



**EUROPEAN COMMISSION**  
DIRECTORATE-GENERAL FOR ENERGY

Directorate D - Nuclear Energy, Safety and ITER  
**D.3 – Radiation protection and nuclear safety**

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## **Verification under the terms of Article 35 of the Euratom Treaty**

### **Main Conclusions**

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## **FRANCE**

### **La Hague nuclear site**

#### **Environmental radioactivity monitoring arrangements** **Emergency radioactivity monitoring arrangements**

<b>Dates</b>	29-31 May 2018
<b>Verification team</b>	Mr Vesa Tanner, DG ENER Mr Raf van Ammel, DG JRC

**Reference** FR 18-01

## INTRODUCTION

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<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 and nuclear safety unit (ENER D.3) 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;
- 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.

For the purpose of such a review, a verification team from DG ENER visited France on 29-31 May 2018. This mission dealt with

- Facilities for routine monitoring of environmental radioactivity at the La Hague nuclear fuel reprocessing facility;
- Facilities for emergency monitoring of environmental radioactivity at the La Hague nuclear fuel reprocessing facility;
- Measuring laboratories, in particular infrastructure, analytical methods, quality assurance and control aspects, as well as reporting.

The present document gives an overview of the main conclusions by the verification team concerning relevant aspects of the environmental surveillance and corresponding suggestions. More detailed information concerning the verification is available in the technical report (TR) of the verification.

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<sup>1</sup> Council Directive 2013/59/Euratom of 5 December 2013 laying down basic safety standards for protection against the dangers arising from exposure to ionising radiation, and repealing Directives 89/618/Euratom, 90/641/Euratom, 96/29/Euratom, 97/43/Euratom and 2003/122/Euratom (OJ L 13 of 17.1.2014)

## MAIN CONCLUSIONS

All verifications that had been planned by the verification team were completed successfully. The information supplied by the French authorities in advance of the visit, as well as the additional documentation received during and after the verification was useful.

- (1) The verification activities that were performed demonstrated that the facilities necessary to carry out monitoring of levels of radioactivity in air, water and soil at the La Hague nuclear fuel reprocessing facility are adequate. The Commission could verify the operation and efficiency of a representative part of these facilities.
- (2) The verification activities that were performed demonstrated that the facilities necessary to carry out monitoring of levels of radioactivity in air, water and soil at the La Hague nuclear fuel reprocessing facility in the event of a radiological emergency are adequate. The Commission could verify the availability and efficiency of a representative part of these facilities.
- (3) One recommendation is formulated:
  - Concerning the **monitoring of environmental contamination outside the site** (section 10.2.9 of the TR), the verification team recommends that ORANO continue the surveillance of the contaminated area in line with the IRSN report IRSN/2017-00136, in particular as regards a possible transfer of radionuclides to agricultural products via surface and ground water. The team stresses the importance of maintaining full transparency towards the local community concerning the results of the surveillance and possible remediation measures.

One technical suggestion is formulated:

- Concerning the **ORANO medium activity laboratory** (section 10.2.2 of the TR), the verification team suggests, as a matter of good laboratory practise, that the laboratory would search for additional intercomparison opportunities.

Notwithstanding these remarks the verified parts of the environment monitoring facilities and the monitoring system for environmental radioactivity at the La Hague nuclear fuel reprocessing facility are in conformity with the provisions laid down under the Article 35 of the Euratom Treaty.

- (4) The detailed verification findings and ensuing remarks are compiled in the 'Technical Report' that is addressed to the French competent authority through the Permanent Representation of France to the European Union.
- (5) The Commission services request that the French authorities submit, at the latest before the end of 2020, a report on the implementation the recommendation concerning the section 10.2.9 of the TR and on any significant changes in the set-up of the monitoring systems. Based on this report the Commission will consider the need for a follow-up verification.
- (6) In addition, the Commission services request that the French authorities provide, as soon as available, a copy of the remediation plan concerning the environmental contamination area discussed in section 10.2.9 and subsequent reports of its implementation.
- (7) Finally, the verification team acknowledges the excellent co-operation it received from all persons involved in the activities it performed.

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