

DOUNREAY WASTE DISPOSAL RADIOACTIVE SUBSTANCES AUTHORISATION (RSA) APPLICATION TO SEPA

Background

Dounreay disposes of waste to land, sea and air under the terms of an authorisation issued by the Scottish Environment Protection Agency (SEPA).

The existing authorisations were granted to the United Kingdom Atomic Energy Authority (UKAEA) in 1999 for the disposal of radioactive waste from the premises at Dounreay in Caithness. The authorisations granted to UKAEA were transferred to Dounreay Site Restoration Ltd (DSRL) on 1 April 2008.

Since 1999 a number of variations have been made to the authorisations, some of which were requested by DSRL and others initiated by SEPA.

DSRL have applied for a new authorisation appropriate for the decommissioning of the Dounreay site. SEPA's consultation on the new authorisation closed on 30th November 2012.

Proposed Discharges limits (subject to SEPA's determination)

Most of the discharge limits are lower than those currently in place, although some have been raised to reflect the needs for decommissioning.

The overall potential impact on the environment of the proposed new limits is less than the existing ones, reducing the site's overall impact on the environment.

Independent assessment of the application, undertaken by the Chemical Contaminants and Novel Foods Division of the Food Standards Agency, confirms the dose received by the most exposed member of the public under the new limits is less than that under the current limit – see website link : http://sepa.org.uk/about_us/consultations/closed_consultations.aspx (Paper 4 refers).

The increased discharge limits are for tritium and caesium, although these are offset by reductions across the other sources of radioactivity in the effluent and emissions. In totality, the new authorisation is less than those permissible under the current authorisation.

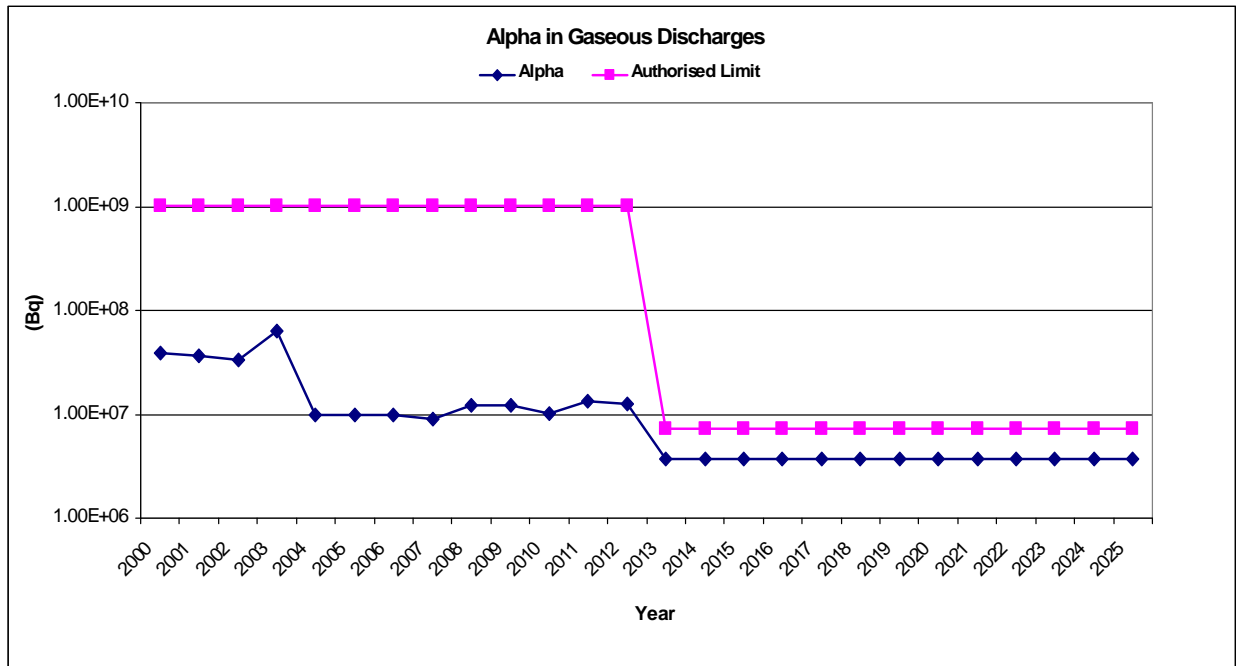
The requested increase of tritium and caesium allows the site to move to the next phase of decommissioning the two fast reactors which involves new processes. Opening up and cleansing new parts of the reactors are expected to give rise to levels that are higher than at present but remain well within safe limits. This is supported by the FSA's assessment.

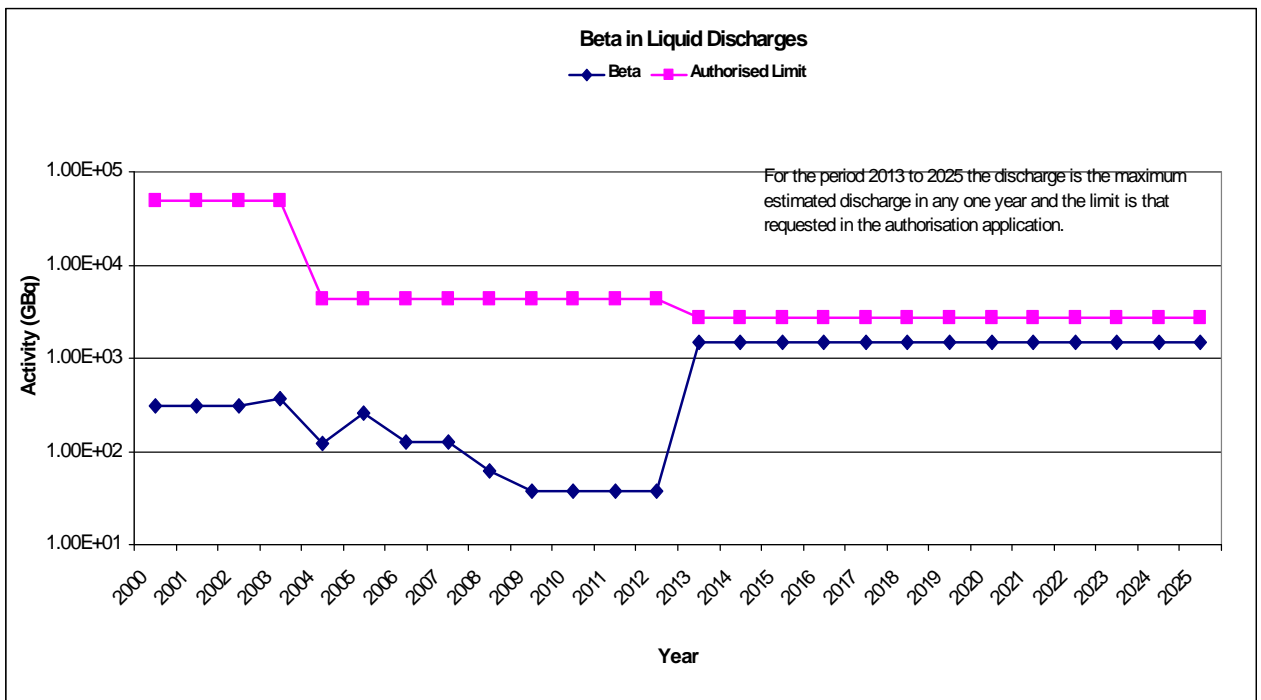
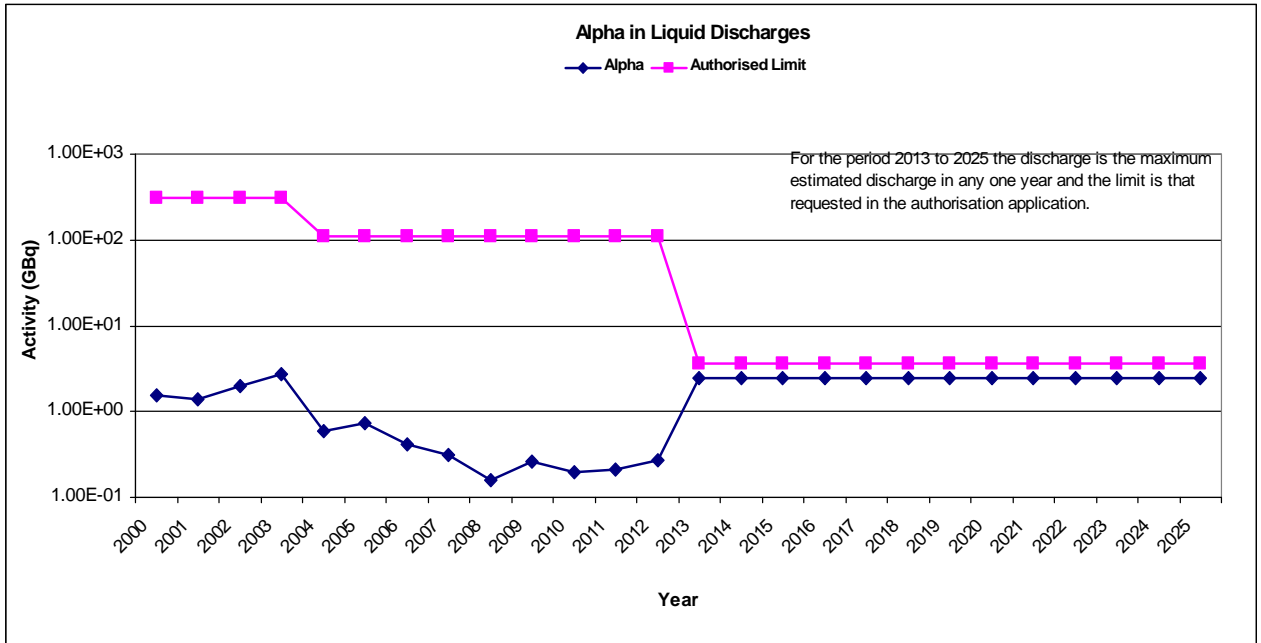
DSRL will continue to apply Best Practicable Means to minimise the discharges under the authorisation.

The graphs below show the current discharge authorisation and the requested new authorisation data. It should be noted that:

- The data from 2013 onwards assume SEPA grants the new authorisation.
- Discharges from 2013 are estimates and are based on the maximum expected in any one year.

- Limits from 2013 are those requested in the authorisation application and the actual limit will be determined by SEPA.
- The data is plotted on a log scale to allow small and big values to be shown on the same graph.





Dounreay Site Restoration Ltd
 11th March 2013