
UNITED KINGDOM**

Dates: 23-25 August 2011

Verification team: Mr. F. MacLean (team leader)  
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## INTRODUCTION

Article 35 of the Euratom Treaty requires that each Member State shall establish the 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<sup>(1)</sup>. Article 35 also gives the European Commission (EC) the right of access to such facilities in order that it may verify their operation and efficiency. The Radiation Protection Unit (ENER D.4) of the EC's Directorate-General for Energy (DG ENER) is responsible for undertaking these verifications.

The main purpose of verifications performed under Article 35 of the EURATOM Treaty is to provide an independent assessment of the adequacy of monitoring facilities for:

- Liquid and airborne discharges of radioactivity into the environment by a site (and control thereof).
- Levels of environmental radioactivity at the site perimeter and in the marine, terrestrial and aquatic environment around the site, for all relevant pathways.
- Levels of environmental radioactivity on the territory of the Member State.

Taking into account previous bilateral protocols, a Commission Communication was published in the Official Journal on 4 July 2006 describing practical arrangements for the conduct of Article 35 verification visits in Member States.

For the purpose of such reviews, on several occasions verification teams from the EC have visited the Sellafield site, which is located on the coast of Cumbria in northern England, UK. At the time of the present verification, ownership of the site had been transferred to the Nuclear Decommissioning Authority (NDA), which had contracted out site operation to Sellafield Ltd, a nuclear decommissioning Site License Company (SLC). Thus Sellafield Ltd is the site licence holder.

The verification visit focussed upon Sellafield Ltd's programme for monitoring of levels of environmental radioactivity in the marine, terrestrial and aquatic environment around the site as well upon the independent environmental monitoring programme implemented by the Environment Agency and the Food Standards Agency. Within the UK, the EA's remit is limited to England & Wales. The Northern Ireland Environment Agency (NIEA) and the Scottish Environment Protection Agency (SEPA) also independently monitor environmental radioactivity arising from Sellafield discharges, however time did not permit the inclusion of these programmes in the verification's scope.

**It should be noted that, in relation to the Sellafield site, only the off site environmental monitoring programme was covered by this verification. For information about the on-site programme and in particular airborne and aqueous discharge monitoring, please consult the report on the 2010 Article 35 verification of Sellafield, reference UK10/05.**

Additionally the verification team visited the Lillyhall Landfill Site, an existing landfill site operated by Waste Recycling Ltd (WRL), which was formerly only Permitted to dispose of inert, non-hazardous and household wastes and asbestos/asbestos contaminated waste in a dedicated cell. On the 6th of April 2011 a Permit was issued to dispose of High Volume Very Low Level Waste (HV-VLLW), although at the time of the visit receipts had not yet commenced.

During the verification activities the EC team was accompanied by or met with representatives of Sellafield Ltd, the Nuclear Decommissioning Authority, the Environment Agency, the Food Standards Authority, Cefas, the Health Protection Agency, Waste Recycling Group and Energy Solutions.

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<sup>1</sup> Council Directive 96/29/Euratom of 13 May 1996 laying down basic safety standards for the protection of the health of workers and the general public against the dangers arising from ionizing radiation (OJ L-159 of 29/06/1996)

The team also visited the Babcock Environmental laboratory which performs the analysis of environmental samples on behalf of Sellafield Ltd.

An opening meeting and a closing meeting were held, with all parties involved during the visit.

The present document gives an overview of the main conclusions by the verification team and corresponding recommendations. More detailed information concerning the verification is available in the technical report of the verification.

## **MAIN CONCLUSIONS**

All verification activities that had been planned were completed successfully. In this regard, the information supplied in advance of the visit, as well as the additional documentation received during and after the verification activities, was useful.

The information provided and the verification findings led to the following conclusions:

- (1) The verification showed that – for the facilities visited – the recommendations laid down at the verification in 2004 have been taken up or good reasons for not implementing them have been given. Thus, the recommendations are no longer pertinent.
- (2) The verification activities that were performed demonstrated that the facilities necessary to carry out continuous monitoring of levels of radioactivity in the air, water and soil at the site of Sellafield are adequate. The Commission could verify the operation and efficacy of these facilities.
- (3) With regard to the Lillyhall very low level radioactive waste repository the planned environmental monitoring programme, as presented to the verification team, appears adequate.
- (4) The Commission Services ask the UK competent authority to inform them of any achievements since the time of the verification.
- (5) The verification team acknowledges the excellent co-operation it received from all persons involved in the activities it performed.

F. MacLean

Team Leader