

Environment Agency Nuclear Regulation Report to Dungeness Site Stakeholder Group



January – March 2015

Introduction

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

Nuclear regulation

Andrew Pynn is the lead regulator for the Dungeness A site.

Jo Moakes is the lead regulator for the Dungeness B site.

Andrew and Jo work in the Nuclear Regulation Group (South) and liaise with colleagues based in Kent in regulating the Dungeness sites.

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 details our inspections and any non-compliance found; they are placed on the Public Register.

We made site visits to Dungeness B on 21-23 January and 2-4 March 2015.

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

Discharge reports

Both Dungeness sites are required to report to us liquid and gaseous discharges to the environment and transfers of radioactive wastes 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 our Environmental Permit.

Current regulatory issues

Dungeness A

Pond decommissioning

We have been reviewing proposals and assessing arrangements to undertake a trial drain of one of the fuel ponds. This will involve draining a small proportion of the pond water to allow access to the concrete pond walls. The purpose of the trial is to allow preliminary characterisation of the pond walls and to test the draining process to inform future decommissioning decisions.

FED treatment plant

The permit to allow continued operation of the FED plant has been issued. Treatment of the residual FED on site can now re-commence. The permit was required to satisfy certain conditions before the discharges from the FED plant could continue. We are now satisfied that we have adequate controls in place to ensure the discharge will not have an adverse impact on the receiving environment.

Inspection programme for 2015/16

This is currently being finalised and will be shared with Magnox shortly. The baseline is for four site inspections during the year with additional resource available for assessment of decommissioning plans, waste disposals and discharges.

Dungeness B

Control of Major Accident Hazards (CoMAH)

Dungeness B is classified as a 'Lower Tier' CoMAH site under the regulations. This means that some of the chemicals held on the site are listed in the CoMAH regulations in volumes that are above the Lower Tier threshold. We carried out a CoMAH inspection to verify the contents of the Secondary Containment Scorecard which provides details on the condition of bunds around storage tanks. We are satisfied with the assessment carried out by the operator.

Radioactive Waste Implementation Plan

We reviewed the operating procedures, commissioning and handover documents between the operator and contractor following modifications to the Low Resolution Gamma Spectrometer (LRGS) which is used to assay Low Level radioactive waste. We were satisfied that the operator was able to demonstrate that they are an 'intelligent customer' and that the checks and verifications ascribed by the contractor have an appropriate level of rigour.

Ponds

The operator notified us during the weekly telecon in November that it had lost some pond water from its system into a sump due to an incorrect alignment of a valve. This radioactive liquid was retained in the system and then treated in the Active Effluent Treatment Plant (AETP). The radioactive discharges were well within the limits set in the permit. We have completed our investigation of this event including a review of the reason behind the pond water loss as well as the actions taken by the operator to minimise the activity of the effluent prior to discharge. On this occasion, we have issued two breaches of the permit and provided advice and guidance.

We carried out a joint ponds inspection with colleagues from ONR in March. We discussed with the operator the reasons behind delays on installing the new demineralised flask washing line, which will enable the operator to have better control over the pond water chemistry. We have been given assurances that this will now be installed in the scheduled fuel route outage in April 2015.

Tritium in groundwater

As discussed in previous SSG meetings, the operator notified us and ONR in July 2014 that groundwater samples taken from borehole 66 was well above the investigation level of 100 Bq/l. [It should be noted that the investigation level is not a limit set in the Environmental Permit but an agreed level of activity that the operator will investigate based on the UK Drinking Water Inspectorate guidance]. Since sealing the leak in the nitrogen pipe-line, the groundwater results supplied by the operator has continued to demonstrate an overall downward trend in the levels of tritium; these have only increased slightly following rainfall events. Recent sampling results have been around approximately 160 Bq/l. We received a copy of the Remediation

Strategy on 10 April which we are currently reviewing in liaison with ONR.

We received notification on 19 December that slightly elevated levels of tritium (around 140Bq/l) had been discovered in a separate area of the site. We are confident that this is not linked to the leak described above. The operator discovered that on further investigation the reason for the elevated levels of tritium in the borehole was as a result of two separate leaks on the boiler condensate pipework. One of which was associated with corrosion under lagging and another from a temporary repair on pipework which had not had the permanent fix carried out. We will report on the conclusions of our own investigation in the next SSG.

Exercises

We have completed the Level 2 emergency exercise in March 2015 and last week attended a 'cold debrief' with the emergency planning partners to identify any lessons learnt.

Beach Feeding

We commenced beach feeding on 4 March following permission from Natural England and Kent County Council. We finished at the end of March.

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