

Introduction

This report covers the Environment Agency's regulation of Dungeness A and B sites and related environmental matters.

Nuclear regulation

Phil Fahey is the lead regulator for the Dungeness A site.

From 1 April 2016 Andrew Stone has taken over as the lead regulator for the Dungeness B site.

Phil and Andrew both work in the Nuclear Regulation Group (South). Officers from the Kent Area Environment Agency team also visit the site for general environment protection matters such as groundwater, contaminated land, waste management and water abstraction.

We work closely with other regulators such as the Office for Nuclear Regulation (ONR) in areas of common interest.

Attendance at site

We regulate radioactive waste disposals through environmental permits that contain limits and conditions aimed at minimising wastes and protecting the environment. We check compliance with the permit by making regular inspections. These are recorded on Radioactive Substances Compliance Assessment Reports (RASCAR) which detail our inspections and any non-compliance found; they are placed on the Public Register.

We visited Dungeness A on 20/21 January, 8/9 March and 11/12 April.

We visited Dungeness B on 11-12 January, 8-9 February and 21-22 March 2016.

Regular contact is also maintained with the sites by telephone and email in addition to formal correspondence.

Discharge reports

Both sites are required to report to us liquid and gaseous discharges to the environment and transfers of radioactive waste to other sites on a regular basis. These reports are placed on the public register. Liquid and gaseous discharges from both Dungeness sites remain within the limits set by the Environmental Permits. Historical data is available via the Environment Agency 'What's in your backyard?' service.

<https://www.gov.uk/check-local-environmental-data>

Environmental monitoring

The operator carries out monitoring of various environmental samples at set intervals and reports the information to us. Dungeness B carries out environmental monitoring on behalf of Dungeness A. The programmes are slightly different to reflect the radionuclides that are being discharged, the historical discharges and the operational activities taking place on the site.

Current regulatory issues

Dungeness A

Inspections

In January we undertook an inspection to close out actions from themed audits carried out over the last few years (2012 to 2014). Those audits were asset management, out of scope/exempt waste arrangements, aqueous waste and the management of pond water chemistry, management arrangements and radioactive waste management arrangements. There were a few outstanding actions but no non-compliances noted during this inspection.

In February we undertook an inspection on out of scope and clearance for solid waste. There were no non-compliances noted on this inspection.

In April we carried out an inspection of gaseous discharge management arrangements. Prior to the inspection Dungeness A had reported that, due to clerical errors in reporting gaseous

discharges, the December 2015 and January 2016 returns to the Environment Agency were incorrect. This did not affect any discharge limit. We are investigating whether there are non-compliances with the permit. The operator will implement processes to prevent a reoccurrence.

Over the past 12 months, there have been several failures in equipment used for gaseous discharge sampling. There have been a variety of reasons for these failures such as power supply problems and sampler failures. As part of the management arrangements for gaseous discharges we asked the operator before the inspection to look into the reasons for the failures and to identify any learning that would reduce the amount of failures. A report was presented to us in March and the operator will action the findings. The operator will work with other Magnox sites that have seen similar issues and Magnox central.

No other non-compliances were found on the gaseous discharge management arrangements inspection

Wrong valve placement in active effluent water treatment plant

Due to incorrect configuration of a non-return valve, active liquor was found to be overflowing from an active drainage trench following routine pumping out of voids. As part of the plant recovery all areas were surveyed and all non-fixed contamination removed. The areas have been returned to the same area designation as they were prior to the event. We are investigating this event to see if there are any non-compliances to the permit.

UV treatment at new sewerage works

A member asked at the last SSG meeting if UV (ultra violet) treatment is to be used at the new sewerage treatment works at Dungeness A. UV treatment is a tertiary method of treatment and is normally only required in sewage plants that discharge into "sensitive areas" such as SSSIs. Most sewerage works only have primary and secondary treatment. As the works at Dungeness does not discharge into a defined "sensitive area", the UV treatment is not required. Further

information can be found in the following document:

www.gov.uk/government/uploads/system/uploads/attachment_data/file/69592/pb13811-waste-water-2012.pdf

Dungeness B

Liquid radioactive waste

An accredited contractor, that is a member of the Environment Agency Monitoring Certification Scheme (MCERTs), has carried out inspections of the management arrangements and discharge flow meters. Both of the inspections met with the MCERTs criteria. These are valid for five years.

Combustion plant inspection

The operator submitted the annual report which documents the combustion plant operations in compliance with the environmental permit. We are satisfied with the content of this report. In particular we are satisfied that where possible the operator has aligned the monitoring of the diesel engines with other testing regimes in order to minimise gaseous discharges.

Environmental Maintenance System

We carried out a joint inspection with the Office for Nuclear Regulation (ONR) on 9 February regarding the management of the Environmental Maintenance Inspection and Testing schedule (EMITs). We have asked the operator to review the electronic document management system to ensure that any relevant work instructions are linked to the work management system.

Tritium in groundwater

As reported at previous meetings, the operator has reported that the tritium concentration in groundwater samples taken from borehole 66 on the site continues to decline and is below the UK Drinking Water Inspectorate guidance level. We shall be liaising with ONR and the operator to review the sampling programme based on these results.

The operator has also reported elevated but declining tritium concentration in groundwater samples taken from borehole 109 on the site which the operator is investigating.

customer service line
03708 506 506

incident hotline
0800 80 70 60

floodline
0345 988 1188
0845 988 1188

www.gov.uk/environment-agency

Actions following the Dump Water Storage Tank leak in December 2014

We have followed up outstanding actions that were placed on the operator following the leak from the tanks in 2014. We observed that the section of pipe work that was leaking has been removed and replaced with a new section and welded into position.

Management of reactor gas leakage

Minor leaks of coolant gas from the reactors can occur, for example from seals on vessels and valves. The gas is removed by ventilation systems and filtered before discharge to the environment. The operator reports such discharges on the periodic monitoring returns.

The operator reported to us in March that the leakage rate from one of the reactors had increased and that the source had been identified. The operator provided us with an assessment of the leakage rate and potential implications on discharges. We are satisfied that the operator considered environmental discharges when deciding on remedial action. The operator has reported that leakage from the reactor has declined now that the plant has been reconfigured to bypass the source.

Eels Regulations

We have now reviewed all of the information that was submitted in order to comply with the Improvement Condition in the Environmental Permit. We propose to issue an Exemption Notice once the alternative measures have been agreed.

Contact details:

Andrew Stone
andrew.stone@environment-agency.gov.uk
Telephone: 020302 59446

Mr Phil Fahey
phillip.fahey@environment-agency.gov.uk
Telephone: 020302 59732

Address:
Environment Agency
Red Kite House
Howbery Park
Wallingford
Oxfordshire
OX10 8BD

Environment Agency Website:

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