



EUROPEAN COMMISSION
DIRECTORATE-GENERAL FOR ENERGY

Directorate D - Nuclear energy, safety and ITER
D.3 – Radiation protection and nuclear safety

Verification under the terms of Article 35 of the Euratom Treaty

Main Conclusions

SPAIN

Palomares

Environmental radioactivity monitoring arrangements

Monitoring of radioactivity in foodstuffs

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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 standards¹.

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 Spain on 18-20 June 2019. This mission dealt with

- Facilities for routine monitoring of environmental radioactivity at the Plutonium contaminated areas in Palomares;
- 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.

¹ 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 Spanish 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 Plutonium contaminated areas in Palomares are adequate. The Commission could verify the operation and efficiency of a representative part of these facilities.
- (2) The verification team noted that at the time of the verification the plutonium measurement capability of the CIEMAT RERA laboratory in Madrid was temporarily not available due to technical and administrative reasons². However, the laboratory is able to measure ²⁴¹Am (²⁴¹Pu decay product) to compensate for this deficiency until acquisition of new equipment.

The verification team recommends that the Spanish Nuclear Safety Council should require recovery of the CIEMAT RERA laboratory plutonium measurement capability as soon as possible.

Notwithstanding this remark, the verified parts of the monitoring system for environmental radioactivity in Palomares are in conformity with the provisions laid down under Article 35 of the Euratom Treaty.

- (3) The verification team points out that the 2010 recommendation concerning the remediation of the Palomares contaminated areas has not been implemented.
- (4) The Commission kindly requests the Spanish authorities to submit, before the end of 2020, a progress report on how the team's recommendation has been implemented and on any significant changes in the set-up of the monitoring systems.

In addition, the Commission requests the Spanish authorities to inform about the progress on the final remediation plan of the Palomares contaminated areas before the end of 2021.

Based on these reports the Commission will consider the need for a follow-up verification in Spain.

- (5) Finally, the verification team acknowledges the excellent co-operation it received from all persons involved in the activities it performed.

V. Tanner

Team Leader

² For more details, please see section 7.3.2 of the technical report