

Report to Sizewell Site Stakeholder Group

September 2016

This report covers the Environment Agency's regulation of Sizewell A & B nuclear sites and related issues for the period between June 2016 and August 2016.

Our Regulation

We regulate radioactive waste disposals to the environment. We do this through environmental permits that contain limits and conditions aimed at minimising wastes and protecting the environment. We check compliance with the permits by making regular inspections at Sizewell A & B.

Radioactive Substances Compliance Assessment Reports (RASCARs) detailing our inspections and any non-compliances found are placed on the Public Register.

We also regulate and control other activities through our environmental permits, including surface water discharges to surrounding water bodies and emissions to air from emergency diesel generators. We are also the joint technical authority, alongside the Health & Safety Executive for the Control of Major Accident Hazard (COMAH) regulations that apply to Sizewell B.

Current Regulatory Activities

Sizewell A

We have carried out 2 inspection visits since the last SSG meeting.

On the 23rd June 2016 we carried out an inspection for the management arrangements for ponds decommissioning. Ponds decommissioning is a major project for Sizewell A. Enablers to allow the decommissioning to take place are being put in place over the next few months. This includes retrieving a failed fuel element currently held in the pond itself which will need special consideration.

On 19th and 20th July 2016 we carried out a joint inspection with the Office of Nuclear Regulation on the management arrangements for aqueous discharges. Part of the inspection was to ensure that the active effluent treatment plant and pond water treatment plant continue to operate in line with best available techniques following their upgrades.

On both inspections there were some recommendations but no non-compliances.

On 28th July 2016, we participated by teleconference in a joint meeting on waste strategy and permissioning for the South East sites with Magnox and the Office for Nuclear Regulation. These meetings will take place on a regular basis and will facilitate discussion between Magnox and the regulators on topics of interest affecting Sizewell A, Dungeness A and Bradwell. The next meeting is scheduled for November 2016.

We will inspect Sizewell A as part of the Environment Agency's national waste themed audit inspection in October 2016. Sizewell B are also taking part in this audit (see below). This year's themed audit concerns characterisation to determine methods and management of classifying radioactive waste streams.

Environmental Monitoring Programme

It was reported at recent SSG meetings that the Operator's environmental monitoring programme around Sizewell has given positive results for Strontium-90 (Sr-90) in marine sediment sampled from Aldeburgh beach, one of 5 beaches sampled in the area. The recorded values were less than 5 Becquerels (Bq) per kilogramme (kg) of sediment, which is a very small amount of radioactivity. For comparison a banana might contain 30 Bq per kg of radioactive potassium from naturally occurring sources.

At the previous meeting it was discussed that Sizewell A are conducting an investigation into possible causes of the positive values. We asked that extra monitoring be undertaken including more sampling from Aldeburgh beach. We are continuing to engage with the Operator on this

investigation. The latest results indicate that the levels of Sr-90 are returning to their previous values i.e. near or below the limits of detections.

Once all the data has been received and analysed a full report will be made by Sizewell A. We will study the report and will continue to update the SSG as information becomes available.

It is important to note that the levels of radioactivity detected are extremely low and do not represent a hazard to anyone using the beach.

Publicity has also been raised about positive results from sampling of sediments from the River Blythe near Southwold. These samples have been taken for many years and have always returned a positive result for Caesium-137 (Cs-137). Concentrations of Cs-137 in these samples have been declining in recent years. In the past 10 years, Cs-137 results have varied between approximately 5-10 Bq per kg of sediment.

Environment Agency sampling undertaken in a similar area as part of our national monitoring programme have given equivalent results. Again there is no cause for concern regarding these very low levels of radioactivity.

Sizewell B

At the end of May we undertook an inspection during the reactor outage to review the Operator's arrangements for maintaining environmental protection standards and compliance with the environmental permit during Reactor Outage 14 (RO14).

Routine refuelling outages are periods within the stations operating life that can generate large quantities of waste, both radioactive and non-radioactive due to maintenance and repair activities taking place.

As part of our inspection we viewed waste arrangements from inside the reactor containment, looking in particular at effective segregation of waste at the source of production. We found that the preparation undertaken by the operator for the outage such as mock-up training for engineers and colour coding systems were effective in minimising and managing radioactive waste produced during the outage.

We placed an action on the station to review the effectiveness of their waste management plans during the outage, as part of their annual Best

Available Techniques (BAT) review of station operations, to encourage and promote continuous improvement. We identified no non-compliances, as a result of this inspection.

We are currently preparing to undertake a national waste characterisation inspection for SZB to determine methods and management of classifying radioactive waste streams. We will report back preliminary findings on this visit at the next Stakeholder meeting in December. Environmental Regulators will report national findings in 2017.

Enforcement

In August we issued a CCS4 rating for an issue relating to incorrect units submitted in environmental monitoring results reported to us. This rating means that there was a minor failure to comply with their environmental permit but that no environmental harm resulted. We have provided advice and guidance to EDF on this issue to ensure future compliance.

Discharge Reports

The operators at Sizewell A and B are required to report liquid and gaseous discharges to the environment to us on a regular basis. These reports are placed on the public register and a digest of information is available via the Environment Agency section on the gov.uk website: [What's in your backyard?](#)

Liquid and gaseous discharges from both Sizewell A and Sizewell B sites were at levels well within permitted limits and no Quarterly Notification Levels (QNLs) were exceeded in the period.

Contacts

The Environment Agency's Lead Regulator for the Sizewell A and Sizewell B sites are Phil Fahey and Stuart Parr respectively. Phil and Stuart are both Nuclear Regulators and part of the Nuclear Regulation Group (South) which is based at the Environment Agency's Wallingford office in Oxfordshire.

Phil and Stuart undertake environmental regulation of radioactive substances on nuclear licensed sites in southern England and Wales. They work closely with the local Environment Agency teams in those areas as well as external bodies such as the Office for Nuclear Regulation.

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

Email:

phillip.fahey@environment-agency.gov.uk

stuart.parr@environment-agency.gov.uk

Telephone: Please note new phone numbers;

Phil Fahey: 020 302 59732

Stuart Parr: 020 302 59771