



PARTICLES PROGRESS REPORT AS AT 7TH MAY 2007

1. BPEO process

The comparative importance of the assessment criteria was consulted on during the first three months of 2007.

- Exhibitions took place in Thurso, Reay, Castletown and Wick and 74 members of the public attended.
- Eight workshops were held in various locations with a total of 64 people taking part.
- 70 responses to the feedback questionnaire were received

Entec have prepared their draft analysis of this part of the consultation and UKAEA will provide a response.

The preliminary BPEO will be updated to reflect the ongoing work and consultation feedback and will be made available for a further period of consultation before being finalised.

2. OFFSHORE WORK

(a) ROV offshore mapping

Following the 2005 and 2006 campaigns to improve understanding on the extent of particle contamination offshore, plans are being prepared for further monitoring and mapping. The intention is to survey during the summer months when the weather is likely to be most favourable. The main locations will be:

- Between the effluent diffuser outfall in Dounreay bay and west Brims in order to further delineate the extent of the main particle plume. To date, no particles have been found in water deeper than about 30m.
- Between the effluent diffuser outfall and Dounreay foreshore, to determine particle numbers and their in-situ burial depth/activities.
- Inshore from the effluent diffuser outfall into Sandside Bay. The aims are to determine particle numbers and their in-situ burial depth/activities.

The ROV does not have the capability to retrieve particles.

(b) Remote particle retrieval offshore

An advert inviting expressions of interest for ROV monitoring technology that can retrieve particles was issued in November 2006. Nine expressions of interest were received which was reduced to six following internal UKAEA assessment. At end of April, 4 tenders were received which offer different technologies for retrieving particles offshore, without using divers. UKAEA are assessing these tenders. This will allow UKAEA to assess up to three offshore particle detection and retrieval systems prior to deployment of one or more of these for offshore remediation in subsequent years.

(c) Investigations at Old Diffuser structure

UKAEA plan to carry out a limited investigation around the old diffuser in late May 2007. Selected risers will be opened to enable access for a video camera to allow visual information on the condition of the rock to be gained and may also extend to the chamber below. An area survey will also be carried out to look for evidence of fissures in the rock mass. The regulatory implications of this investigation have been discussed with SEPA and have been incorporated into UKAEA's working methods and environmental safety case.

UKAEA has completed a comprehensive review of information relating to the old diffuser chamber (ODC). As part of the shaft isolation project, the tunnel has been sealed with a grout plug which will reduce, or stop, the groundwater flow through the system. Preliminary investigative work (above) will be carried out at the ODC in late May 2007. The method and timing for the remediation of the old diffuser system is being planned to coincide, at an appropriate time, with the offshore work associated with the particles BPEO.

3. Dounreay Particles Advisory Group (DPAG) meeting

The work of DPAG is to continue after publication of their 3rd report in September 2006. Meetings are held every two months to discuss the reports and information provided by UKAEA on their offshore and onshore particle monitoring/retrieval strategies and particle research work. A final DPAG report is expected in summer 2008. DPAG and COMARE will be organising with UKAEA a second series of environmental testing of the latest version of Groundhog particle monitoring system; the tests are scheduled for late June 2007.

4. Dounreay Particles: Edinburgh meeting

A meeting was held in Edinburgh with Scottish Executive, COMARE, DPAG, SEPA, Highland Council, Food Standards Agency, Health Protection Agency and UKAEA in March 2007. A number of actions were identified to ensure a 'joined up' approach by all the agencies.

5. Monitoring of beaches

A programme to survey Dunnet bay beaches commenced on 4th April. During monitoring of Murkle beach a radioactive particle was detected and retrieved. The particle is classified as a minor particle, using the criteria specified by DPAG. Peedie Sands has also been surveyed and no particles were detected. Monitoring of Dunnet is ongoing and expected to be completed during June 2007.

6. Sandside

Access to Sandside beach was withdrawn by the owner at the end of March. Surveying of Reay Golf Course is continuing using the same detection equipment as the beaches with the greens, tees and sensitive areas carried out by hand-held detectors. The total area covered so far is over 100,000 m² (a quarter of the course). Completion is expected in 6-7 weeks.

7. Assessment of beach monitoring systems

Four different systems for monitoring, including an enhanced version of the system currently in use, have been short listed by a panel of experts after a series of trials to test their performance against the current system. The companies will be invited to tender for the contract to monitor local beaches in response to a forthcoming monitoring specification.

UKAEA, Dounreay
7th May 2007