The Annual Research and Development Review

News story

Each year Sellafield Ltd produces a short report into the work of their research and development teams.



WEDA is a wall cleaning remotely operated vehicle used to clean pond walls on the Sellafield site

The report is a fascinating insight into the highly complicated world of Sellafield.

We know that at its core, our work involves taking waste out of our ponds and silos and making it safe for storage, then knocking down what we no longer need.

But the science behind that is incredible, and R&D is at the forefront.

The report is designed to help everyone understand why the science is so important, and how we work in collaboration with organisations across the UK to meet the challenges of our site. It includes:

- using lasers to monitor hydrogen levels round the stored waste in our Box Encapsulation Plant Product Store
- new robots which can attach themselves to the walls of our Pile Fuel Storage Pond to scrub away debris and ground-in dirt as we lower the water levels
- giving our glovebox operators remote access to their job putting them in a control room away from active areas but still allowing them to grip, cut and move around hazardous materials as if they were there
- creating 'smart cans' for storing our special nuclear material, which will be able to monitor themselves when stored and warn if something isn't happening as expected.

Rebecca Weston, Chief Operating Officer, Sellafield Ltd said

Our R&D professionals — from inside and outside the nuclear sector, working at and with Sellafield to solve problems — are among the best in the world.

And they need to be, to understand and create and ultimately implement solutions to the complex issues only a 70-year-old nuclear facility built on a constricted site can offer, and then try to anticipate what the next problem might be.

Ours is a fascinating business to be in, and this report gives an insight into the incredible, diverse, historic and ground-breaking world in which we operate.

The new Sellafield Ltd 2019/20 Annual Research and Development Review can be found here.

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