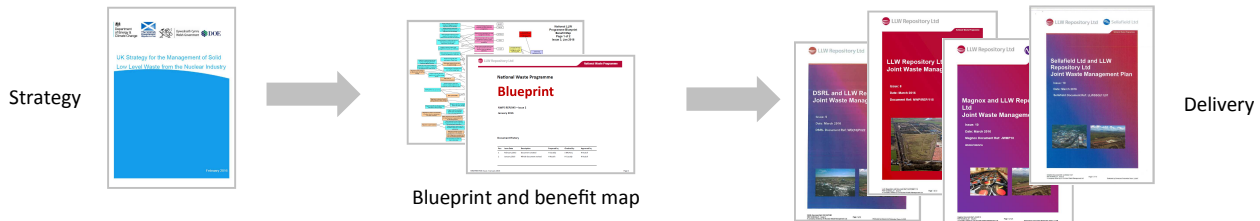


NATIONAL WASTE PROGRAMME QUARTERLY REPORT Q4 FY16/17

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 Nuclear Industry Solid LLW Strategy*. 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 the Department for Business, Energy and Industrial Strategy (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 mission 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 increased to 2130 & Benefit 4: continued application of the Waste Hierarchy.
Waste diversion and disposal performance
KEY


Actual waste diversion is less than forecast or LLW waste disposal exceeds forecast.

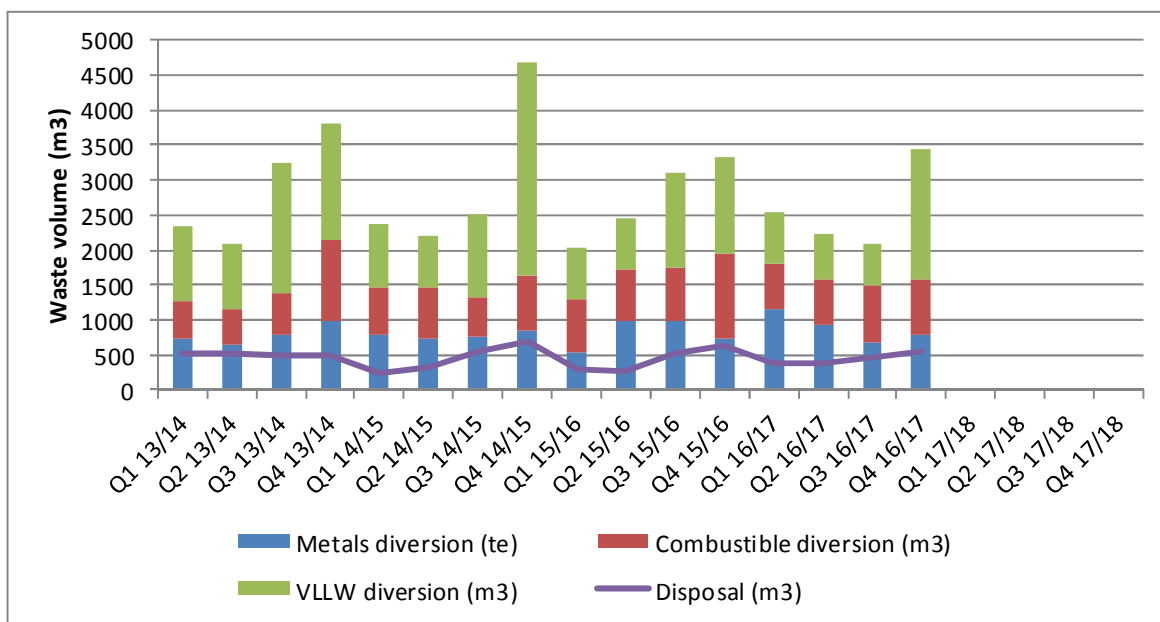


Actual waste diversion in line with forecast or exceeds forecast. LLW waste disposal in line with forecast or is less than forecast.

Waste producer	Route	Plan (for year)	Actual (YTD)	Performance against forecast (for Q4)	% diversion (YTD)
Dounreay	Combustible (m ³)	40	0		N/A
	LLW disposal (no. containers)	600	42		
LLW Repository Ltd	Metallic (te)	7	51		96%
	Combustible (m ³)	64	74		
	VLLW (m ³)	30	126		
	LLW disposal (no. containers)	1	1		
Magnox Ltd	Metallic (te)	948	1000		97% ¹
	Combustible (m ³)	1318	1596		
	VLLW (m ³)	2085	2778		
	LLW disposal (no. containers)	23	18		
Sellafield Ltd	Metallic (te)	2365	2511		91% (including CLESA)
	Combustible (m ³)	1100	1226		
	VLLW (m ³)	8363	9062		
	LLW disposal (no. containers)	117	126		
Non-NDA estate	Metallic (te)	473	293		92%
	Combustible (m ³)	514	204		
	VLLW (m ³)	824	2680		
	LLW disposal (no. containers)	56	29		
NDA estate (total)	Metallic (te)	3320	3562		88% (excluding CLESA)
	Combustible (m ³)	2522	2896		
	VLLW off-site (m ³)	2915	3829		93% (including CLESA)
	VLLW on-site (m ³)	7563	8136		
	LLW disposal at LLWR (no. containers)	141	145		
UK nuclear industry (total)	Metallic (te)	3793	3855		89% (excluding CLESA)
	Combustible (m ³)	2996	3100		
	VLLW off-site (m ³)	3739	6509		93% (including CLESA)
	VLLW on-site (m ³)	7563	8136		
	LLW disposal at LLWR (no. containers)	197	174		

¹ Diversion calculated as 97% using National Waste Programme norms and assumptions. This is calculated as 91% by Magnox Ltd based on their calculation assumptions.

Waste diversion and disposal performance



Waste diversion performance has remained high at 88% (excluding CLESA) during Q4 FY16/17 within the NDA and non-NDA estate. The low rate of waste disposal at the LLW Repository observed in FY15/16 has continued with a total of 174 containers disposed at LLWR during FY16/17. Waste diversion has been strong across all diversion routes within the estate (with diversion ahead of forecast for Sellafield Ltd, Magnox Ltd and LLW Repository Ltd); and in the non-NDA estate also, particularly for VLLW disposal. This level of diversion, if it continues, should ensure adequate disposal capacity at the LLWR until 2130.

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	Capenhurst Nuclear Services	Cristal Pigment UK Ltd	Doosan Power Systems Ltd	HMNB Clyde	HMNB Devonport	HMNB 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	o	✓	✓	✓	✓	o	o	✓	o	o	o	✓	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	
	C	o	✓	✓	✓	✓	o	o	✓	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
	V	✓	✓	✓	✓	✓	o	o	✓	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
	L	✓	✓	✓	✓	✓	o	o	✓	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o

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).

o 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).

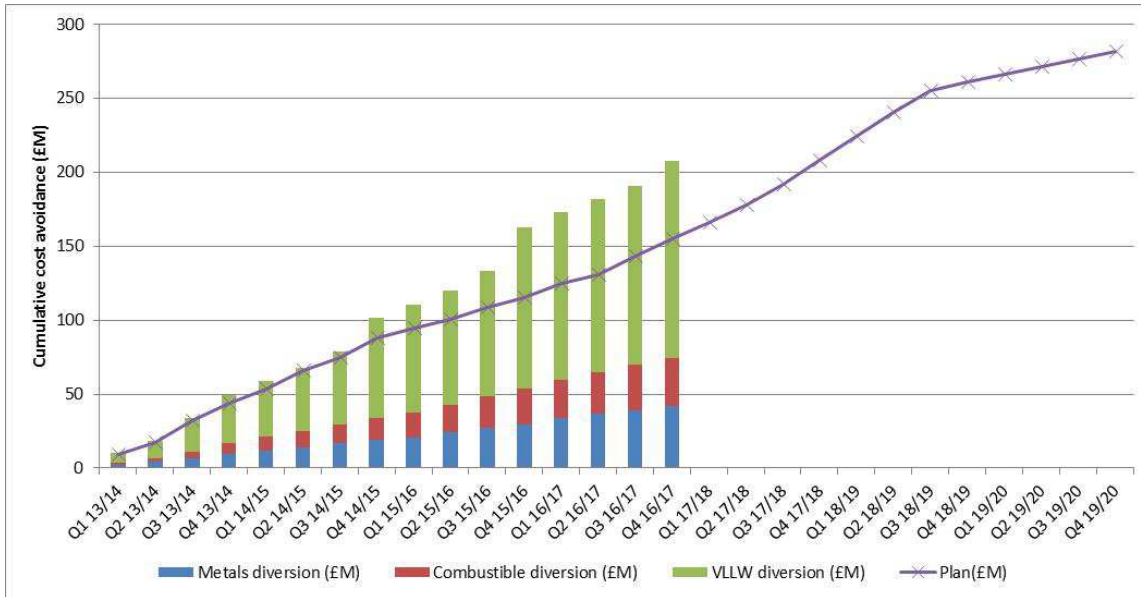
C Combustible waste management (incineration).

V Very low level waste / low-activity low level waste disposal.

L LLW disposal (to LLWR or to the Doune near site disposal repository).

SECTION 2: Benefit 2 — overall waste management costs are reduced.

Waste diversion and disposal performance



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 updates (performance during Q4)



A strong programme of diversion was completed during Q4, including; 460te of metal diverted for recycling, 1850m3 of VLLW to a combination of on-site and off-site capabilities, and 440m3 of material diverted for incineration. In addition, special transport arrangements were successfully implemented for the off-site transfer of a 112te legacy Tritium mortuary for further analysis, pre-treatment and disposal. Overall in excess 91% of LLW was successfully diverted away from LLWR during FY16. JWMP reviewed and updated to reflect forward planned diversions and proposed transformational projects.

Formal submission to extend the on-site landfill Post-Closure Radiological Safety Assessment, including an associated permit change, submitted to EA for consideration.

Initial Disposability Assessment received from LLWR confirmed that more than 50% of the packages packed during the decommissioning of WAGR may be suitable for LLW disposal. Forward programme developed to progress the next stages of this work stream, with a focus on detailed characterisation, transport and emplacement.

High level Disposability Assessment received on the feasibility of managing graphite arising from the dismantling of AGR fuel elements as LLW. Further work identified to improve characterisation and remove identified pessimisms from the C-14 release modelling.

A detailed review of ILW streams has been completed to support the short-lived ILW and boundary work streams being led by the NWP. The analyses indicate that significant volumes of the current inventory could potentially be safely disposed at a shallow or near surface disposal facility. These work streams will be progressed during FY17/18.

Good progress continues to be made with the integration of the site decommissioning and waste management functions.

 **Magnox**

At the end of Quarter 4, Magnox has diverted 91% of its LLW from the Repository, predominantly as Out of Scope Metal and Out of Scope VLLW. All diversion quantities are greater than planned at this stage in the year (relative to the JWMP11 forecast), due to the acceleration of various waste projects across Magnox sites to reduce volumes of legacy waste at several sites.

Bradwell FED: FED1 'first of a kind' container consigned to LLWR in February 2017; permissions to consign all agreed FED from Bradwell for processing during Q4 obtained and materials now all successfully shipped off site by 31/3/17, as a result of collaborative working with LLWR and Tradebe-Inutec. Work continues to develop and implement a generic safety case/arrangements at LLWR to support further FED consignments to LLWR (i.e. Bradwell FED2 and Sizewell/Oldbury FED in due course).

The TRS Drums collaborative project has now received confirmation from LLWR of the disposability of the drums; work continues to detail the exact nature of the transport packaging/movement arrangements prior to commencing consignments.

Magnox has participated in various NWP collaborative project (IPT) meetings and workshops during the quarter and provided comments on various NWP project deliverables, including: problematic wastes IPT; alternative management options for the management of short-lived ILW; and boundary waste identification.

Magnox has been working closely with LLWR on a collaborative procurement to provide waste characterisation services, which will be available to the UK industry from summer 2017.

All JWMP projects have been completed.

 **Dounreay**
Decommissioning excellence

DSRL continue to support the implementation of National LLW strategy in association with LLWR. Progress has been made with the planning of the disposal of oils and solvent off-site. WRACS is routinely operating on a day-shift basis. There is currently a DSRL imposed embargo on the transfer of LLW from the Grout Encapsulation Plant to the LLW Vaults; documentation has been produced and discussions held with SEPA with progress made towards lifting the embargo in the next period. Discussions have been held on the options for the disposal of LSA Scale (NORM).

 **LLW Repository Ltd**

Legacy Drum progress continues with the Interim Consignment Report having been produced and submitted to the NDA which considers the disposal / treatment options for drums sampled up until December 2016.

The Drum Store demolition has been completed and all waste associated with the demolition managed.

Significant progress has been made on the LLWR Site Sources Strategy however focus will remain next FY year on working with SL to ensure the remaining sources are removed efficiently.

This quarter saw significant waste diversion from the LLWR Site with the metallic route being opened, incineration becoming business as usual and very low level waste being consigned. Large quantities of legacy out of scope waste was also consigned from the site.

Non-NDA estate

Consignments continue as non-NDA estate transactions become routine business across the portfolio of services. New Waste Enquiries have been received and are being progressed across the diversion routes. Work has been focussed on management of metals, soft combustible waste, VLLW and management of complex wastes such as ion exchange resins.

National Waste Programme Office Update

National Waste Programme (NWP) governance activities during Q4 included the quarterly face-to-face Programme Managers Meeting and the six-monthly Delivery Overview Group with good attendance from waste producers, supply chain and regulators and productive discussions on 2017/18 collaborative projects. The Programme Office also participated in the Integrated Waste Management Forum convened by Department for Business, Energy & Industrial Strategy; the National Inventory Forum, the NDA Integrated Waste Management Theme Overview Group, the Problematic Waste IPT Board and the RWM Ltd Waste Packagers' Liaison Group.

Good progress was made on many of the NWP projects during Q4, with most 2016/17 projects now complete including the Strategic Review 2016, the Short-Lived ILW project and the review of the National Strategic BAT (Best Available Technique) for Low Activity Waste Metals, which concluded that the current Strategic BAT is still valid. An introductory guidance document on the management of non-radioactive waste and its classification and coding is undergoing final review.






Training launched this quarter included an eLearning module 'Characterisation Overview' and the first three self-guided learning modules on completing LLW Repository Ltd waste services forms. Two Waste Loading Plan classroom-based courses were also delivered.












Support has continued for the development of an international review on optimising management of low level radioactive waste from decommissioning (being delivered a the Nuclear Energy Agency working group). Support was also provided for visits to the LLWR site by: the French national radioactive waste management agency and RWM; and a delegation from Japan.

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.

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.

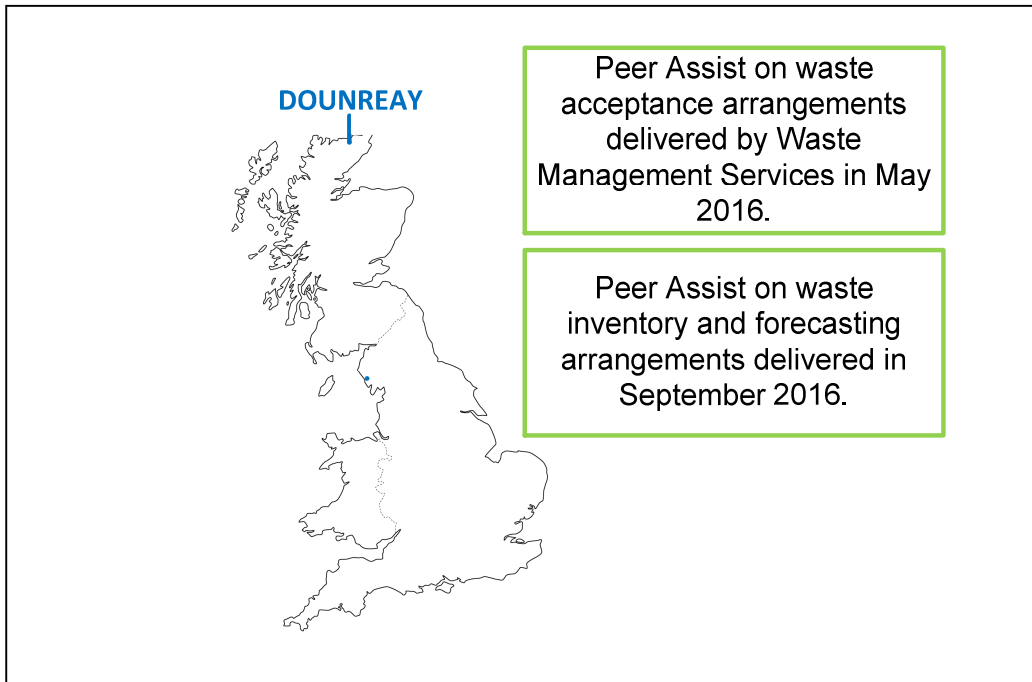
Priority business change	Project	Status
Waste management processes enable robust and effective material diversion; with streamlined characterisation, sorting, segregation, packaging and consignment.	Magnox Ltd—Cross-estate project to scope the review of data requirements for LLW to be managed through the LLWR frameworks; and to undertake the first part of the review of data requirements for waste to be sent for incineration.	
	Magnox Ltd—Programmisation of characterisation to streamline process (Improvement & Delivery Programme).	
	Sellafield Ltd—Increase capability within the process combustible route - To allow capacity for increase from 1500m3 to 2500m3	
	Sellafield Ltd—Develop and enhance bulk combustible route (wood/plastics)	
	Sellafield Ltd—Finalise the update of the on-site process for management of problematic asbestos and asbestos contaminated waste.	
	Sellafield Ltd—Enhance capability to treat metal (on and off-site) <ul style="list-style-type: none"> Further optimise the routing of metals between on-site and off-site capabilities 	
	Sellafield Ltd—Enhance capability to treat metal (on and off-site) <ul style="list-style-type: none"> Enhance the use of on-site facilities to manage metal that cannot readily be transported 	
	Sellafield Ltd—Enhance capability to treat metal (on and off-site) <ul style="list-style-type: none"> Investigate and implement short-term opportunities for decontamination 	
	Sellafield Ltd—Restructure and implement a new fit for purpose management system for the management of solid waste under topic 2.10	
	LLW Repository Ltd—Open Metallic waste route for LLWR site.	
LLW Repository Ltd—Project to deliver standards for the consignment and management of waste.		

Priority business change	Project	Status
Waste management processes enable robust and effective material diversion; with streamlined characterisation, sorting, segregation, packaging and consignment.	LLW Repository Ltd—Project to scope the review of data requirements for LLW to be managed through the LLWR frameworks; and to undertake the first part of the review of data requirements for waste requiring incineration.	Black
	LLW Repository Ltd—Project to develop guidance on the non-radiological aspects of radioactive waste management.	Green
	LLW Repository Ltd—Project to understand secondary waste arisings and routings from the supply chain.	Yellow
	DSRL—Consign approximately 23m ³ of LLW oils and solvents for thermal treatment via LLWR WMS.	Green
There is a flexible, sustainable supply chain infrastructure which includes enhanced options. The supply chain offers sorting, segregation, pre-treatment and conditioning infrastructure to complement the infrastructure on sites.	Sellafield Ltd—Develop the next generation of waste processing capability to support POCO and Decommissioning.	Green
	Sellafield Ltd—Investigate opportunities to broaden the Calder Landfill Extended Segregated Area Conditions for Acceptance.	Green
	Sellafield Ltd—Support LLWR to assess and implement solutions to the current Waste Services business model.	Green
	LLW Repository Ltd—Project to undertake the scope of work set out in the NDA document 'Developing a Robust, Sustainable Waste Management Infrastructure to Deliver the UK Nuclear LLW Strategy.	Black
	LLW Repository Ltd—Project to undertake data analysis to understand forward waste forecasts and routings across the nuclear industry over the next 20 years.	Green
Risk based disposability approaches have been developed and are being implemented	Magnox Ltd—Cross estate project to undertake a comparison of international approaches to rad waste classification.	Black
	LLW Repository Ltd—Project to collate information on approaches for radioactive waste classification and undertake an analysis of the advantages and disadvantages of each in comparison with the current UK approach.	Black
	Sellafield Ltd—Support NWP to change storage and disposal options <ul style="list-style-type: none"> • Investigate the opportunities for decay storage • Investigate the opportunities for a risk based approach to disposal • Investigate the opportunities for in-situ disposal to support regulatory guidance. 	Green

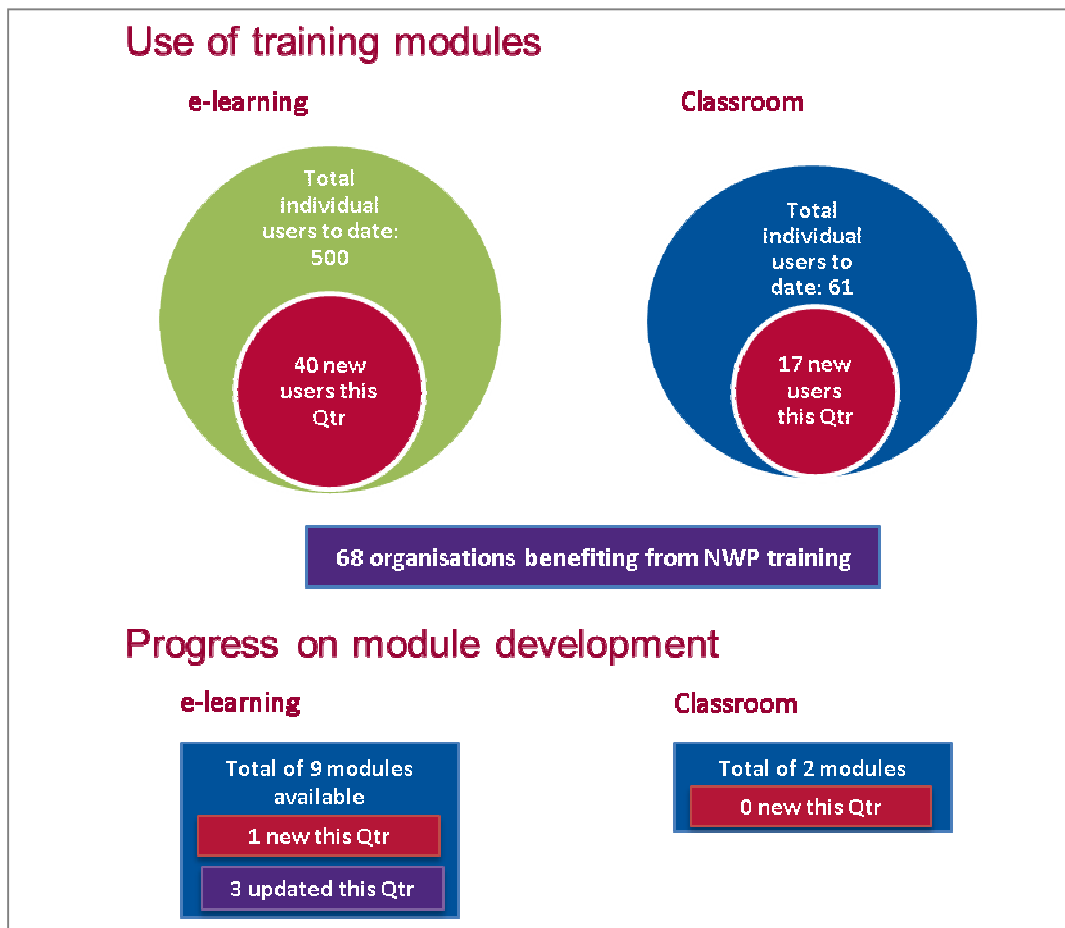
Priority business change	Project	Status
Options for decay storage and management of short lived ILW are being implemented	Magnox Ltd—Identify size and opportunity for decay storage.	Blue
	LLW Repository Ltd—Project to review the available information on short lived ILW to identify potential opportunities for alternative waste management.	Black
A full understanding of the LLWR ESC assumptions and material limits is available and informs waste producer operations.	Sellafield Ltd—Work with LLWR to fully understand the ESC and capacity management and identify where real benefits can be derived from changes.	Green
	LLW Repository Ltd—Project to produce guidance to support improved understanding of the Waste Acceptance process.	Blue
There are solutions in place for most problematic LLW, including items that fall outside the LLWR ESC.	Magnox Ltd—Projects to identify what wastes fall outside the ESCs/WACs for waste routes.	Blue
	Sellafield Ltd—Develop an updated orphan waste strategy and process for inventory management.	Black
	Sellafield Ltd—Liaise with analytical services regarding step change in using exchange columns and the disposal route.	Green
	LLW Repository Ltd—Project to identify and implement routes for problematic wastes identified on the Problematic Waste Inventory.	Green
	LLW Repository Ltd—Project to establish a treatment route for asbestos.	Green
	LLW Repository Ltd—Project focussing on problematic waste to develop a data set and carry out feasibility work for the problematic waste stream, discrete items.	Black
	LLW Repository Ltd—Participation in the NDA Problematic Waste Integrated Project Team.	Green
	DSRL—Share mercury treatment development with rest of the NDA estate.	Green
Appropriate and flexible packaging and transport assets available; with increased use of rail and ability to use mixed loads	Magnox Ltd—Project to review standard packaging requirements.	Black
	Sellafield Ltd—Develop transport and packaging arrangements to enable efficient transfer of materials for treatment and disposal.	Black
	LLW Repository Ltd—Project to identify gaps in packaging provision undertaken and to identify solutions.	Green
	LLW Repository Ltd—TC06 modified design.	Black
	LLW Repository Ltd—TC26 Overdrum.	Black
	LLW Repository Ltd—TC02 Stillage Modifications.	Green
	LLW Repository Ltd—Design Review and re-licence of TC06.	Black


Peer Reviews and Peer Assists

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



NWP training framework



Looking Back Notice Board— publications, consultations and information

EXTERNAL PUBLICATION/CONSULTATION

UK Government consultation on its Building our Industrial Strategy Green Paper, January 2017.

[<https://beisgovuk.citizenspace.com/strategy/industrial-strategy/>]

Consultation closed 17 Apr 2017.


EXTERNAL CONSULTATION

Scottish Government consultation on Proposals for an Integrated Authorisation Framework.

[<https://consult.scotland.gov.uk/sepa/integrated-authorisation-framework/>]

Consultation closed: 12 Apr 2017.


NWP REPORTS

- Strategic Review 2016 — a 'state of the nation' view of the landscape for the management of LLW within the UK nuclear industry.
[<http://llwrsite.com/national-waste-programme/waste-practitioner-support-guidance/>]
- Short-lived Intermediate-Level Waste Study, Mar 2017 — the report provides an improved understanding of the inventory of SL-ILW in the UK nuclear industry.


EXTERNAL PUBLICATION

The 2016 UK Radioactive Waste Inventory Report, which is the latest national record on radioactive wastes and materials in the UK, was published in March 2017.

[<https://ukinventory.nda.gov.uk/the-2016-inventory/2016-uk-data/>]


NWP TRAINING MODULES

Now available on the Nuclear Training Network portal:

- Characterisation Overview — a 30-minute e-learning module providing an introduction to waste characterisation
- Three self-guided learning modules on how to complete the LLW Repository Ltd Waste Characterisation Form, Waste Enquiry Form, and Waste Consignment Information Form for LLW Disposal.



NWP Office publications, reports or training.

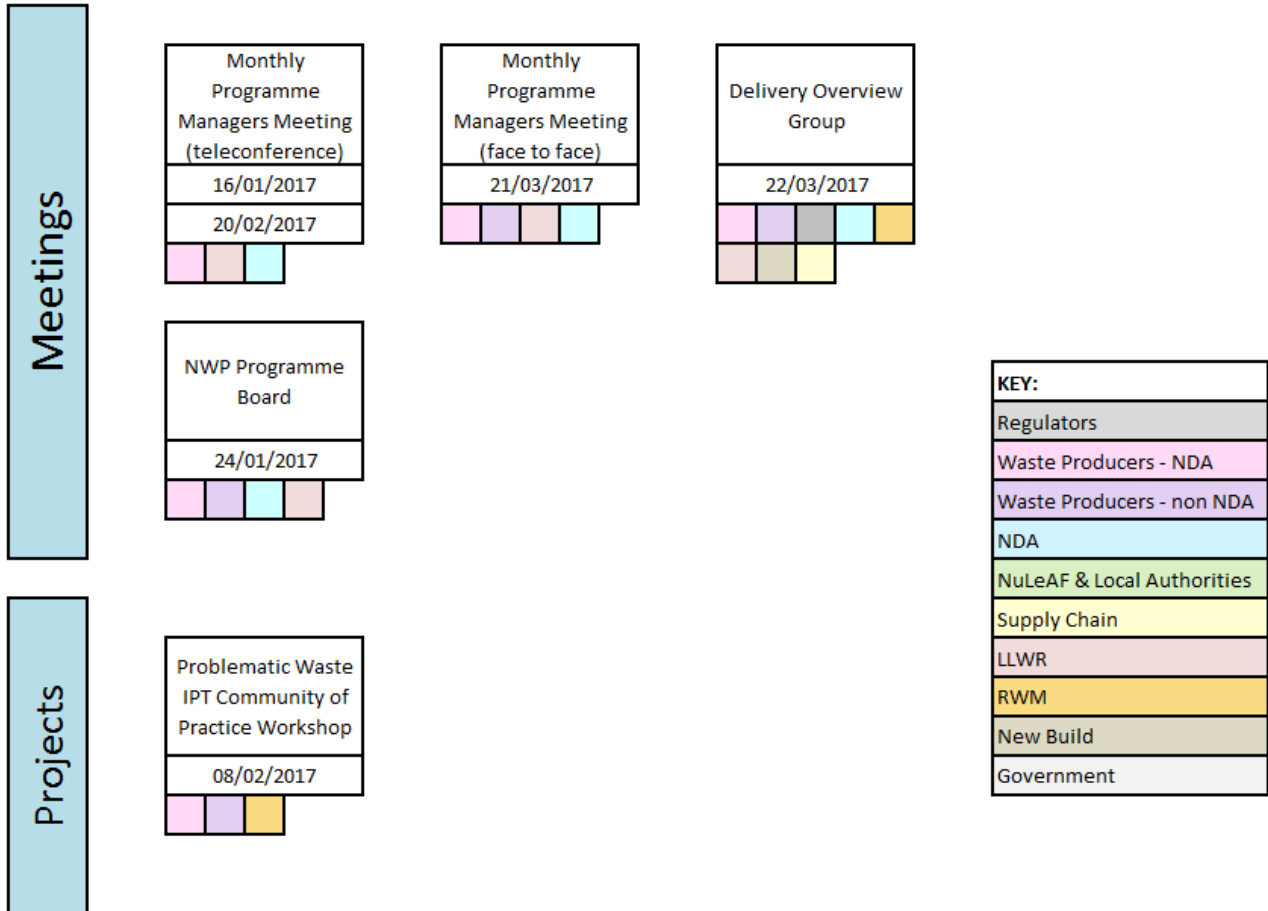


Publications or consultations external to the NWP Office.

NWP guidance, publications and information about training available via www.llwrsite.com.

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

Stakeholder interactions in the NWP during the quarter



Q4 industry 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
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. TC12 licence withdrawn significantly reducing capacity of IP rated full-height ISO containers. Waste producers are having to implement alternative arrangements.
Risk of waste mis-consignment	↔	<ul style="list-style-type: none"> There have been some waste mis-consignment near-misses and concerns. Work has been undertaken by LLW Repository Ltd to publish guidance and standards for waste producers to support their efforts to mitigate this threat.
BSSD clearance level changes	↔	<ul style="list-style-type: none"> Government undertaking work to assess how BSSD should be implemented with public consultation expected Spring 2017. Early indications suggest impact of outcome may be less adverse than anticipated but uncertainty remains.
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. Implementation will be delayed as not all parties are in a position to ratify. The earliest expected date is January 2018 but uncertainty remains.
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.
LLWR WAC5 and forms	↔	<ul style="list-style-type: none"> Implementation of WAC5 and associated forms complete. Some ongoing challenges with particular aspects of the revised arrangements (such as discrete item limits).

High concern



Low concern



SECTION 5: Looking forward

Sellafield Ltd

- Implement arrangements for the management of those drums segregated from the PCM stream demonstrated to be suitable for management as LLW
- Progress the WAGR work stream in line with the agreed forward plan.
- Complete current AGR characterisation work, and undertake further engagement with LLWR regarding the forward management of this waste stream
- Undertake reviews of the BATs for LA-LLW/VLLW metal and bagged process wastes and develop and implement any option(s) deemed to provide a significant benefit.
- Undertake analysis to determine the best value SL/supply chain balance to progress decommissioning projects and LLW management.
- Support the FY17/18 NWP collaborative work programme, including the next stages of the short-lived ILW and boundary waste assessments.


Magnox

- TRS Drums: preparatory work for shipments to commence Summer 2017.
- Support remaining collaborative NWP projects to conclusion (including problematic waste IPT, boundary wastes , Short-Lived ILW & Decay Storage Opportunities).
- Develop strategies for optimised disposal of wet and solid LAW wastes, using averaging.
- Gear up for further large quantities of VLLW to be shipped from Harwell as a result of the LETP land remediation project.
- Initiate collaborative projects for LLW FED from Oldbury and Sizewell.


Dounreay
Decommissioning excellence

- Re-commence routine operation of the Grouting Facility and the transfer of LLW to the Dounreay LLW Disposal Vaults.
- Evaluate opportunities for re-use of VLLW and out-of-scope waste on-site.
- Progress the requirements for the off-site disposal of oils and solvents.


LLW Repository Ltd

- Commencement of PCM Consignments to SL.
- Consignment of the Trench Cap Drums as Very Low Level Waste.
- License submission of the Crofts 2816 Package for the movement of sources.
- Commissioning of the ISOCs to support Legacy Drum Waste.
- Go live of the PCM Waste Delivery Management System.

Non-NDA Estate

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

National Waste Programme Office

- Completion of LLW/ILW boundary waste projects.
- Commence projects in FY17/18 programme of work (On-site decay storage principles, buffer storage and boundary waste).
- Continued participation in Problematic Waste IPT and Near-Surface Disposal IPT.
- Completion of revised training for Waste Acceptance Procedure forms.

NWP Notice Board— looking forward

EXTERNAL CONSULTATION

BSSD Implementation

[via www.gov.uk]

Expected Summer 2017

NWP STAKEHOLDER REVIEW

LLW / ILW Boundary Waste Study

Expected May 2017

PROBLEMATIC WASTE IPT

Supply Chain Webinar


Expected May 2017


PROBLEMATIC WASTE IPT


FY17/18 Programme of Work

Expected April 2017

[via www.llwrsite.com]

 NWP Office publications, reports or training.

 Publications or consultations external to the NWP Office.

 Publications or reports from an Integrated Project Team.

Forward calendar

April 2017						
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

04/04 – LLW/ILW Boundary Waste stakeholder workshop (MA)

18/04 – NWP Monthly Managers Meeting (T)

20/04 – Problematic Waste regulatory meeting (C)

May 2017						
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				

15/05 – NWP Monthly Managers Meeting (T)

May 2017 – NWP Board - date/location TBC

May 2017 – PW IPT Supply Chain Webinar - TBC

June 2017						
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		

5-6/06 – Problematic Waste CoP meeting (C)

19/06 – NWP F2F Monthly Managers Meeting (MA)

21/06 – Practitioners Forum (BM)

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
Insufficient 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 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>	Near-term	Medium (9)	Medium (9)	<p>Working with consignors to improve short term waste forecasting.</p> <p>Developing aggregated procurement process to build more certainty into supply chain.</p> <p>Working with supply chain to increase visibility of capacity constraints etc.</p> <p>Standard services in place to give more certainty to supply chain.</p> <p>UKRWI 2016 to be published on NDA website (accessible to all).</p> <p>National Inventory Forum subgroup looking to amalgamate the UKRWI and WIF.</p> <p>Supply chain sustainability review undertaken.</p> <p>Potential (case by case) use of LLWR for buffer storage.</p> <p>Work with supply chain to encourage entrants.</p> <p>Reviews periodically undertaken of capacity supply and demand (e.g. VLLW capacity assessment).</p> <p>Trials of new commercial arrangements with supply chain.</p> <p>Problematic Waste and Near-Surface Disposal IPTs considering alternatives.</p> <p>Watching brief kept on supply chain capacity.</p>
Significant waste mis-consignment event causes all diversion/ disposal to be stopped via that route.	<p>Waste route(s) closed for individual producer or whole industry.</p> <p>Closure of routes reduces supply chain sustainability (supply chain withdraws from market).</p> <p>Increased waste disposal due to loss of diversion routes.</p>	Near term	High (14)	Low (5)	<p>Waste producers reviewing and improving waste consignment practices/barriers.</p> <p>Guidance on waste consignment in development by LLWR.</p> <p>Peer Reviews and Assists conducted at some sites covering mis-consignment.</p> <p>Highlighted in NWP training modules.</p> <p>LLWR WMS procedures and waste producers procedures in place.</p> <p>Peer Reviews conducted on waste consignment practices.</p> <p>Sharing of LFE within the industry (e.g. Condition Reports, Green Briefs).</p>

Threat	Impacts	Proximity	Rating (current)	Rating (target)	Mitigation activities
Strategy for site end states means that large volumes of contaminated land are generated and have to be managed as lower activity waste.	<p>Increased volumes of waste mean inadequate capacity at LLWR; leads to requirement for new repository.</p> <p>Waste may need to be managed as HAW.</p> <p>Creates need for additional storage.</p> <p>Potential for use as profiling material for the LLWR cap.</p>	Long term	Medium (9)	Medium (9)	<p>NDA developing strategy for site end states and de-licensing criteria with regulators and stakeholders.</p> <p>Waste producers interim and end state development.</p> <p>Revised regulatory guidance on in situ disposal drafted; being trialled at three sites.</p>
Stakeholder concerns over radioactive waste management and disposal facilities constrain 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>	Near term	Medium (8)	Medium (8)	<p>Continued dialogue and consultation with stakeholders.</p> <p>Provision of authoritative information on forecasts.</p> <p>Work with NuLeAF on duty of care guidance.</p> <p>Waste producers work on mitigating any risk of mis-consignments.</p> <p>Implementation of NWP Stakeholder Engagement Plan.</p>

Strategic opportunities

Opportunity	Impacts	Proximity	Rating (current)	Rating (target)	Realisation activities
Improve and refine waste inventories.	More realistic arisings. Improved supply chain confidence. Improved value from supply chain.	Long term	High 17	Very high 19	Look to amalgamate UKRWI & WIF. Prioritise and deliver inventory improvement tasks.
Consistent application of waste hierarchy through change in behaviour of waste producers.	Diversion is optimised. Use of most cost effective, optimised route.	Near term	High 16	High 18	Execute LTP 13 scope. Execute implementation of national strategy for non-estate.
Investigate and implement alternative VLLW management solutions.	Improved stakeholder perception of VLLW routes. Increased diversion. Maximise repository availability. Reduced the amount of clean material required for profiling and the number of transports that would be required.	Near term	High 16	High 18	Continue cap studies, develop business case and specifications for LLWR. Sellafield to continue with on site disposal strategy work. Revised regulatory guidance on in situ disposal drafted and in consultation, being trialled at sites. Work to be undertaken to understand potential impact on the VLLW supply chain.
Improve the sustainability and health of the supply chain.	Better environment for investment in capacity by supply chain. Continued presence for the supply chain.	Near term	Medium 8	Very high 19	Future competitions for frameworks continue to consider sustainability. Embed aggregating process. Continue inventory improvement. LLWR to undertake supply chain sustainability review on behalf of NDA in FY16/17.

Strategic opportunities

Opportunity	Impacts	Proximity	Rating (current)	Rating (target)	Realisation activities
Opportunity to manage waste destined for GDF down the LLW route.	Reduction in storage and disposal costs for waste producers. Prompt hazard and risk reduction.	Long term	Very Low 2	High 16	Ongoing collaboration work. Delivery of projects FY16/17 and FY17/18 to investigate boundary waste management. Work on Near Surface Disposal IPT. Share LFE from projects to manage complex wastes.
Non-NDA estate consignors are fully engaged with the Strategy.	Diversion maximised. Waste hierarchy applied and new waste management routes being used.	Near term	Medium 8	High 12	Non-NDA engaged in DOG and NWP Programme Managers Meeting once a quarter. Engaged in projects/workshops. Production of Tier 3 JWMPs. Provide forecast/actuals data for metrics report.
Decay storage capabilities available.	Reduced cost for waste producer. Diversion from GDF maximised. Improved value from supply chain. Enables earlier solution for waste producer.	Near Term	Medium 8	High 12	Undertake work to support waste producers in implementation of decay storage.
Utilisation of methods to enable management of complex and challenging wastes.	Prompt hazard and risk reduction. Earlier solution for the management of such wastes. Cost savings across industry. Routes available for problematic waste.	Long term	Medium 8	High 12	Waste producers undertake work to progress opportunities (e.g. use of new metallic framework). LLWR work with suppliers to understand and promote opportunities.