



EUROPEAN COMMISSION  
DIRECTORATE-GENERAL 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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## **URANIUM SITES**

### **Environmental Radioactivity and Discharge Monitoring and part of National Monitoring System for Environmental Radioactivity**

## **Portugal**

**Date:** 10 to 15 April 2011

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## 1. INTRODUCTION

Article 35 of the Euratom Treaty requires that each Member State 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.

For the EC, the Directorate-General for Energy (DG ENER), and in particular its Radiation Protection Unit (ENER D4), 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 (if applicable), terrestrial and aquatic environment around the site, for all relevant pathways.
- Levels of environmental radioactivity on the territory of the Member State.

From 10 to 15 April 2011, two verification teams from DG ENER (former DG TREN) visited different uranium mining and milling sites around Urgeiriça (northern/central Portugal). The aim of the verification was to check the operation and efficiency of the facilities and associated analytical laboratories for continuous monitoring of the level of radioactivity in air, water and soil in the vicinity of these sites on the territory of Portugal. The verification scope also covered on-site facilities monitoring liquid and aerial discharges of radioactivity into the environment. Stations of the national network for ambient gamma dose rate monitoring in the area were visited as well.

During the verification activities the EC teams were accompanied by representatives of the relevant Portuguese authorities and other actors.

The visit included meetings with representatives of various national authorities having competence in the field of radiation protection. An opening meeting and a closing meeting were held, with all parties involved during the visit, in the premises of the Directorate-General for European Affairs (Ministry of Foreign Affairs).

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 at the technical report of the verification.

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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, page 1).

## 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 activities that were performed demonstrated that the facilities necessary to carry out continuous monitoring of levels of radioactivity in the air, water and soil around the remediated former uranium mining and processing sites at Urgeiriça, Valinhos, Espinho, Cunha Baixa, Quinta do Bispo, Freixiosa, Mondego Sul, Vale de Abrutiga, Senhora das Fontes, Vale de Arca, Carrasca and Bica as well as the verified parts of the national monitoring system for environmental radioactivity are adequate. The Commission could verify the operation and efficiency of these facilities.
- (2) A few topical suggestions and recommendations are formulated. These aim at improving some aspects of the remediation and the environmental surveillance of former uranium sites and do not discredit the fact that environmental monitoring around former uranium sites is in conformity with the provisions laid down under Article 35 of the Euratom Treaty if the measures are maintained in the long term and the recommendations implemented.
- (3) The verification team recommends for all remediated sites maintaining an appropriate radiological monitoring (e.g. with regard to radon emanation at the site and potential groundwater contamination). Such monitoring would have to be in place for long term surveillance; adequate administrative and financial support would be necessary.
- (4) The Commission services ask the Portuguese competent authority to inform them of any progress or significant changes with regard to the situation at the time of the verification.
- (5) The detailed verification findings and ensuing recommendations are compiled in the 'Technical Report' document that is also addressed to the Portuguese competent authorities through the Portuguese Permanent Representative to the European Union.
- (6) Finally, the verification team acknowledges the excellent co-operation it received from all persons involved in the activities it performed.

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Team Leader