

The Problematic Waste Integrated Project Team

The Problematic Waste IPT

An Integrated Project Team (IPT) on problematic radioactive waste was established in May 2016, to support the Nuclear Decommissioning Authority's (NDA) strategy, published in April 2016. The IPT is delivering a 4 year programme; it is led, on behalf of the NDA, by Radioactive Waste Management Ltd (RWM) and LLW Repository Ltd.

Our objective:

To develop a co-ordinated and improved approach to the industry-wide management of problematic radioactive waste.

What is problematic waste?

Problematic waste, as defined by the IPT, includes radioactive wastes for which an existing waste management route is either not available or not optimised. It incorporates "orphan wastes" and "wastes requiring additional treatment". These are wastes from across the radiological spectrum, including lower and higher activity waste.

The Community of Practice

The IPT operates through a Community of Practice (CoP), comprising a range of stakeholders, working both within and outside the NDA estate, with responsibility for problematic waste. The CoP has been established to shape the work of the Problematic Waste IPT, and to share learning and experience on the management of problematic wastes.

Work to date:

Existing problematic waste inventories for lower and higher activity waste have been consolidated and updated. An inventory summary has been published.

A report summarising previous work on problematic waste has been produced and published.

A paper presenting short, medium and long-term opportunities for improving problematic waste management has been produced.

Inventory data and information on radioactive waste management facilities have been combined to produce a prioritisation calendar for use by waste owners.

Community of practice meetings have been held to discuss specific problematic waste types: oils, oily waste and liquid wastes.

A specification has been developed for a knowledge management tool for sharing information on management approaches for problematic wastes.

IPT publications can be found at:

llwrsite.com/national-waste-programme/waste-practitioner-support-guidance/#problematic

Ongoing Projects:

Understanding Barriers and Blockers to Problematic waste management – this project aims to develop our understanding of the reasons why wastes are considered problematic. An Issues Register will be produced to record, communicate and monitor trends across the industry.

Review of Treatment Technologies for Problematic Ion Exchange Materials, Oils and Sludges – a review and assessment of technologies used in the UK and overseas for management of these waste types. The review will provide waste owners with information on options available for managing their waste.

Transport and Packaging of Problematic Waste – a review of packages available for transporting radioactive waste, and determination of which wastes are problematic to transport and the underlying reasons for this.

Waste Management Approaches in the Non-Nuclear Industry – this project recognises that radioactive waste and Naturally Occurring Radioactive Material have to be managed outside the nuclear industry and is considering approaches which could be transferred and applied to problematic wastes.

Other projects:

- The potential for treating problematic wastes at existing radioactive waste facilities
- Identification of characterisation approaches for redundant laboratory chemicals
- Understanding disposability of Nochar immobilised waste oils
- Management approaches for waste failing the Low Level Waste Repository (LLWR) discrete items limit.

Future plans:

- Review of technologies for managing some small volume, but particularly challenging, problematic wastes (boron, beryllium, cadmium, desiccants, isotope cartridges and pyrochemical wastes).
- Development of a knowledge management system and a toolkit for sharing information on management approaches for problematic wastes.
- Further Community of Practice meetings to discuss the challenges associated with specific waste groups and the issues surrounding the management of problematic wastes.
- R&D tasks on specific waste groups, identified by the Community of Practice.
- Continuing engagement with regulators, supply chain organisations and other stakeholders to provide them with updates and opportunities to feed back on the work of the IPT.
- Annual updates and continued improvement of the Problematic Waste Inventory.

For more information on the Problematic Waste IPT, please contact the IPT core team:

pw.integrated.project.team@llwrsite.com