

Briefing Note - Disposal of Sellafield Ltd low level radioactive waste bags to Lillyhall landfill site May 2010

Background

The Sellafield site in Cumbria is operated by Sellafield Ltd. A variety of activities in support of the UK nuclear industry are carried out at this site, including spent nuclear fuel reprocessing, and nuclear waste processing and storage.

Operations at the site involving radioactive waste disposals are regulated by the Environment Agency under an environmental permit. This permit contains conditions with which the operator must comply, including limits on the types of and amounts of radioactive waste that can be released to air, water and land.

On the 12 April 2010, Sellafield Ltd incorrectly sent four bags of low level radioactive waste from the Sellafield site for disposal at the Waste Recycling Group's Lillyhall landfill site, Workington, Cumbria. This waste should have been sent to the Low Level Waste Repository, near Drigg for disposal. The environmental permit for Sellafield does not currently allow the disposal of this type of waste to the Lillyhall landfill site, and the landfill is also not permitted to accept this waste. The landfill is able to accept 'exempt' waste which has very low levels of radioactivity. Sellafield Ltd had originally believed that the bags of waste were exempt waste.

We were alerted to this incident by Sellafield Ltd on the 20th April 2010. Early indications are that it was caused by Sellafield Ltd using waste monitoring equipment which had not been set up properly.

The current position

Sellafield Ltd, with support from the Waste Recycling Group and the Environment Agency, recovered the wrongly consigned low level radioactive waste bags from the Lillyhall landfill site, between the 22 and 29 April 2010. The bags contained items such as gloves, swabs etc. One bag had been punctured and a number of individual items were recovered from the vicinity of the bagged waste. The recovered waste was returned to the Sellafield site. Sellafield Ltd, the Waste Recycling Group and the Environment Agency carried out a number of monitoring surveys during and following the recovery, which ultimately confirmed that there were no elevated levels of radioactivity remaining on the landfill site. The tests also confirmed there had been no contamination of vehicles, plant or equipment involved in the incident.

Normal operations at the Lillyhall landfill site were able to commence following the recovery operation.

The Environment Agency's response

The Environment Agency is treating this incident seriously. The bagged waste that was disposed of to the Lillyhall landfill site contains radioactivity levels that are higher than the permitted 'exemption' levels, and the waste should not have been sent to the Lillyhall landfill site.

We are conducting an investigation into this incident and we are co-ordinating this with other regulatory bodies, the Nuclear Installations Inspectorate and the Department for Transport, to ensure effective use of regulatory resources. The outcome of the investigation will confirm whether or not an offence or offences have been committed and the level and type of enforcement action to be undertaken. This will be considered in accordance with our Enforcement and Prosecution Policy.

We have seized the waste involved in the incident for independent testing and assessment. We have sought clarification from Sellafield Ltd that they are satisfied that no other consignments of low level radioactive waste have been consigned in error to the Lillyhall landfill site. We will be carrying out a thorough check of the arrangements and records on the Sellafield site as part of our investigation to make sure that this is the case. We will also be checking that Sellafield Ltd learns the lessons from this incident and implements the improvements necessary to prevent such an incident from happening again.

We have alerted the Nuclear Decommissioning Authority, and all its sites, to ensure that checks are made on similar equipment and disposal routes. We have also informed the Nuclear Industry Liaison Group and the Safety Directors' Forum. We will continue to inform the nuclear industry, as we, and Sellafield Ltd have more details about the root causes of this incident.

We are urgently reviewing the wider implication of this incident across the Nuclear Industry. An early outcome of this review is to audit the arrangements for disposing of exempt wastes, at all nuclear licensed sites that we regulate, as soon as practicable. In conjunction with this, we will be carrying out independent monitoring of exempt waste streams over the coming months across the sites we regulate.

Getting in touch with us

If you need any more information please contact Stephen Tandy, Nuclear Regulator on Tel: 01768 215729 or stephen.tandy@environment-agency.gov.uk