

Sellafield Transport Emergency Arrangements - Progress and Challenges

Background

Sellafield is a large industrial nuclear facility in the north west of England. It has been part of the UK Nuclear industry since the 1950s. The Sellafield Site contains a large variety of facilities with nuclear inventory, employs >10,000 employees and is a complex and hazardous site.

Our current activities relate to decommissioning, remediation, and environmental clean-up. To enable delivery of our mission and to support national strategies, we routinely transport Class 7 radioactive material both within the UK and abroad.

The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 sets out responsibilities to dutyholders. The amendment in 2019 was a result of the Basic Safety Standards Directive (BSSD) 2013 and it emphasised the legal requirements to have suitable emergency plans. The legislation also sets out key duties for Consignors and Carriers.

Sellafield acts as both a Consignor and a Carrier and our consignment travels by Road, Rail and Sea. The distance of travel is substantial. To enable timely emergency response, Sellafield is a full member of RADSAFE, which is a GB mutual aid scheme with 24/7 response capability. If there is a transport incident anywhere within GB where the package may be damaged, the geographically closest member will provide emergency response on behalf of the Consignor, before the Consignor attends the scene and undertake package retrieval and environmental remediation and clean-up. All RADSAFE responders are trained Radiation Protection Advisers (RPAs) and provide expertise Radiological Protection advice to the Emergency Responders at the scene.

Engagement with Local Authorities

Sellafield maintains routine communications with Local Authorities and Emergency Services in Cumbria to raise awareness about Transport of Radioactive Materials from the Sellafield Site. A CDG Task and Finish Group was formed within Cumbria Local Resilience Forum and a series of workshops was held in 2022-2023. Government agencies like the Fire Services, Police and Ambulance Services were actively involved. Other operators within the region also took part. This series of workshop was positively received and clarified responsibilities and promoted collaboration at a regional level in North West England.

Sellafield has promoted this piece of work through national forums, namely the Radioactive Materials Transport User Committee (RAMTUC) and encouraged other members to engage with their respective local authorities and local resilience forum.

Sellafield, in conjunction with Cumbria Local Resilience Forum and EDF, undertook a desktop emergency exercise in 2023 where multi-agency partners were present. Sellafield also ran a live play exercise in 2025 where emergency services and other agencies were involved. These were successful demonstration that different parts of the industry collaborate and enhance our emergency preparedness for such incidents.

Challenges Ahead

Sellafield is working closely with our partners who have significantly improved awareness of the topic. There are still challenges ahead. Public perception of radioactive material means that even a minor incident could cause disproportionate interests in the public domain with potentially extensive media, and social media, coverage. This is further complicated by the fact that personnel from the consignor organisation may take a significant amount of time to reach the scene to undertake package retrieval and environmental clean-up.

Onward consignment involves approval from competent package design capability and dispatch paperwork produced by Dangerous Goods Safety Adviser in consultation with the Office for Nuclear Regulation. This requires significant amount of time and can cause disruption to the road or rail network.

There are opportunities that better technological solutions like the use of drones could contribute to effective and efficient emergency response. We are continuously working closely within the industry which will further contribute in preserving the confidence and trust that our stakeholders have in our industry.

Country or International Organization

Instructions

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