Corporate report: Radioactive particles in the environment around Dounreay

Updated: Attached new information leaflet 'Monitoring of beaches near Dounreay'

Particles are fragments of irradiated nuclear fuel discharged to sea as a result of historic practices in reprocessing.

Used fuel from the reactors on site and other research reactors in Britain and abroad was recycled in the site's reprocessing facilities.

The swarf produced during the procedure was discharged from fuel ponds with the water and were released to sea.

It is not known how many particles were released but extensive research suggests that the bulk were released between 1958 and 1984.

The most hazardous fragments are located close to an old discharge point on the seabed.

Their disintegration is believed to be the source of smaller, less hazardous particles detected on local beaches since the early 1980s.

Health risks

Expert laboratory research into the potential health effects of different particles has been carried out by the Health Protection Agency for Scottish Environment Protection Agency (SEPA), and studied by the independent Dounreay Particles Advisory Group (DPAG). The work looked at the likely health effects of different particles being swallowed, inhaled or coming into skin contact.

DPAG concluded that only those particles in the significant category pose a realistic potential to cause harm to members of the public, and that the probability of the most frequent beach-users at Sandside coming into contact with a relevant particle is one in 80 million.

A number of studies on the potential effects of particles have been completed by independent bodies.

Explanations of the hazards and risks can be found at:

- SEPA
- Committee on Medical Aspects of Radiation in the Environment (COMARE)
- Food Standards Agency (FSA)

Monitoring

Beach monitoring continues and forms part of the RSA authorisation granted to the site by SEPA. Monitoring of land owned by third parties is subject to agreements on access.

During 2003-2008 an extensive consultation programme was established to identify the best practicable environmental option (BPEO). The consultation led to recommendations to Government bodies on the way forward which is environmentally and publicly acceptable.

This process recognised that recovery of every particle was impractical but that it was feasible to seek recovery of larger, more hazardous particles that pose a significant health risk and which had settled in the sediment close to Dounreay. That, along with on-shore monitoring specifically at Dounreay foreshore and Sandside beach, was identified as the preferred way forward.

Underwater clean-up started in August 2008, targeted at a 60-hectare area of seabed known as the "plume" where the most hazardous particles were located. This work continued each summer until 2012.

This programme was guided by the independent expert Particles Recovery Advisory Group (Dounreay), PRAG(D), which advises both DSRL and SEPA.

All particles recovered from the seabed were returned to Dounreay.

The Dounreay foreshore and Sandside beach in the bay adjacent to the site are monitored on a regular basis. Strathy beach and Murkle beach act as 'gatekeepers' and are monitored twice a year to ensure that the offshore work has not adversely impacted the surrounding beaches.

When a particle is detected, it is retrieved and taken to Dounreay for analysis. The regulator is informed, and the find is reported publicly via this website. Any unusual finds are treated in the same manner.

In the 1990s extensive additional surveys of the site were carried out. This included roadside verges, cliff top land and drainage systems. By 2009, these surveys had yielded 89 particles.

Detailed investigations identified a number of areas of the site where more particles could be expected to be found during decommissioning.

The effectiveness of the clean-up is reported by Dounreay to SEPA, PRAG(D) and other interested parties, including the site stakeholder group.

Guidance: Dounreay Communities Fund

Updated: September 2018 summary added to document

The fund is provided by the Nuclear Decommissioning Authority and administered by Dounreay in association with the Dounreay Stakeholder Group.

Applications to the fund are reviewed on a quarterly basis:

Closing dates for submitting applications Application review dates

 27 June 2018
 11 July 2018

 22 August 2018
 5 September 2018

 17 October 2019
 31 October 2018

 16 January 2019
 30 January 2019

Dounreay reserves the right to change this schedule.

For more information, contact:

Dounreay Communities Fund Co-ordinator

Dounreay.com

Traill House

7 Olrig Street

Thurso

Caithness

KW14 7BJ

Telephone: 01847 890837

Email: stakeholderrelations@dounreay.com

<u>Policy paper: Totnes: reducing the risk of flooding</u>

Updated: Update to latest news section — testing of lower gate and complete

except for snagging work.

This document explains what the Environment Agency is doing to reduce the risk of flooding in Totnes, South Devon.

<u>Guidance: Higher Tier: Countryside</u> <u>Stewardship</u>

Updated: Options, supplements and capital items PDF updated to show option SW12 cannot be used on land already receiving funding for Ecological Focus Areas declared for Basic Payment Scheme.

These documents apply to the 2018 application round for Countryside Stewardship (CS).

Higher Tier closed for applications on 13 April 2018.

Use the manual to understand:

- the payments you could receive and how this scheme benefits the environment
- eligibility requirements
- how to apply
- the rules and conditions

Use Higher Tier and Mid Tier guidance on options, supplements and capital items:

- to understand the rules for each option, supplement and capital item
- for advice on carrying out options, supplements and capital items

Use the conversion guidance if:

- you're in the final year of an Environmental Stewardship (ES) agreement and want to put the land into a Higher Tier agreement
- there's a risk of to a site caused by loss of management between the end of your ES agreement and the start of a Higher Tier agreement

The manual has portrait and landscape pages. Before printing, select 'auto rotate' in your printer settings.

Overlap of CS options with Ecological Focus Areas

(EFAs) in 2019

You can no longer overlap the following CS options with EFAs declared on your Basic Payment Scheme (BPS) 2019 application:

- AB1 Nectar flower mix
- AB3 Beetle banks
- AB4 Skylark plots
- AB5 Nesting plots for lapwing and stone curlew
- AB6 Enhanced overwinter stubble
- AB8 Flower rich margins and plots
- AB9 Winter bird food
- AB11 Cultivated areas for arable plants
- AB15 Two year sown legume fallow
- AB16 Autumn sown bumblebird mix
- HS2 Take historic and archaeological features out of cultivation
- OP2 Organic wild bird seed mixture
- SW1 4 to 6 metre buffer strip on cultivated land
- <u>SW3 In-field grass strips</u>
- SW4 12 to 24 metre watercourse buffer strips on cultivated land
- <u>SW6 Winter cover crops</u>
- SW12 Making space for water
- WD3 Woodland edges on arable land
- WT2 Buffering in-field ponds and ditches on arable land

This is to avoid funding the same activity on the same land parcel under both CS and BPS, known as 'double funding'. You can continue to place CS options and EFAs in the same land parcel but they cannot overlap.

In 2018, your Ecological Focus Area (EFA) cover crops must be established by 1 October 2018 and retained until at least 15 January 2019. Natural England will not consider the retention of the EFA cover crops as an overlap with 1 January 2019 CS agreements. This assumes you'll move the cover crops to a different location in 2019.

Hedges can be used for EFA and for Entry Level Stewardship, Higher Level Stewardship and CS options without payment deductions.

Find out more about CS funding

See:

- <u>Wildlife Offers</u> for information on the 4 new CS Offers for Wildlife for 2018
- Countryside Stewardship for details of other funding

Guidance: Mid Tier: Countryside Stewardship

Updated: Mid Tier is closed for applications.

Mid Tier closed for applications on 31 August 2018.

Use the manual to understand:

- the payments you could receive and how this scheme benefits the environment
- eligibility requirements
- the rules and conditions that apply to Mid Tier and the <u>4 Wildlife</u> Offers

Use the options, supplements and capital items document or CS grant finder:

- to understand the rules for each of them
- for advice on how to carry them out

The manual has portrait and landscape pages. Before printing, select 'auto rotate' in your printer settings.

Overlap of Countryside Stewardship (CS) options with Ecological Focus Areas (EFAs) in 2019

You can no longer overlap the following CS options with EFAs declared on your Basic Payment Scheme (BPS) 2019 application:

- AB1 Nectar flower mix
- AB3 Beetle banks
- AB4 Skylark plots
- AB5 Nesting plots for lapwing and stone curlew
- AB6 Enhanced overwinter stubble
- AB8 Flower rich margins and plots
- AB9 Winter bird food
- AB11 Cultivated areas for arable plants
- AB15 Two year sown legume fallow
- AB16 Autumn sown bumblebird mix
- HS2 Take historic and archaeological features out of cultivation
- OP2 Organic wild bird seed mixture
- SW1 4 to 6 metre buffer strip on cultivated land
- SW3 In-field grass strips
- SW4 12 to 24 metre watercourse buffer strips on cultivated land
- SW6 Winter cover crops
- WD3 Woodland edges on arable land
- WT2 Buffering in-field ponds and ditches on arable land

This is to avoid funding the same activity on the same land parcel under both CS and BPS, known as 'double funding'. You can continue to place CS options and EFAs in the same land parcel but they cannot overlap.

In 2018, your Ecological Focus Area (EFA) cover crops must be established by 1 October 2018 and retained until at least 15 January 2019. Natural England will not consider the retention of the EFA cover crops as an overlap with 1 January 2019 CS agreements. This assumes you'll move the cover crops to a different location in 2019.

Hedges can be used for EFA and for Entry Level Stewardship, Higher Level Stewardship and CS options without payment deductions.

Find out more about CS funding

See Countryside Stewardship for details of other funding.

Contact

Contact Natural England if you have any queries:

Enquiries

Natural England County Hall, Spetchley Road

Worcester

WR5 2NP

Email
enguiries@naturalengland.org.uk

Telephone 0300 060 3900

Opening times: 8:30am to 5pm, Monday to Friday (excluding public holidays)

Find out about call charges at www.gov.uk/call-charges.