



Magnox

Harwell Nuclear Material Transfers

Nuclear Material Transfers Project

- Significant Lifetime cost savings to NDA estate.
- Consolidation of NM on a Category 1 site (Sellafield) and reduction of Site Security Requirements at Harwell.
- Environmental benefits through avoiding new build facilities at Harwell
- Enabler for clearance of Winfrith site. 70% of NM must be transferred before ILW transfers from Winfrith to Harwell can commence.

Four Waste streams

Scope To Sellafield

- **251** stainless steel canisters of Dragon Fuel.
- **4004** drums Contact Handled ILW.
2332 Concrete Lined Drums.

Scope To Capenhurst

- **57** drums Low Enriched Uranium

Contact Handled ILW Drums

- 200-litre drums of Plutonium Contaminated Material (PCM) & other ILW.
- Transfer window: April 2013 – Dec 2021
- Transport packages: FHISO (IP-2) & Novapak (Type B)
- Transfers: 4004 drums in 278 shipments
- **Progress to date: 2672 drums in 125 shipments**



Concrete Lined Drums

- 200-litre, 450-litre & 670-litre CLDs containing PCM and miscellaneous $\beta\gamma$ waste
- Transfer window: April 2017 - Dec 2023
- Transport packages: FHISO (IP-2) & Gemini (Type B)
- Transfers: 2332 drums in 372 shipments
- **Progress to date: 1016 drums in 118 shipments**



Dragon Fuel

- 40-litre stainless steel canisters of Dragon Fuel originating from the Winfrith Dragon Reactor.
- Transfer: Dec 2018 – Dec 2022
- Transfers :126 in 1.5 Modular Package.
- Phase 1 active commissioning complete with **6 cans in three shipments.**



Low Enriched Uranium drums

- 200-litre drums containing Low Enriched Uranium cans.
- Transfer: Oct 2019– Feb 2020
- Transport packages: Novapak
- Transfers: 15



Summary

- Currently 55.8% complete overall
- CLD transfers ahead of schedule with 1000th drum just completed.
- Dragon Phase 2 active shipments commence in May.
- TN Gemini Manufacture on Schedule.
- Fourth FHISO container hired to accelerate PCM Moves.
- Novapak to restart active moves April 22 following outage to address Manufacturing issues.