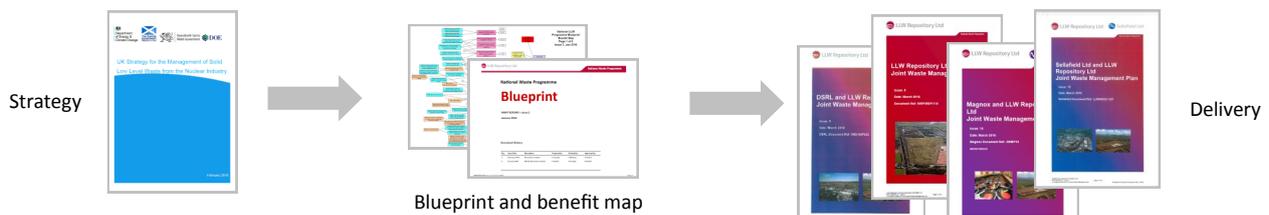


NATIONAL WASTE PROGRAMME QUARTERLY REPORT Q1 FY18/19
What is the National Waste Programme?

The National Waste Programme (NWP) is a cross-UK programme of work to lead the ongoing implementation and delivery of the *UK Strategy for the Management of Solid Low Level Waste from the Nuclear Industry*. The NWP covers all nuclear industry waste producers including those in the NDA estate, the public sector and the private sector. The NWP is led by LLW Repository Ltd on behalf of the NDA (who are responsible for leading strategy implementation for BEIS). The NWP works collaboratively with its stakeholders to produce a Blueprint and Benefit Map to show the direction of travel for strategy implementation. The activities to deliver the strategy are executed by the stakeholders of the NWP; for example by waste producers through their waste management practices.



The vision of the National Waste Programme is:

Optimised LLW management across the UK that delivers value for money.

The purpose of the NWP is to deliver a transformation in the way that LLW is managed in the UK, in accordance with the LLW Strategy. The NWP will deliver five strategic benefits:

NWP Strategic Benefits:

1. The life of the LLWR is extended to 2130.
2. Overall waste management costs are reduced.
3. Optimised LLW management that supports and enables effective hazard reduction and decommissioning.
4. Continued application of the Waste Hierarchy.
5. Stakeholders to the strategy are increasingly engaged with its delivery.

What is the purpose and structure of this report?

This report provides a “snapshot in time” of the progress being made within the National Waste Programme community to achieve the strategic objectives of the programme. The report is divided into five sections broadly aligned with the strategic benefits (to enable visibility of benefit realisation):

- Section 1 (Benefits 1 and 4) - waste diversion / disposal metrics and waste route availability map.
- Section 2 (Benefit 2) - cost avoidance metrics.
- Section 3 (Benefit 3) - updates from waste producers across the UK, key project tracker showing progress against delivery of projects to support priority business changes, an update on Peer Reviews/Assists, an update on the NWP training framework, details of NWP publications over the past quarter and of external publications / consultations from the past quarter.
- Section 4 (Benefit 5) - information on stakeholder interactions in the quarter and an update on industry issues/concerns.
- Section 5— look forward—information on the priorities for the NWP community over the next 12 months, look forward notice-board, forward calendar and strategic threats and opportunities.

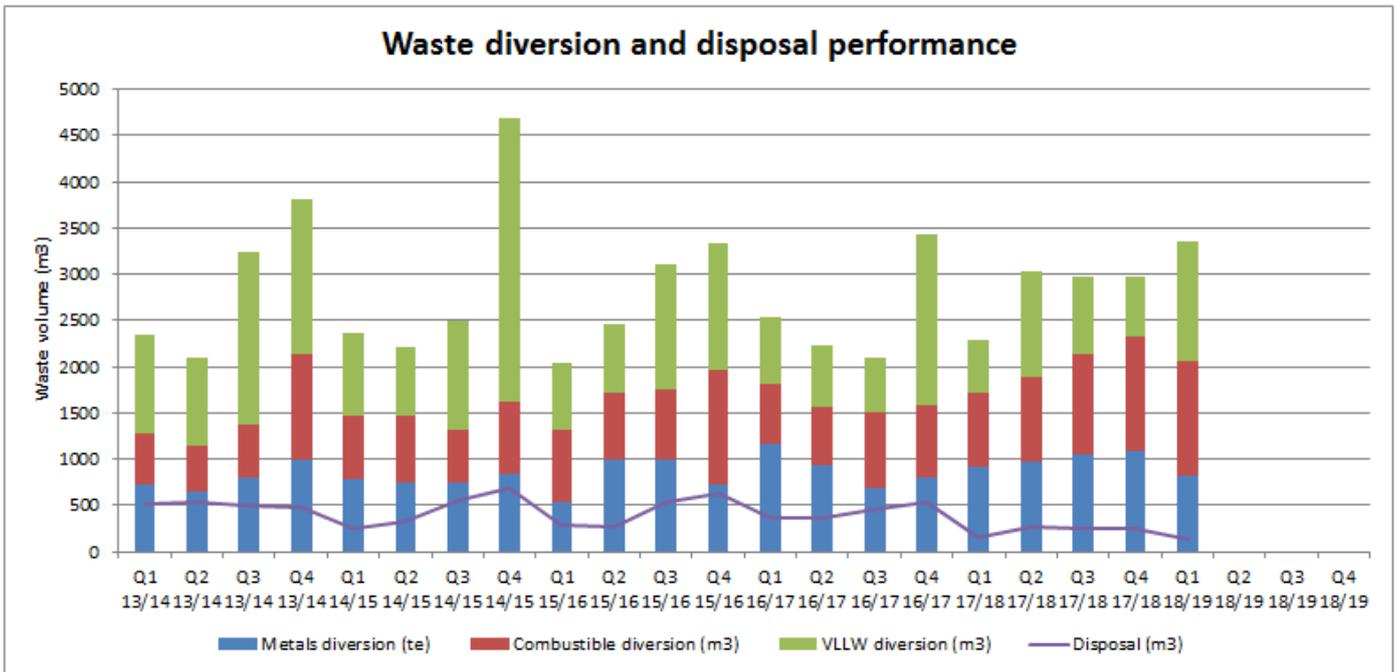
SECTION 1: Benefit 1 — The life of the LLWR is extended to 2130 & Benefit 4—Continued application of the Waste Hierarchy
Waste Diversion and Disposal performance
KEY

- Actual waste diversion is less than JWMP or LLW disposal exceeds JWMP.
- Actual waste diversion or LLW disposal in line with JWMP.
- Actual waste diversion exceeds JWMP or LLW disposal is less than JWMP.

Waste producer	Route	JWMP (for year)	Actual (Year to Date)	Actual Performance against JWMP (Year to Date)	% diversion (Year to Date)
Dounreay Site Restoration Ltd	Combustible (m ³)	0	0	N/A	N/A
	LLW disposal (no. containers)	0	0	N/A	
LLW Repository Ltd	Metallic (te)	0	0		100%
	Combustible (m ³)	156	27		
	VLLW (m ³)	16	0		
	LLW disposal (no. containers)	2	0		
Magnox Ltd	Metallic (te)	1110	258		100%
	Combustible (m ³)	1186	522		
	VLLW (m ³)	9087	1250		
	LLW disposal (no. containers)	42	0		
Sellafield Ltd	Metallic (te)	2800	561		94% including CLESA
	Combustible (m ³)	1800	685		
	VLLW off-site (m ³)	600	50		
	VLLW on-site at CLESA (m ³)	3600	449		
	LLW disposal (no. containers)	80	11		
Non-NDA estate (total)	Metallic (te)	672	0		99%
	Combustible (m ³)	300	6		
	VLLW (m ³)	7618	2022		
	LLW disposal (no. containers)	25	2		
NDA estate (total)	Metallic (te)	3911	819		97 % excluding CLESA
	Combustible (m ³)	3142	1234		
	VLLW off-site (m ³)	9703	1300		
	LLW disposal (no. containers)	124	11		
UK nuclear industry (total)	Metallic (te)	4583	819		98 % excluding LESA
	Combustible (m ³)	3442	1240		
	VLLW (m ³)	17321	3322		
	VLLW on-site (m ³) (CLESA)	3600	451		
	LLW disposal (no. containers)	149	13		

Note: Diversion calculated using National Waste Programme norms and assumptions. Waste producers may use different assumptions in their own calculations.

Waste Diversion and Disposal Performance



Waste diversion in Q1 has exceeded FY17/18’s performance, achieving 98% during Q1 FY18/19 within the NDA and non-NDA estate. It is worth noting that this level of diversion has been achieved even with delays to significant diversion projects (Chapelcross’ metallic project and Harwell’s VLLW project). 13 HHISOs have been disposed of to the Repository, compared with 16 by this time last year.

Availability of Waste Diversion and Disposal Routes

This table provides a summary of the usage of the waste diversion and disposal routes for waste producers across the UK; reflecting the routes used for waste management since 2008 through reclassification to out-of-scope, self-perform, use of direct contracts and use of the LLW Repository Ltd frameworks. This differs to the Waste Metric Dashboard, in that it records information gathered by the National Programme Office and not actuals data provided by the waste producers.

		Organisation																														
		DSRL	LLW Repository Ltd	Magnox Ltd	Sellafield Ltd	AWE	Active Collection Bureau	Babcock Marine	Urenco Nuclear Stewardship	Cristal Pigment UK Ltd	Doosan Power Systems Ltd	HIMNB Clyde	HIMNB Devonport	HIMNB Rosyth	EDF Nuclear Generation Ltd	EDS	GE Healthcare	Medical Research Council	NNL	Nuvia	Police National Centre	RR MoD	Rutherford Appleton Laboratory	Springfields	Cyclife	Tradebe	Tradebe Inutec	UKAEA Culham	Umicore Coating Services Ltd	UniTech Services Group Ltd	Urenco	
Route	M	•	✓	✓	✓	✓	•	•	✓	•	•	•	✓	•	✓	•	•	•	•	•	•	•	✓	✓	•	•	•	•	•	•	•	
	C	•	✓	✓	✓	✓	•	•	✓	•	•	✓	•	•	•	•	•	•	•	•	•	•	✓	•	•	•	•	•	•	•	•	
	V	•	✓	✓	✓	✓	•	•	✓	•	✓	•	•	✓	✗	•	•	•	•	•	•	•	✓	•	•	✓	✓	✓	•	•	•	•
	L	✓	✓	✓	✓	✓	•	•	✓	✓	•	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	•	✓	•	✓	✓	•	✓	•	•	•	•

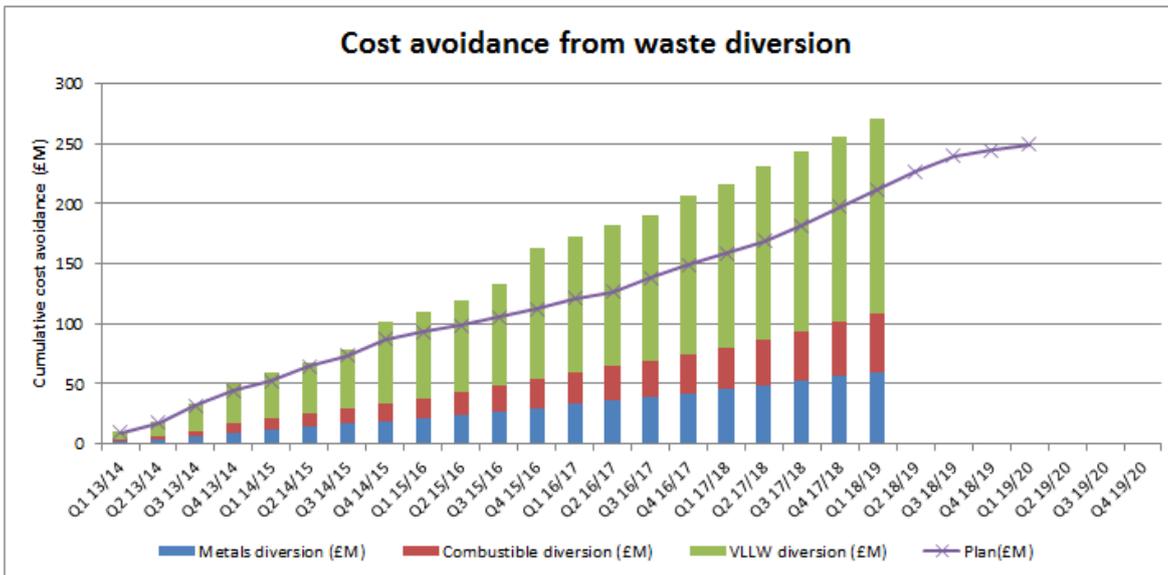
KEY: note that information refers to known route usage (via direct contract, on-site infrastructure or LLWR framework) since 2008.

- ✗ Waste route is not open (either not permitted or has not been opened by the waste producer).
- Waste route is open but is not in use by the waste producer.
- ✓ Waste route is open and is in use by the waste producer.

- M Metallic treatment (surface decontamination and / or metal melting).
- C Combustible waste management (incineration).
- V Very Low Level Waste / low-activity Low Level Waste disposal.
- L LLW disposal (to LLWR or to the Dounreay near site disposal repository/demolition waste vault).

SECTION 2: Benefit 2 — Overall waste management costs are reduced

Cost Avoidance from Waste Diversion



Cost avoidance is calculated by comparing the norm cost for the relevant route against the cost for disposal at the repository for the actual volumes diverted during the quarter.

SECTION 3: Benefit 3 — Optimised LLW management that supports and enables effective decommissioning and hazard reduction

Waste Producer Quarterly Updates



A good start to the programme of diversion during Q1, including 561te of metal diverted for recycling, 499m³ of VLLW to landfill capabilities, and 685m³ of material diverted for incineration. During Q1 there has been a reduction in the number of containers generated and transferred for disposal.

To support enhancing effective LLW management and diversion from LLWR, focus has been on setting out the approach for waste capability development, identifying a number of near term deliverables. Engagement on the NWP-led project to develop a Decay Storage Business Case has commenced.

Focus areas in Q1 included:

- A site wide peer assist covering excavated wastes was completed. Future demand and capabilities were aligned during the peer assist with development of a forward looking programme of work.
- Development of a 2nd soft bagged waste trial to cover larger volumes and waste streams. The targeted feedstock will be disposal waste which has been traditionally routed to WAMAC.
- Developing the concept of waste pilots to bring about transformational change across the site. A feasibility study will commence in Q2 for the FGMSP waste stream.

Key Boundary LLW/ILW areas have been progressed:

- A schedule to transfer 15 WAGR boxes to LLWR has been agreed with final stage approvals now complete. Work has commenced to carry out bespoke Discrete Item assessments on the next population residing within WAGR store.
- Building on work previously progressed with AGR graphite sleeves a number of problem definition and optioneering workshops have taken place to further explore the disposability opportunity.


Magneox

At the end of Quarter 1, Magnox has diverted an impressive 97%* of its LLW from the repository, predominantly VLLW from the Harwell LETP project. This high diversion rate is also due to there being minimal scheduled disposals or supercompaction campaigns to date (they are mostly planned for back end of the year). Bradwell FED continues to progress with consignments delivered to LLWR now 'business as usual'. The Chapelcross heat exchangers top ducts project has recommenced consignments following a pause whilst water ingress issues were investigated. A contract award has been finalised for the management of ILW/LLW boundary wet wastes from Dungeness (first of a kind) and will be announced in Q2. The Oldbury Wet Waste (second of a kind) and Winfrith TRS Drums (Magneox scope only, not LLWR scope) projects have been deferred as a result of portfolio management to meet funding constraints this year. Activity assessment work has progressed well on potential diversion of Harwell NMT (Nuclear Materials Transfer) drums to LLW routes. The Waste Characterisation service (WACASS) has been implemented and is now in use across the Magnox fleet.


Dounreay
Decommissioning excellence

There have been no disposals of LLW or DLLW (Demolition Low Level Waste) in Q1, and the Encapsulation Plant has also been shut down for the duration. WRACS assay and supercompaction operations have continued and 2080 drums have been compacted. The first batch of LLW oils has been decanted into new IBCs for disposal - work continues in preparation for this disposal. A contract has been let to carry out a verification exercise on the stored and disposed of LLW inventories against the D3100 Vaults Waste Acceptance Rules.


LLW Repository Ltd

LLW Repository has had a slow start to the year with some consignments not going as planned. This has been down to Service Providers either being at full capacity or on a planned shutdown. Our routinely scheduled consignments are not affected and these have all been achieved as scheduled. We are currently liaising with Service Delivery to find a solution so that we can get waste moving off the site as we are exporting considerable volumes of waste on a weekly basis. Support to the LLW Ops team and Projects continues with PWMP updates and waste tasks included in schedules.

Non-NDA estate

Diversion consignments continue with non-NDA estate transactions being routine business across the portfolio of services. Discussions continue between non-NDA customers and LLWR regarding procurement of their VLLW disposal service requirements under the new VLLW framework, which is expected to be available at the beginning of Q2.

National Waste Programme Office Update

The National Waste Programme (NWP) FY18/19 Programme of Work (PoW) is well underway, with a number of projects in the process of procurement, and two having selected a contractor.

The NWP sponsored and attended the Nuclear Waste and Decommissioning Research Forum Decommissioning Working Group Steering Group Industry Event, focussed on alpha decommissioning. The event included attendees from waste producers, regulators and supply chain.

The NWP has continued to collaborate with the Problematic Waste (PW) Integrated Project Team (IPT). There was a meeting of the Core Team in April to discuss the FY18/19 PoW, and a workshop in June to develop the problem statements on Mercury and Uranics as a PW.

The Integrated Radioactive Waste Programme has made significant progress in Q1, with the first Programme Board and first stakeholder workshop in early June. The workshop involved participation from 31 people from over 15 organisations and included a discussion of the proposed storyboards for the Baseline Review.

*: Magnox's Diversion % is calculated using different metrics than those employed in the table on Page 2.

Key Project Tracker

The NWP community agree, on an annual basis, a number of priority business changes from the NWP Benefit Map. These priority business changes are those which are critical to supporting strategy implementation in the near term or are longer term changes which need to be initiated or driven to ensure they are delivered when the nuclear industry need them. This tracker provides a snapshot of performance of delivery of projects (tasks undertaken by waste producers) or enablers (tasks outwith of the control of waste producers, such as those undertaken by the regulators) which support achievement of the priority business changes for the current FY.

Priority Business Change	Project	Status
Waste management processes enable robust and effective material diversion; with streamlined characterisation, sorting, segregation, packaging and consignment.	Magnox —Deliver the Magnox Waste Assurance Programme.	
	Sellafield —Undertake a review of the SL BAT for LA-LLW / VLLW metal. Develop and implement a programme of work to introduce any option(s) deemed to provide a significant benefit.	
	Sellafield —Further optimise the routing of metals between on-site and off-site capabilities.	
	Sellafield —Increase segregation of inorganic material currently disposed as LLW, in line with review findings.	
Waste management processes enable robust and effective material diversion; with streamlined characterisation, sorting, segregation, packaging and consignment. There is a flexible, sustainable supply chain infrastructure which includes enhanced options. The supply chain offers characterisation, sorting, segregation, pre-treatment and conditioning infrastructure to complement the infrastructure on sites. A full understanding of the LLWR ESC assumptions and material limits is available and informs waste producer operations.	LLWR —Project to explore the level of understanding of the LLWR WAC amongst key stakeholder groups and implementation of a programme of initiatives to improve this.	
	LLWR —Project to identify and implement improvements to the processes used in Waste Management Services.	
	LLWR —Project to explore and identify the requirements for the next evolution of the Waste Services Treatment Frameworks.	
	LLWR —Delivery of project to re-compete the Waste Services Treatment Framework.	
	LLWR —Implement outcomes from review of the LLWR Waste Acceptance Process.	
	LLWR —Undertake a project to review the LLWR Waste Acceptance Process to increase usability and robustness of arrangements.	
	LLWR —Delivery of a programme to examine and enhance LLWR arrangements to mitigate against the risk of mis-consignment of waste.	

KEY

-  Project not yet commenced.
-  Project has commenced and is on target to deliver on or ahead of schedule.
-  Project has commenced and is behind schedule; but is expected to recover.
-  Project has commenced and is behind schedule; but is not expected to recover.
-  Project is complete.

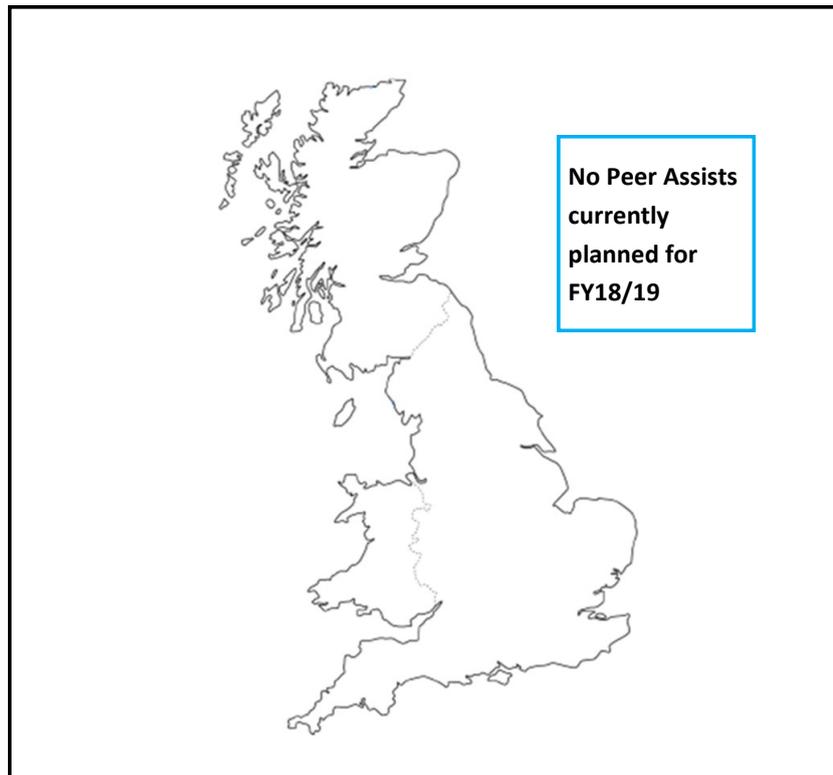
Priority Business Change	Project	Status
There is a flexible, sustainable supply chain infrastructure which includes enhanced options. The supply chain offers characterisation, sorting, segregation, pre-treatment and conditioning infrastructure to complement the infrastructure on sites.	Magnox —Cross-estate project to understand and assess the disposability of wastes identified in the 2017 Problematic Waste Inventory as problematic owing to not being disposable in the LLWR.	
	Sellafield —Undertake analysis to determine the best value SL/supply chain balance for the management of LLW.	
	Sellafield —Support LLWR to assess and implement the solutions to the current Waste Services business model.	
A full understanding of the LLWR ESC assumptions and material limits is available and informs waste producer operations.	LLWR — Project to enable the utilisation of magazine demolition rubble as profiling material for capping of Vault 8.	
	Magnox —Participation in a project to explore waste producer perspectives on their understanding of the LLWR WAC and its structure, with the aim of identifying potential improvements / initiatives to improve waste producer understanding of the WAC.	
	Sellafield —Work with LLWR to fully understand the ESC and capacity management and identify where real benefits can be derived from changes.	
Risk Based disposability approaches have been developed and are being implemented.	LLWR —project to deliver an outline business case on decay storage of a specific short-lived ILW wastestream.	
There are solutions in place for most problematic LLW, including items that fall outside the LLWR ESC.	LLWR —Deliver the Problematic Waste IPT (jointly with RWM).	
	LLWR —Project to develop an information resource to collate information on projects and opportunities for ILW to LLW reclassification.	
	Magnox —Project to determine solutions for Magnox problematic wastes (various).	
	Magnox —Delivery of problematic waste IPT projects, on specific problematic waste groups.	
Appropriate and flexible packaging and transport assets available; with increased use of rail and the ability to use mixed loads where appropriate.	LLWR —Participation in NDA Critical Enablers transport and packaging strategy development.	
	Magnox —Cross estate project to explore packaging of LLW and ILW with the potential to be managed as LLW (including that already packaged as ILW).	
	LLWR —Project to establish transport and packaging agreements with Sellafield Ltd for transfer of profiling material for capping programme.	

KEY

-  Project not yet commenced.
-  Project has commenced and is on target to deliver on or ahead of schedule.
-  Project has commenced and is behind schedule; but is expected to recover.
-  Project has commenced and is behind schedule; but is not expected to recover.
-  Project is complete.

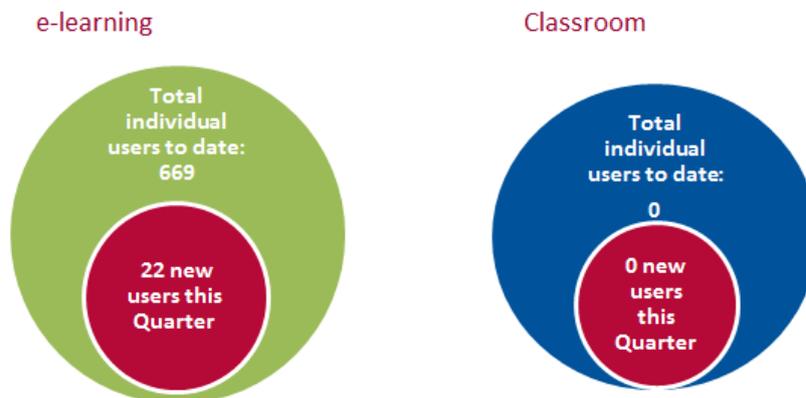
Peer Reviews and Peer Assists

This provides a summary of the planned and delivered peer reviews / peer assists during the financial year.

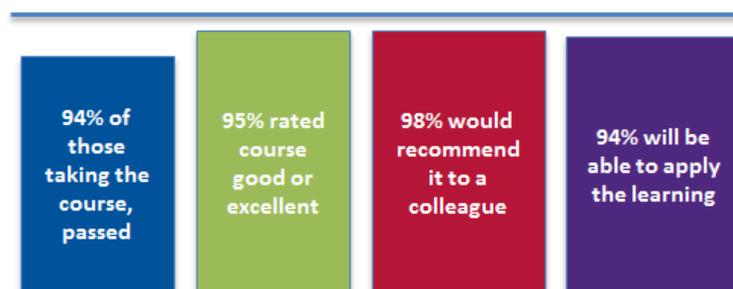


NWP Training

Use of training modules



User feedback to date:



Looking Back Notice Board— publications, consultations and information

EXTERNAL REPORT
Euratom exit: quarterly update, April to June 2018

This report is the second of a series of quarterly updates to Parliament on the government's progress on the UK's exit from the Euratom Treaty.

Published June 2018


NWP PUBLICATION
LLWR & Magnox Joint Waste Management Plans

A Joint Waste Management Plan (JWMP) is a proactive management plan for the next 5 years that has been developed by the SLC in conjunction with LLW Repository Ltd.

Published June 2018


EXTERNAL REPORT
Nuclear sector deal

This Sector Deal builds on the government's historical partnership with the UK nuclear sector.

It ensures that the UK's nuclear sector remains cost competitive with other forms of low-carbon technologies to support our Clean Growth Strategy and Grand Challenge. Through adopting new construction techniques and innovative approaches to manufacturing, the deal will reduce the costs of building new reactors in a way that builds domestic supply chain capability and skills.

Published June 2018


EXTERNAL REPORT
UK strategy for radioactive discharges: 2018 review of the 2009 strategy

The [2009 Radioactive Discharges Strategy](#), alongside the [OSPAR Radioactive Substances Strategy](#), aims to prevent pollution of the OSPAR maritime area (the North East Atlantic) from radiation through progressive and substantial reductions of discharges, emissions and losses of radioactive substances.

Published June 2018


EXTERNAL CONSULTATION
The regulation of nuclear sites in the final stages of decommissioning and clean-up

Working with the regulators and the Nuclear Decommissioning Authority (NDA), BEIS has identified an opportunity to improve current arrangements that apply to the regulation of the final stages of nuclear site decommissioning and clean-up. BEIS published [a discussion paper on the principle of these proposals](#) in November 2016 and are now consulting on the detailed proposals, in particular the arrangements for exiting the nuclear third party liability regime and for ending the nuclear site licence.

Consultation closed on 3 July 2018


EXTERNAL CONSULTATION
Environmental impact assessment: Nuclear Decommissioning Regulations

This consultation invites comments on proposals for implementing amendments of the European Union Directive on environmental impact assessments, in so far as the Directive applies to consent for nuclear reactor decommissioning projects in the UK under the Nuclear Reactors (Environmental Impact Assessment for Decommissioning) Regulations.

Consultation closed on 20 June 2018



NWP Office publications, reports or training.

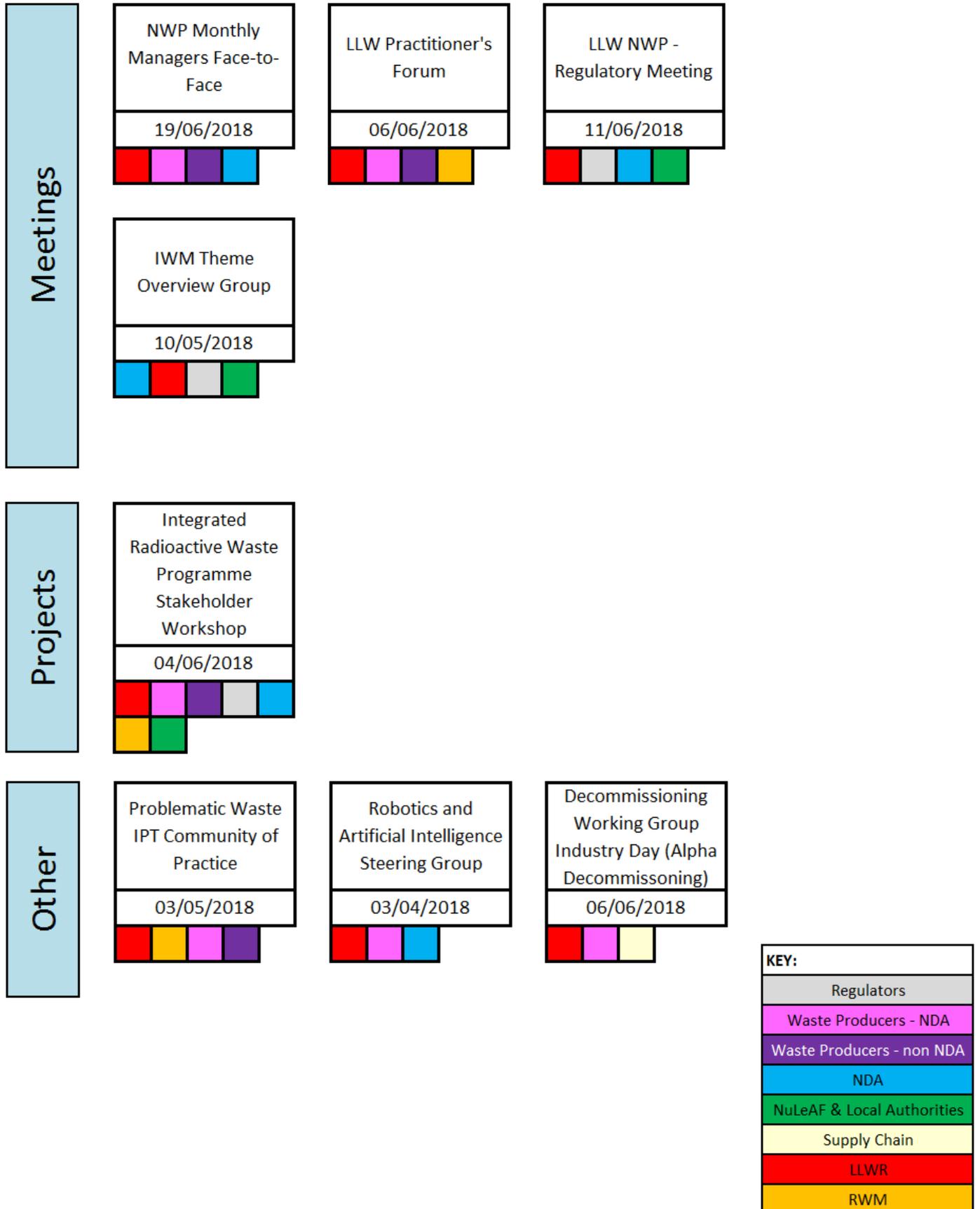


Publications or consultations external to the NWP Office.

NWP guidance, publications and information about training available via <http://gov.uk/LLWR>

SECTION 4: Benefit 5 — stakeholders to the strategy are increasingly engaged with its delivery.

Stakeholder interactions in the NWP during the quarter



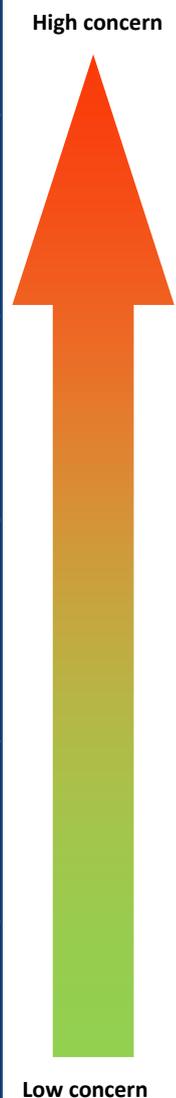
Stakeholders' Key Issues and Concerns

The following table provides a summary of the key issues and concerns within the nuclear industry relevant to LLW management, collected by the National Waste Programme through formal and informal interactions with waste producers. The chart provides a summary of each issue, a statement of the change in status for that issue (i.e. whether the issue has become more or less important to the NWP community) and a commentary on actions that are being taken to resolve the issue.

KEY

-  No change in issue status since last quarter.
-  Issue status has increased since last quarter.
-  Issue status has reduced since last quarter.

Issue	Change since last quarter	Commentary
Risk of waste mis-consignment		<ul style="list-style-type: none"> • There were some waste mis-consignment near-misses and concerns during FY17/18, and a number of lower-level near-misses and concerns in FY18/19. • LLW Repository Ltd is working with waste producers and initiating additional work to support further mitigation of this risk.
Paris-Brussels nuclear liability implementation		<ul style="list-style-type: none"> • Government working with NDA, LLW Repository Ltd and the supply chain to understand the changes and mitigate impacts. • Uncertainty remains as to the timescale for implementation.
Access to supercompaction facilities for non-NDA estate		<ul style="list-style-type: none"> • One supercompaction facility not accessible for external waste producers who wish to use it due to challenges with LLWR WAC5 information requirements compliance.
Waste packaging and transport		<ul style="list-style-type: none"> • Issues with Waste Loading Plans, hauliers and the range of waste containers available etc. continue to impact waste producers.
Complex projects and problematic waste management		<ul style="list-style-type: none"> • Greater interest and impetus in this area, with a number of complex projects being delivered. • The Problematic Waste Integrated Project Team (involving RWM, NDA and LLW Repository Ltd) is working with waste producers to identify opportunities for problematic waste management.



SECTION 5: Looking Forward

Magnox

- Progress LAW improvements project, focusing on activity assessment spreadsheets rationalisation and fit-for-purpose ways of characterising decommissioning projects to improve efficiency.
- Participate in new 2018/19 collaborative NWP/IPT (PBI & Non-PBI) cross estate projects.
- Announce contractor for management of Dungeness wet ILW/LLW boundary wastes, as a first of a kind.
- Seek disposability approvals from LLWR for FED from Sizewell and Oldbury.
- Produce JWMP15, including a review of waste forecasts as a result of portfolio management decisions and Bradwell's approach to C&M entry.


Dounreay
Decommissioning excellence

- Complete decant and consignment of LLW oils and solvents for off site incineration.
- Resume DLLW disposals to D3130 Vault.
- Continue development of business case for LLW Handling Facility to allow waste diversion and better packaging fractions in disposal containers.
- Continue with work on variation to D3100 RSA Authorisation.
- Complete verification exercise on stored wastes and resume LLW encapsulation and disposal operations.


Sellafield Ltd

- Scope the soft bagged waste trial and further competition.
- Complete waste pilot feasibility study.
- Complete the transfer of WAGR boxes to LLWR in line with agreed transfer schedule and progress next tranche of assessments.
- Progress programme of agreed SL/LLWR workshops to establish BAT approach to manage the identified AGR graphite drums.
- Progress LLW and sub LLW programme study.


LLW Repository Ltd

- Consignment of soft waste associated with the Legacy Drums Project.
- Consignment of the waste items from the various magazines and continue making full use of the diversion services.
- There will be a lot of focus on waste for the PCM delivery programme in FY 18/19 as the project ramps down towards the end of the year.
- Continue supporting the other areas of site with their waste requirements providing advice when needed.

Non-NDA Estate

- Continue embedding business as usual arrangements for waste diversion.
- Open new waste management routes as applicable and appropriate.
- Seek opportunities for management of more complex wastes.

National Waste Programme Office

- Work to progress the IRWP Baseline Review; and the Supply Chain Management Opportunities project.
- Close out procurements for the Soft-Solid Organic BAT Review, and Exploration of Conventional Waste Management Innovations project.
- Make progress on key collaborative projects—Packaging Demand to 2050, Exploration of Problematic Waste Disposal to the LLWR and Outline Business Case for Decay Storage.
- Continue support to the work on the proposed Problematic Waste IPT and Thermal Treatment IPT crossover.

NWP Notice Board — looking forward

EXTERNAL CONSULTATION
Nuclear Safeguards Regulations

Following withdrawal from the European Atomic Energy Community (Euratom), the UK will be introducing new Nuclear Safeguards Regulations to enable a domestic nuclear safeguards regime to operate in the UK. This consultation seeks views on the operability and effectiveness of these draft Nuclear Safeguards Regulations.

The government has committed to establish a regime that will operate in a similar way to existing arrangements, but with changes made to the regulations to ensure they are appropriate for the domestic, legislative and operational landscape in which they operate.

If passed into law, these proposed Regulations will allow the Office for Nuclear Regulation (ONR) to meet international obligations from day one of exit, and to build, over time, a safeguards regime equivalent in coverage and effectiveness to that currently provided by Euratom.

Consultation closes on 14 September 2018



Publication or consultation from the NWP Office.



Publication or consultation external to the NWP Office.

NWP guidance, publications and information about training available via <http://gov.uk/LLWR>

Forward Calendar

July 2018						
M	T	W	T	F	S	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

- 04/07/18** – Problematic Waste Mercury and Uranics joint Workshop
- 11/07/18** – Decay Storage Project – Case for Change & Optioneering Stakeholder Workshop (MA)
- 16/07/18** – NWP Monthly Managers Meeting (T)
- 26/07/18** – ILW to LLW Reclassification Opportunities Information Resource (Internal) Workshop (C)
- 20/07/18** – LLW NWP Programme Board Meeting (MA)

August 2018						
M	T	W	T	F	S	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

- 15/08/18** – Packaging to 2050 of LLW as identified in the UKRWI Stakeholder Workshop (TBC)
- 20/08/18** – NWP Monthly Managers Meeting (T)

September 2018						
M	T	W	T	F	S	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

- 18/09/18** – NWP Programme Managers Meeting Face-to-Face (TBC)
- 19/09/18** – LLW NWP Delivery Overview Group (MA)

KEY			
	Meeting		Project workshop
	Peer Review / Peer Assist		Deadlines
BM=Birmingham MA=Manchester WA=Warrington C=Cumbria T=Teleconference			

Strategic Threats

Threat	Impacts	Proximity	Rating (current)	Rating (target)	Mitigation activities
Significant waste mis-consignment event causes partial or full closure of diversion or disposal route(s).	<p>Waste route(s) closed for individual producer or whole industry.</p> <p>Closure of routes reduces supply chain sustainability (supply chain organisation(s) withdraws from market).</p> <p>Increased waste disposal due to loss of diversion routes.</p> <p>Increased waste accumulation due to lack of disposal routes.</p> <p>Loss of radiological / volumetric capacity at LLWR due to potential loss of diversion routes.</p> <p>Increased costs for waste producers.</p> <p>NDA required to invest capital in new facilities.</p>	Near term	High (14)	Low (5)	<p>Waste producers review and improve waste consignment practices/barriers.</p> <p>Guidance on waste consignment developed by LLWR.</p> <p>Peer Reviews and Assists conducted at some sites covering mis-consignment.</p> <p>Highlighted in NWP training modules.</p> <p>External buffer storage capability on line to manage waste flows.</p> <p>Temporary LLWR Task force established for investigation of some recent mis-consignment events.</p>
Insufficient non radiological, radiological or volumetric capacity at LLWR.	<p>Inadequate capacity at LLWR; leads to requirement for new repository.</p> <p>Potential Increase in number/volume of problematic streams.</p> <p>Some waste may have to be managed as HAW.</p> <p>Creates the need for additional storage and potentially higher treatment and disposal costs.</p>	Medium term	Medium (9)	Very low (1)	<p>Increased or enhanced incentivisation for diversion.</p> <p>NDA intervention or direct action to engender different approaches at waste producer sites.</p>

Threat	Impacts	Proximity	Rating (current)	Rating (target)	Mitigation activities
Large volumes of waste from contaminated land remediation are generated and have to be managed as lower activity waste.	<p>Disposal of increased volumes of waste result in inadequate capacity at LLWR; leading to requirement for new repository.</p> <p>Some waste may need to be managed as HAW.</p> <p>Creates need for additional storage.</p> <p>Reduced volumetric capacity at LALLW/VLLW disposal sites.</p>	Medium term	Medium (9)	Very low (2)	<p>NDA working with regulators, planning authorities and other stakeholders to develop de-licensing approach and arrangement.</p> <p>Revised regulatory guidance on in situ disposal drafted (GRR); being trialled at three sites.</p> <p>On-site or near-site disposal of LALLW/VLLW.</p>
Insufficient radiological, non-radiological or volumetric capacity in the supply chain.	<p>Fewer routes available; less capability and less redundancy in marketplace.</p> <p>Higher prices.</p> <p>No/inadequate diversion routes or capacity for waste.</p> <p>Excess volumes being sent to LLWR, so inadequate capacity at repository.</p> <p>NDA required to invest capital in new facilities.</p> <p>Increased waste accumulation due to lack of disposal routes.</p> <p>Increased costs for waste producers.</p>	Near term	Medium (8)	Low (5)	<p>Working with consignors to improve short term forecasting of waste.</p> <p>Introduction of new Waste Treatment Services Framework (estimated 2020).</p>

Threat	Impacts	Proximity	Rating (current)	Rating (target)	Mitigation activities
Changes in legislation, governmental policy and regulatory perspective prevents execution of LLW Strategy.	<p>Could restrict ability to divert or dispose of LLW.</p> <p>Increased volume of waste that needs to be managed as LLW or that is disposable at LLWR.</p> <p>Additional cost to treat and dispose of waste to meet revised regulatory expectations.</p> <p>Adverse impact on LLWR and/or supply chain capacity.</p>	Medium term	Very Low (2)		N/A - risk tolerated.
Stakeholder concerns over radioactive waste management constrain access to existing routes and / or development of new routes and facilities.	<p>Increased volumes of waste have to be disposed of at LLWR.</p> <p>Supply chain cannot secure authorisation for sites/facilities.</p> <p>Transport of waste is constrained.</p> <p>Waste producers unable or unwilling to use the routes because of stakeholder opposition.</p> <p>Inadequate capacity at the LLWR; requiring need for new repository in worst case.</p> <p>Requirement to buffer store more VLLW and LLW.</p>	Near term	Very Low (2)		N/A - risk tolerated.

Strategic Opportunities

Opportunity	Impacts	Proximity	Rating (current)	Rating (target)	Realisation activities
Optimised use of waste diversion and disposal routes by waste producers.	<p>Diversion is optimised.</p> <p>Use of most cost effective, optimised routes for radioactive waste.</p> <p>Optimised used of repository capacity (disposal of only those wastes that require engineered protections).</p>	Near term	High (16)	High (18)	<p>Execute NWP scope of work and programmes at waste producer sites.</p> <p>Sellafield Ltd pursue re-Permitting of CLESA and plans for CLESA2.</p> <p>Trialling and roll out of application of GRR by regulators.</p> <p>Further studies to understand potential opportunity for re-use of VLLW/LALLW in LLWR cap.</p> <p>Liaising with BEIS, NDA and supply chain organisations to minimise adverse impacts of Paris-Brussels and to further legislative exemption for landfill sites.</p>
Management solutions available and in use for complex, challenging and problematic wastes.	<p>Prompt hazard and risk reduction.</p> <p>Earlier solution for the management of such wastes.</p> <p>Cost savings across industry.</p> <p>Routes available for problematic waste.</p> <p>Avoidance of critical path schedule impacts due to inability to sentence problematic wastes that need to be dealt with.</p>	Long term	Medium (8)	High (12)	<p>Work through Problematic Waste IPT to identify and pursue opportunities.</p> <p>Work to identify opportunities for SL-ILW and Boundary Waste through NWP projects.</p> <p>Project on HAW Treatment capability being delivered by LLWR NWP / RWM and additional work through WMS.</p> <p>Waste producers progressing opportunities for reclassification of ILW.</p> <p>Waste producers undertake work to progress opportunities for management of complex / problematic wastes.</p> <p>LLWR work with suppliers to understand and promote opportunities.</p>

Opportunity	Impacts	Proximity	Rating (current)	Rating (target)	Realisation activities
Improve the sustainability and health of the supply chain.	<p>Better environment for investment in capacity and capability by supply chain.</p> <p>Continued presence for the supply chain.</p> <p>Improved value from the supply chain.</p> <p>Continued and optimised waste diversion.</p> <p>Release of LLWR resource for other activities (no need for liability channelling arrangements).</p> <p>Reduced prices (landfills may no longer require insurance for nuclear liabilities).</p>	Near term	Medium (8)	High (12)	<p>Future competitions for frameworks continue to consider sustainability.</p> <p>Embed aggregating process.</p> <p>Supply chain sustainability review undertaken by LLWR on behalf of NDA in FY16/17 and FY17/18.</p> <p>During FY17/18, review of customer demand for LLWR WMS Frameworks and specific focussed engagement on frameworks to be recompleted in near term.</p> <p>Delivery of inventory improvement tasks.</p> <p>Implementation of a new design for Waste Services Frameworks (estimated 2020).</p>
Non-NDA estate consignors and New Build are fully engaged with the Strategy.	<p>Diversion maximised.</p> <p>Waste hierarchy applied and new waste management routes being used.</p>	Near term	Medium (8)	High (12)	<p>Potential to interact with New Build forums to increase visibility of NWP.</p>
Management solutions for earlier management of ILW employed.	<p>Potential reduction in storage and disposal costs for waste producers.</p> <p>Prompt hazard and risk reduction.</p> <p>Diversion from GDF maximised.</p> <p>Improved value from supply chain.</p> <p>Enables earlier solution for waste producer.</p>	Medium term	Medium (8)	High (16)	<p>Ongoing collaboration work.</p> <p>Delivery of projects FY17/18 to investigate boundary waste management.</p> <p>Work on Near Surface Disposal IPT.</p> <p>Share LFE from projects to manage complex wastes.</p> <p>NWP On-Site Decay Storage Principles project being delivered FY17/18.</p> <p>Alignment of permits, WACs and planning consents to safety cases.</p>

Opportunity	Impacts	Proximity	Rating (current)	Rating (target)	Realisation activities
Fit-for-purpose, flexible and agile package fleets available for LLW management.	Optimised use of transport models. Quicker and cheaper LLW management.	Long term	Low (4)	Medium (8)	Execute LTP 13 scope. Develop new and fit-for-purpose packages. NDA work on transport and packaging strategy initiated in FY17/18 under Critical Enablers thematic area.
Buffer storage capabilities available and in use.	Diversion maximised. Improved value from supply chain. Allows variability in waste arisings to be managed to remove peaks and troughs to supply chain. Enables greater aggregation of waste from around the UK for treatment (driving better value). Enables an earlier solution (removal of waste from site) for consignors.	Medium term	Very Low (2)	Low (4)	Undertake work to understand potential for and logistics of buffer storage options (NWP Gate 0 project) and next steps of that project.
Improved use of rail infrastructure to support management of LLW.	Reduced use of road (better carbon footprint, improved safety). Potential for improved value from supply chain.	Medium term	Very Low (2)	Low (4)	DRS and LLWR undertaking some work to establish what might be available. NDA work on transport and packaging strategy initiated in FY17/18 under Critical Enablers thematic area.