

**VERIFICATION
UNDER THE TERMS OF ARTICLE 35
OF THE EURATOM TREATY**

UKAEA DOUNREAY

CAITHNESS, SCOTLAND (UK)

28 to 30 September 2004

**SCOTTISH EXECUTIVE
RESPONSE
TO THE VERIFICATION FINDINGS**

1. Introduction

The Scottish Executive acknowledges the thoroughness of the verification activities carried out by the Commission verification team. Not all of the Commission verification activities performed gave rise to specific recommendations. Those that did are dealt with below.

2. Response to findings and recommendations of the Commission

Finding 2.3

(With respect to establishing that quality assurance and control are implemented through a comprehensive compilation of written procedures and working instructions). The verification team, in the framework of general quality assurance and control, endorses the project of replacing the current spreadsheet-based reporting system by an integrated database that would reduce the number of data input operations.

The integrated database system has now been in operation and used to report the monthly Radioactive Substances Act returns since the September 2004 verification visit.

Reducing the number of data input operations has given increased confidence in the reporting system, and also allowed further cross-verification of those data.

Conclusion 3.7

It is recommended that the competent regulatory authority considers a statutory replacement of UKAEA's existing high volume air samplers with the 'new generation' devices when these have proven their reliability. At the same time it is suggested that when these new systems become standard equipment, they be duly fenced off so as to ensure their physical integrity.

All of UKAEA's statutory high-volume air samplers were replaced with the 'new-generation' devices, the last of which was installed on 14 July 2005. In order to ensure their physical integrity, they are isolated within large, robust security cabinets the dimensions of which are 2.1m high x 2m length x 1m width.

SEPA intends to introduce, as soon as practicable, new regulatory requirements that remove from the Technical Implementation Document the detailed specification of statutory equipment. Rather, SEPA will require that such equipment is always fit-for-purpose and complies with the best practicable means requirement. SEPA considers that this will better ensure continued improvement in monitoring capability as a part of its regulatory activities.

Conclusion 7.4

It is recommended that SEPA regularly evaluate the feasibility and necessity of imposing an even more stringent target performance on the beach survey systems that are currently in use.

As a part of its regulatory functions, SEPA regularly reviews the performance requirements of not only beach, but of all, monitoring systems in place.

Conclusion 7.5

It is recommended that the competent authorities find ways to reach a mutually satisfactory and robust agreement with the owners of Sandside beach so as to resume local survey activities at regular intervals. The programme of detecting and subsequent removal of particles of radiological significance should, for reasons of protection of the

population, not be interrupted on this publicly accessible beach.

Negotiations to allow regular access for monitoring purposes have continued. Access was restored in December 2004 but subsequently interrupted between April and June 2005. Between December 2004 and February 2006, during monitoring, 8 particles have been removed from Sandside beach. Access has again been denied from early February 2006.

In October 2005, the Scottish Executive consulted on proposals to extend its existing regime for contaminated land to include radioactive contamination. As with the existing regime, the proposed regime includes provisions for access for monitoring purposes. The Executive is currently considering the response to its consultation.

Conclusions 7.6 and 8.3

The Commission would appreciate it being kept informed about any further investigation results and envisaged remedial actions with respect to particles of radiological significance on public beaches around Dounreay.

The Commission would appreciate it being kept informed about any further investigation results and envisaged remedial actions with respect to particles of radiological significance in the marine environment around UKAEA Dounreay, both on-shore and off-shore.

As a condition of the authorisation, under the terms of the Radioactive Substances Act 1993, to dispose of radioactive waste to sea, SEPA requires UKAEA to monitor for particles and to quantify the extent of the seabed contamination by particles. Following recommendations in 1998 by the Scottish Office, the predecessor to the Scottish Executive, SEPA and the UKAEA set up in 2000 the Dounreay Particles Advisory Group (DPAG). This is a group of experts which provides impartial expert scientific advice on the current UKAEA research programme in respect of particles in the Dounreay local environment. In its work, it liaises with the Government's Advisory Committee on the Medical Aspects of Radiation in the Environment (COMARE).

DPAG has reported twice on its early review of the particles issue. Following further extensive work, it is to report for the third time in summer 2006. It will set out its current understanding of the particles issue and will present recommendations. In response to Commission Conclusions 7.6 and 8.3, the Scottish Executive undertakes to send the Commission a copy of the DPAG report and also a note of any actions to be undertaken as a result of recommendations made in the report.

Conclusion 9.2

The Commission would appreciate it being kept informed about progress made with

respect to the isolation project of the Dounreay Shaft and any further actions that may be undertaken to remove the waste that is contained within the Shaft.

Following a major public consultation on a suitable end state, a major programme of work is now underway to decommission the facility safely. Prior to retrieving its contents, the shaft is to be isolated from the surrounding groundwater by injection of a curtain of grout through a series of boreholes. A programme of borehole testing has already been undertaken and the project is currently constructing the raised working platform required to provide a stable base for borehole drilling and grouting prior to the physical activity of isolating the shaft from the environment. Progress is regularly reported in the Dounreay Bulletin and in response to Commission Recommendation 9.2, the Scottish Executive undertakes to ensure that the Commission has access to those Bulletins.

Scottish Executive

Edinburgh

23 May 2006