

Journey to Success 2008 – 2021

11. Type B Fissile Packaging Programme

It was a proud day for LLWR in 2017 when the first active shipment of waste to Sellafield from the Magnox Harwell site in Oxfordshire was completed under the multi-million pound Type B Fissile Packaging Programme.

LLWR's Type B (Novapak) project team was on hand to witness the historic initial delivery of intermediate level waste in the first pair of new, high-specification stainless steel transport packages, manufactured by Cumbrian firm Bendalls Engineering.

Soon after this milestone came another when shipments resumed of legacy plutonium contaminated material (PCM) from the Repository site to Sellafield for safe storage, following a four-year hiatus. The industry's former Type B fleet had been retired in 2013, due to quality issues originating from manufacture in the 1990s, and the focus had switched to the manufacture of a new fleet, which was due to be in service for at least eight years.

Bendalls won the contract through a competitive tendering process and went on to manufacture six pairs of Novapaks in Carlisle. Characteristically for LLWR, collaborative working with stakeholders was key throughout all stages of the complex project.

The integrated project team to deliver the Novapaks consisted of LLWR, Mott MacDonald, Prima Uno and Bendalls Engineering with Nuvia acting as the Design Authority.

Learning from Experience (LfE) on the Novapak project was utilised when it came to a second key element of the programme, the refurbishment of the three-strong TN Gemini fleet. The Geminis had been used to transport waste drums from LLWR to Sellafield for a couple of years from



The first rail shipment of legacy PCM under the programme leaves LLWR for Sellafield in 2017



Gemini Container in transit

2006 but then remained unused on the Repository Site for several years before being released to Magnox.

These containers are larger, heavier and more versatile than the Novapaks and will be brought back into service to facilitate the transfer of around 700 concrete-lined Magnox drums of fissile waste to Sellafield over four to five years.

Following a two-year refurbishment in France by Orano, the fleet has undergone Site Acceptance Testing, using virtual reality technology, with Magnox and are now undergoing the same process at Sellafield with an expectation of being operational in 2021, playing a significant part in the NDA's mission.

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