

NATIONAL WASTE PROGRAMME QUARTERLY REPORT Q3 & 4 FY19/20

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 NWP 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

<u>KEY</u>

Actual waste diversion is less than JWMP or LLW disposal exceeds JWMP

Actual waste diversion or LLW disposal in line with JWMP.

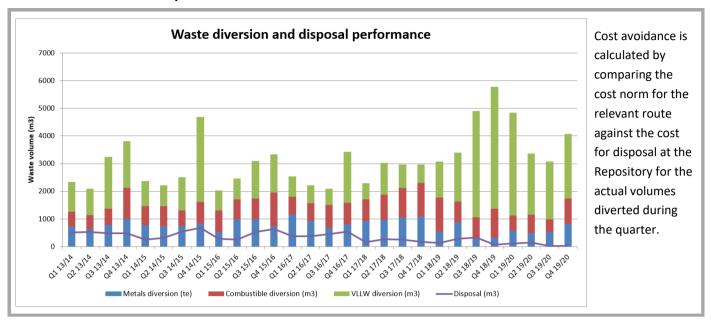
Actual waste diversion exceeds JWMP or LLW disposal is less than JWMP.

Waste producer	Route	JWMP (for year)	Actual (Year to Date)	Actual Performance against JWMP (Year to Date)	% diversion (Year to Date)		
Dounreay Site	Metallic (te)	0	0		N/A		
Restoration Ltd	Combustible (m³)	7	7				
	LLW disposal (no. containers)	0	128				
LLW Repository Ltd	Metallic (te)	59	95		100%		
	Combustible (m³)	181	162				
	VLLW (m ³)	44	19				
	LLW disposal (no. containers)	4	0				
Magnox Ltd	Metallic (te)	183	130		99%		
	Combustible (m³)	859	792				
	VLLW (m ³)	10806	9715				
	LLW disposal (no. containers)	18	8				
Sellafield Ltd	Metallic (te)	1711	2210		96%		
	Combustible (m³)	2218	1626		(Including		
	VLLW off-site (m ³)	980	626		CLESA)		
	VLLW on-site at CLESA (m³)	3098	2403				
	LLW disposal (no. containers)	32	26				
Non-NDA estate	Metallic (te)	288	112		~100%		
(total)	Combustible (m³)	257	140				
	VLLW (m ³)	5272	4743				
	LLW disposal (no. containers)	14	1				
NDA estate (total)	Metallic (te)	1953	2435		98%		
	Combustible (m³)	3266	2587		(Excluding CLESA)		
	VLLW off-site (m ³)	11830	10360		98% (Including		
	LLW disposal (no. containers)	54	34		CLESA)		
UK nuclear industry	Metallic (te)	2242	2547		98%		
(total)	Combustible (m³)	3523	2727		(Excluding CLESA)		
	VLLW (m ³)	17102	15103		98% (Including		
	VLLW on-site (m³) (CLESA)	3098	2403		CLESA)		
	LLW disposal (no. containers)	68	35				

Note: Diversion calculated using National Waste Programme norms and assumptions. Waste producers may use different assumptions in their own calculations. Note: Dounreay is not included in the LLW disposal totals as these wastes are not being diverted from the LLWR.



Waste Diversion and Disposal Performance



While NDA-estate waste diversion performance across the UK has performed well generally throughout the year, the impact of the COVID-19 pandemic significantly impacted waste management in Period 12. The Sellafield Soft Bagged Waste Trial resulted in 883m³ of incinerable waste being routed via the combustible framework, achieving 98% diversion of the trial material. Whilst VLLW management fell short of the P12 target, this was largely for the positive reason that an unexpectedly high volume of material, being excavated as part of the Harwell Liquid Effluent Treatment Plant project, was clean material.

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.

															Oı	gan	isati	on													
		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	HMNB Clyde	HMNB Devonport	HMNB Rosyth	EDF Nuclear Generation Ltd	EDS	GE Healthcare	Medical Research Council	TNN	Nuvia	Police National Centre	RRS Ltd	Rutherford Appleton Laboratory	Springfields	Cyclife	Tradebe	Tradebe Inutec	UKAEA Culham	Umicore Coating Services Ltd	UniTech Services Group Ltd	Urenco UK
	M	✓	✓	✓	✓	✓	٠	٠	✓	٠	٠	٠	✓	•	\checkmark	٠	٠	\checkmark	٠	٠	٠	\checkmark	✓	٠	✓	٠	✓	٠	٠	٠	
Route	С	✓	✓	✓	✓	✓	•	•	✓		•	✓			✓			•	•	•	•	✓		•	✓	✓	✓	•	•	•	•
Ro	٧		✓	✓	✓	✓	٠		✓		✓	٠		✓	x	٠	✓		٠	٠		✓		✓	✓	✓	✓			✓	✓
	L	✓	✓	✓	✓	✓	٠		✓	✓	٠	✓	✓	✓	✓	✓	✓	✓	✓	٠	٠	✓	٠	✓	✓	•	✓	✓	٠		✓

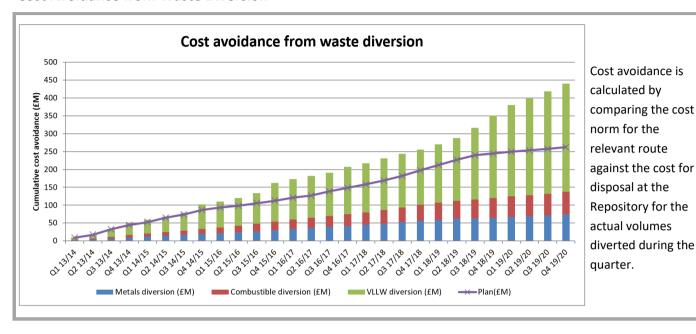
KEY: note that information refers to known route usage (via direct contract, on-site infrastructure or LLWR framework) since 2008.

- 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



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

Waste Producer Quarterly Updates



Sellafield Ltd

Strong programme of diversion completed during Q3/Q4, with >99% of LLW diverted for recycling, incineration or to landfill disposal capabilities. Only 3 HHISOs sent for LLWR disposal.

Good progress on a range of transformation activities, including;

- Soft Bagged Waste Trial successfully diverted 883m3 of the 910m3 trial volume for incineration. Work well advanced on revising site operational practices to reflect the learning from the completed trials.
- Implementation of equipment progressed to aid the management of boundary waste metallic items extracted from high hazard facilities.
- Assessment of suitability of next tranche of WAGR boxes for LLWR disposal expected imminently. Compilation of data for the remaining WAGR boxes completed.
- Extensive provenance information complied on the lifecycle of the drummed AGR graphite and its expected response to irradiation. Joint DQO workshop successfully held with LLWR. Agreed some sampling of legacy drums will be undertaken to take forward. High workshop confidence that some AGR graphite drums likely to be suitable for management as LLW.
- Further batch of drums from the PCM drum store confirmed as suitable for management as LLW. Total of 720 drums now formally diverted from PCM stream. Expectation several thousand more can be safely diverted.
- Work underway to complete active commissioning of the Chemical hub.

A Board of Inquiry, convened following two events where waste containers were inappropriately transferred off-site, has been finalised. A detailed follow-up work programme will be progressed to enhance the governance/control focus on LLW/ VLLW management activities.

Controlled shutdown of complex Sellafield operations safely undertaken in mid-March, to reflect the COVID-19 pandemic.



Magnox

At the end of Quarter 4, Magnox had diverted 99% of its LLW from the Repository, in part due to comparatively large volumes of VLLW from the Harwell LETP land remediation project. The year-end targets were reset in JWMP17 which was issued in September, but for a number of operational reasons and then the COVID-19 situation we did not ship as much waste as expected. From 20th March all Magnox LLW waste shipments and consignment preparation activities were paused.

Work has progressed regarding development of the disposability cases for management of Oldbury and Sizewell FED. Technical work has progressed on the development of the FED inventory and the Integrated Magnox FED Strategy report was revised and issued in March which sets out the steps required to substantiate a disposability case. Regulatory briefing meetings have taken place in support of this work.

A project plan was developed to manage legacy waste at Chapelcross. Much of the work in the last 4-6 months has focused on enabling activities such as fingerprint reviews.

The TRS drums project has continued with preparatory work required to facilitate retrieval and packing of the drums into transport containers.

Disposability documentation for the Dungeness borderline wet wastes project has progressed, with BAT documents, fingerprint implementation reports and WCH forms having been prepared for two out of the four wastestreams.

The company LAW Strategic BAT was reviewed and reissued in March 2020.

Work on the Waste Management Improvement Programme has continued. The key achievement in the last quarter has been the completion of waste management process flow charts to inform a review of the waste management model. Additional projects such as the application of lean processes and scaled up characterisation & waste assay are also progressing.

Regarding the Continuous Safety Improvement Programme (CSIP) benchmarking project, findings from benchmarking matrix submissions from all Magnox sites have been collated allowing a number of good practices and areas for improvement to be identified. There has also been engagement with external and international organisations.

On the CSIP 'waste is our core, quality product' project, work in the last 6 months has included socialising the concept of waste being a quality product with various groups and interviews with staff across Magnox about waste management culture, culminating in a report on the findings and some recommendations for further work.

'Characterisation for non-practitioners' pilot training was delivered to a diverse group of people across Magnox in Q3 and the 'Applying the Characterisation Process' workbook/mentor based training for characterisation practitioners was launched with a small group of volunteers from across the fleet taking part in the pilot.

5 year forecasts were submitted and JWMP18 has been drafted.

LLW Repository Ltd

PCM decommissioning is complete in magazines 3, 5, 9 and 10 and demolition is complete for magazine retrieval facilities 3, 5 and 10.

Consignments have been steady and LLWR hosted a waste workshop in January with its PCM Project Team to create a more robust forecast for the consignments. This has been working very well and the team is optimising volumes and weights consigned to the Service Providers for treatment/disposal.

A new Wastestream Characterisation Document has been written for the LLW Operations areas of the site. Historically, this waste was consigned to the vault but results from sampling and analysis have confirmed it to be suitable for the VLLW route.

Consignments and onsite operations have been affected by COVID-19 and the schedule is currently frozen; however, the team is preparing paperwork in the background to allow consignments to be ready for dispatch on their return to site.





Operations:

- Receipt and processing of compliant LLW through Supercompactor and Grout plant for disposal to the D3100 LLW
 Disposal Facility continued throughout Q3 and Q4.
- Project to design, install and commission a new Control System for Grout Plant continues.
- Project to qualify and quantify potential inaccessible voidage in legacy LLW HHISO commenced.

Compliance:

- Implementation of updated LLW Management Process which includes improved processes for Characterisation and Permissioning of solid LLW arisings completed during Q4 this will ensure the "right first time" consignment of wastes.
- Review of Dounreay Fingerprints to confirm "fitness for purpose" commenced and ongoing during Q3 and Q4.

Non-containerised Wastes:

Project initiated to divert two large non-containerised LLW items for metals recycling / disposal. The redundant
WRACS Supercompactor, which failed in 2011, and a redundant Metal Baler from the Low Level Pits are being processed through characterisation and preparation for consignment off-site via the LLWR Waste Services Contract.

National Waste Programme Office Update

The Programme Office closed out all outstanding FY-19/20 PBIs, with the completion of:

- The Waste Consignment Practices Peer Learning Shared Learning Summary Report.
- The Waste Consignment Practices Industry-Led Review Report.
- The Gate A / B credible and preferred options paper on management arrangements for waste failing the DI Limit.
- The LLWR Disposition Models Phase 2 Case for Change (Gate 0) report and Credible Options (Gate A) paper.

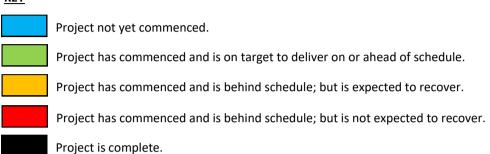
NWP Governance activities for Q4 included an NWP Blueprint Workshop in November as part of its two-yearly review cycle, and included attendance from NDA waste producers, non-NDA waste producers, regulators the supply chain and the NDA. Unfortunately, the Monthly Managers Face-to-Face and Delivery Overview Group meetings had to be cancelled in response to the COVID-19 pandemic.



Key Project Tracker

The NWP community agrees, 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



Priority Business Change	Project	Project Status
A full understanding of the LLWR ESC as- sumptions and material limits is available and informs waste producer operations.	Magnox - Stakeholder experiences in working with the LLWR WAC, WAP and ESC.	
Appropriate and flexible packaging and	Sellafield - Assess options to package and transport small volumes of liquid and implement a programme of work to introduce any option(s) deemed to provide a significant benefit.	
transport assets are available; with increased use of rail and the ability to use	LLWR - Participation in NDA Critical Enablers transport and packaging strategy development.	
mixed loads where appropriate.	LLWR - Enabling work to establish transport and packaging agreements with Sellafield Ltd for transfer of profiling material for capping programme.	
	LLWR - Enabling activities for utilisation of magazine demolition rubble as profiling material for capping of Vault 8.	
Decommissioning is seen as a waste management process by waste producers and is organised from this perspective.	LLWR - Consider the implications of the updated LLWR ESC on LLWR processes and services.	
is organised from this perspective.	LLWR - Consider and implement the outcomes from the review of the LLWR Waste Acceptance Process.	
	LLWR - Review and share learning on scaling up waste management practice for decommissioning.	
Decommissioning projects are waste management informed.	Sellafield - Further develop decommissioning approaches using LFE from ORANO and external innovation.	
	Magnox - Waste management for scaled-up decommissioning.	
There is a flexible, sustainable supply chair	Magnox - Risk preparedness plan developed.	
infrastructure which includes enhanced options. The supply chain offers characteri-	LLWR - Development and implementation of integrated treatment	
sation, sorting, segregation, pre- treatment and conditioning infrastructure to complement the infrastructure on sites.	LLWR - Delivery of a programme to examine and enhance LLWR arrangements to mitigate against the risk of misconsignment of waste diversion or disposal routes.	



K	ΕY

	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.

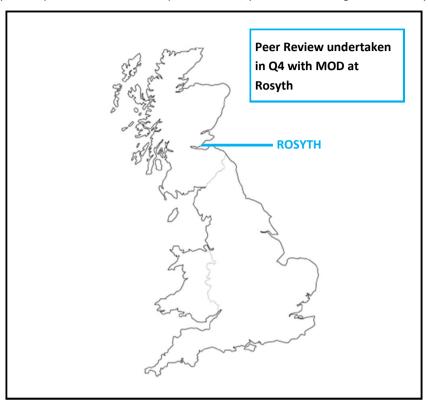
Project is complete.

Priority Business Change	Project	Project Status
	Magnox - JWMP Lifecycle Improvements.	
	Magnox - Support the LLWR Risk of misconsignment Project.	
	Magnox - Magnox Waste Improvement Programme.	
	Magnox - Deliver the Magnox Waste Assurance Programme.	
	Magnox - Waste consignment practices and misconsignment controls.	
	Magnox - Dungeness A boilers removal and treatment - characterise and optimise the process for removal and treatment.	
	Sellafield - Develop approaches for assay of bulk materials.	
	Sellafield - Program to integrate POCO, decommissioning and solid waste management areas.	
	Sellafield - Undertake study to assess on-site options for future VLLW capability.	
Waste management processes enable robust and effective material diversion; with streamlined characterisation, sorting, segregation, packaging and consignment.	Sellafield - Work with LLWR to address impact diversion is having on management of material unsuitable for diversion.	
	Sellafield - Implement programme of work to further segregate material from the alpha stream that can be managed as LLW.	
	Sellafield - Undertake a review SL BAT for LA-LLW/VLLW bagged process wastes & develop programme to introduce beneficial option(s).	
	Sellafield - Undertake study to establish how LLW and sub -LLW systems should evolve.	
	Sellafield - Develop and implement programme of follow- up bagged waste trials.	
	Sellafield - Undertake review of BAT for LA-LLW / VLLW metal & develop programme to introduce beneficial option(s).	
	LLWR - Implementation of streamlined waste services processes.	



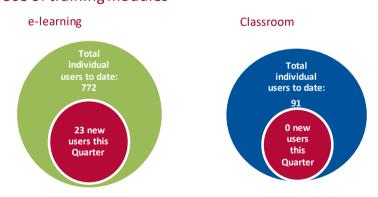
Peer Reviews and Peer Assists

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



NWP Training Framework

Use of training modules



User feedback to date:





Looking Back Notice Board — publications, consultations and information



NWP Publication

LLW National Waste Programme Blueprint Issue 5

This document describes the latest iteration of the Blueprint for the delivery of the National Waste Programme (NWP); defining the current state of Low Level Waste (LLW) management in the UK and articulating the aspirational end state for the programme in 2030. It is recognised that the NWP will be integrated into the NDA Integrated Waste Management Programme (IWMP) as the IWMP develops and matures; this may influence this aspirational end state. It also defines an aspirational interim state for 2025.



NWP Publication

NWP Discrete Item Management Option Datasheets

This document, produced in Sept 2019, was an input to an optioneering workshop looking at arrangements to support the management of DIs failing the LLWR DI Limit. The document will be up-issued in April 2020 to incorporate the findings of the workshop and will be available to the wider industry.



NWP Publication

The Disposability of ILW Packaging (Containing Compliant LLW) to LLWR

The report was an extension of the 2018/19 NWP project 'Packaging to 2050 of ILW with the Potential to be Managed as LLW', which identified the packaging requirements for the identified ILW wastestreams in the UKRWI. This latest phase of the project explored whether or not there is anything inherent in the identified container designs that precludes their disposal to the Repository. The report presents the findings and outcomes.



NWP Publication

Waste Consignment Practices Industry-Led Review

The NWP Waste Consignment Practices project was initiated, at the request of waste producers, to help mitigate misconsignment risk. The project included an Industry-Led Review of the extent, efficacy, positives, shortcomings of and potential improvements to waste consignment practices.



NWP Publication

LLWR WAC Explained 'WAC-X'

This signposting resource aims to help waste consignors better understand the LLWR Waste Acceptance Criteria (WAC). It consolidates into one place resources already available to support consignors, and provides answers to frequently asked questions, highlights LFE and also provides an overview on the origin of each criterion.



NWP Publication

Discrete Item Precis

The Precis is a two page summary explaining what Discrete Items are (with examples provided), why they are controlled by the LLWR WAC, what the Limit is and how they can be managed. The Precis provides waste producers with a convenient reference resource.

NWP Office publications, reports or training.



Publications or consultations external to the NWP Office.

NWP quidance, publications and information about training available via www.gov.uk/llwr.



Looking Back Notice Board — publications, consultations and information



NWP & RWM PUBLICATION

IWM Radioactive Waste Management Good Practice Model

This document sets out Good Practice for radioactive waste management in the UK and is designed to support application of the Radioactive Waste Management Peer Review Peer Assist and Peer Learning frameworks.



EXTERNAL CONSULTATION

GDF Siting: Site Evaluation - How will we evaluate sites in England / Wales

The Site Evaluation document explains the relevant policy frameworks and shows how Radioactive Waste Management (RWM) will apply these frameworks consistently and transparently. The document also explains how evaluations will be structured using a series of Siting Factors and Evaluation Considerations.

Site Evaluation Documents Published



EXTERNAL CONSULTATION

Nuclear Decommissioning Authority: Business Plan 2020 to 2023

The consultation on the Plan ran for 8 weeks, from 23 December 2019 to 14 February 2020. The consultation was constrained to this timeframe by pre-election guidelines relating to the December 2019 general election.

Outcome Published



EXTERNAL CONSULTATION

Sellafield: radioactive substances activities (RSA) permit variation

Due to the impact of COVID-19, Sellafield Ltd is not able to make the changes required to implement the permit variation (V009) on 1 April 2020.

Sellafield Ltd has applied for another variation (V010) to change the date on which the permit comes into effect to 1 October 2020.

Outcome Published



EXTERNAL CONSULTATION

Lillyhall landfill site: radioactive substances activities permit variation

The proposed changes to the permit are to increase the current activity limits for the disposal of radioactive waste from 4Bq/g (or 40Bq/g for tritium) to a maximum average consignment activity limit of 200Bq/g; and to update the permit to the latest template so that it reflects recent guidance changes.

Summary of Consultation Responses Published



NWP Office publications, reports or training.



Publications or consultations external to the NWP Office.

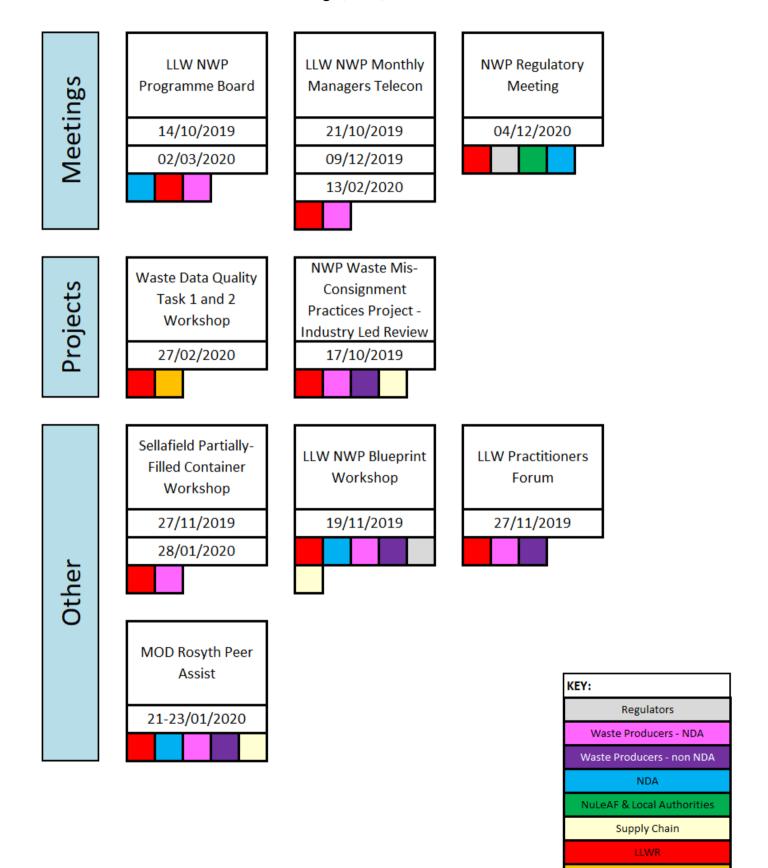
NWP quidance, publications and information about training available via www.gov.uk/llwr.

RWM



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

Stakeholder interactions in the NWP during Q3 & Q4





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	High concer
Paris-Brussels nuclear liability implementati on.	仓	 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. 	
Risk of waste mis- consignment.	Û	 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. 	
Waste packaging and transport.	⇔	 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.	⇔	 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. 	

Low concern



SECTION 5: Looking Forward



Sellafield Ltd

- Further develop, and implement, the programme of work to underpin a staged return to full operations, in line with the requirements to manage site hazards and risks, and government and medical advice, as the COVID-19 pandemic progresses.
- Develop and formalise the programme of work to take forward the findings of the waste management Board of In-
- Progress the work programme to implement the learning from the completed Soft Bagged Waste Trials.
- Undertake follow-up engagement with LLWR on the WAGR box assessments.
- Formalise plans for the first iterations of a Sellafield site Waste Management Plan (WMP) and Site Wide Environmental Safety Case (SWESC) to address the GRRs, and undertake planned follow-up engagement with the Environment Agency.



Magnox

Subject to the impacts of the COVID-19 restrictions:

- Take forward recommendations from CSIP work on benchmarking and waste management culture into the Waste Management Improvement Programme.
- Finalise and launch JWMP18 transformational projects.
- Submit disposability documents to LLWR for the Dungeness Borderline Wet Wastes project.
- Produce plan to restart waste operations when possible.



- Complete stored LLW HHISO container voidage assessments and prepare BPM Statements.
- Continue review and revision of Dounreay Fingerprints.
- Progress Non-Containerised Waste diversion project Phase 2 comprising decommissioned Supercompactor and Baler units.
- Disposal off site of Phase 3 LLW Solvents.



LLW Repository Ltd

- Wood assay (drum scan alpha) anticipated to go online this will enable all wood from all magazines to be assayed and consigned for Combustible Waste Treatment.
- Mobilising the LLW Operations areas towards Metals and Combustible Waste Treatment following the sampling and analysis for VLLW.
- Restart following COVID-19 operational pause.



Non-NDA Estate

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

National Waste Programme Office

- Finalise the FY20/21 Programme of work.
- Planning / commencement of procurement for the FY20/21 Programme of Work.
- Continuing to adapt project scopes / governance fora to accommodate social distancing measures due to the COVID
 -19 pandemic.



NWP Notice Board— looking forward **NWP** Publication Scaling up waste management for decommissioning report This reports details the purpose, methodology and outcomes on the project on scaling up waste management practices for decommissioning. Expected Q1 2020/21

NWP guidance, publications and information about training framework available via www.gov.uk/llwr.

Publication or consultation from the NWP Office.

Publication or consultation external to the NWP Office.



Forward Calendar

	April 2020										
М	Т	W	Т	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								

22/04/2020 – Delivery Overview Group (MA) 23/04/2020 – LLW NWP Monthly Managers Face-to-Face (MA)

	May 2020										
М	Т	W	Т	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								

07/05/2020 – LLW Practitioners Forum Telecon (T)
14/05/2020 – LLW Practitioners Forum Telecon (T)
18/05/2020 – LLW NWP Monthly Managers Telecon (T)
19/05/2020 – LLW Practitioners Forum Telecon (T)
28/05/2020 – NWP Monthly Report Waste Producer
Submission Deadline

	June 2020										
М	Т	W	Т	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	30									

01/06/2020 – LLW NWP Programme Board (T) 03/06/2020 – LLW NWP Regulatory Meeting (T) 15/06/2020 – LLW NWP Monthly Managers Telecon (T)



Strategic Threats

Threat	Impacts	Proximity	Rating (current)	Rating (target)	Mitigation activities
Significant waste misconsignment event causes partial or full closure of diversion or	Waste route(s) closed for individual producer or whole industry. Closure of routes reduces	Near term	High (14)	Low (5)	Waste producers review and improve waste consignment practices/barriers.
disposal route(s).	supply chain sustainability (supply chain organisation(s) withdraw(s) from market).				Guidance on waste consignment developed by LLWR.
	Increased waste disposal due to loss of diversion routes.				Peer Reviews and Assists conducted at some sites
	Increased waste accumulation due to lack of disposal routes.				covering mis- consignment. Highlighted in NWP training modules.
	Loss of radiological / volumetric capacity at LLWR.				Storage capability available at LLWR, in
	Increased costs for waste producers.				extremis, to help manage waste flows.
	NDA required to invest capital in new facilities.				
	Regulatory controls increase burden (operational and administrative) on consignors.				
	Loss of confidence in suppliers / waste producers / industry.				
Insufficient non radiological, radiological or	Inadequate capacity at LLWR; leads to requirement for new repository.	Medium term	Medium (9)	Very low (1)	Increased or enhanced incentivisation for diversion.
volumetric capacity at LLWR.	Potential increase in number/volume of problematic streams.				NDA intervention or direct action to engender different approaches at
	Some waste may have to be managed as HAW.				waste producer sites.
	Creates the need for additional storage and potentially higher treatment and disposal costs.				
	Causes delays to programmes.				
	Increased waste to diversion routes impacts capacity (e.g. VLLW).				



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.	Disposal of increased volumes of waste result in inadequate capacity at LLWR; leading to requirement for new repository / new fit-for-purpose disposal facility. Some waste may need to be managed as HAW. Creates need for additional storage. Reduced volumetric capacity at LALLW/VLLW disposal sites.	Medium term	Medium (9)	Very low (2)	NDA working with regulators, planning authorities and other stakeholders to develop de-licensing approach and arrangement. Revised regulatory guidance on in situ disposal (GRR). On-site or near-site disposal of LALLW/VLLW.
Insufficient radiological, non-radiological or volumetric capacity in the supply chain.	Fewer routes available; less capability and less redundancy in marketplace. Increased cost for waste producers (higher prices). No/inadequate diversion routes or capacity for waste. Excess volumes being sent to LLWR, so inadequate capacity at repository. NDA required to invest capital in new facilities. Increased waste accumulation due to lack of disposal routes. Increased costs for waste	Near term	Medium (8)	Low (5)	Working with consignors to improve short term forecasting of waste. Introduction of new Waste Treatment Services Framework (estimated 2020).



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



Strategic Opportunities

Opportunity	Impacts	Proximity	Rating (current)	Rating (target)	Realisation activities
Positive step change in the sustainability and	Better environment for investment in capacity and capability by supply	Near term	Medium (8)	High (12)	•Future competitions for frameworks continue to consider sustainability and improved integration of services.
health of the supply	chain.				Embed aggregating process.
chain.	Continued presence for the supply chain.				•Delivery of inventory and forecasting improvement tasks.
	Improved value from the supply chain.				•Implementation and embedding of the IWMP.
	Continued and optimised waste diversion.				
	Release of LLWR resource for other activities (no need for liability channelling arrangements). Reduced prices (landfills				
	may no longer require insurance for nuclear liabilities).				
Non-NDA estate consignors and New Build are fully engaged with the Strategy.	Diversion maximised. Waste hierarchy applied and new waste management routes being used.	Near term	Medium (8)	High (12)	Potential to interact with New Build forums to increase visibility of NWP.
Management solutions employed	Potential reduction in storage and disposal	Medium term	Medium (8)	High (16)	Ongoing collaborative work with RWM & other stakeholders.
for earlier management of ILW.	costs for waste producers.				Share LFE from projects to manage complex wastes.
	Prompt hazard and risk reduction.				NWP On-Site Decay Storage Principles project delivered FY17/18.
	Diversion from GDF maximised. Improved value from				Environmental Permit Review to assess whether there are any unnecessary barriers within consignor
	supply chain.				permits.
	Enables earlier solution for waste producer.				Alignment of permits, WACs and planning consents to safety cases.
	Reduced lifecycle cost.				



Opportunity	Impacts	Proximity	Rating (current)	Rating (target)	Realisation activities
Fit-for-purpose, flexible and agile packaging fleets available for LLW management.	Optimised use of transport models. Quicker and cheaper LLW management.	Long-term	Low (4)	Low (5)	NWP follow-on packaging project (disposability to LLWR of select ILW containers). Ongoing NDA work on transport and packaging strategy initiated in FY17/18 under Critical Enablers thematic area. Develop new and fit-for-purpose packages. Ongoing development of the Type B fleet and transition to BAU.
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)	Onsite buffer storage generally available at waste producer sites and within the supply chain. This is now augmented with capability to store waste, in extremis, on the LLWR site.
Improved use of rail infrastructure to support management of LLW.	Reduced use of road (better carbon footprint, improved safety, improved community relations). 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. Ongoing NDA work on transport and packaging strategy initiated in FY17/18 under Critical Enablers thematic area.



Opportunity	Impacts	Proximity	Rating (current)	Rating (target)	Realisation activities
Management solutions available and in use for complex, challenging and problematic wastes.	Prompt hazard and risk reduction. Earlier solution for the management of such wastes. Cost savings across industry. Routes available for problematic waste. Avoidance of critical path schedule impacts due to inability to sentence problematic wastes that need to be dealt with.	Long-term .	Medium (8)	Medium (8)	Work through Problematic Waste IPT to identify and pursue opportunities. Waste producers undertake work to progress opportunities for management of complex / problematic wastes. LLWR work with suppliers to understand and promote opportunities.
Relevant ILW diverted from HAW disposal.	Potential reduction in storage and disposal costs for waste producers. Prompt hazard and risk reduction. Enables earlier solution for waste producer. Diversion from GDF maximised. Improved value from supply chain. Reduced lifecycle cost.	Medium- Term	Medium (8)		Exploration and introduction of an IRWP. Ongoing collaboration work. Tracking and progression of reclassification opportunities. Work on Near Surface Disposal IPT. Share LFE from projects to manage complex wastes. Project on HAW Treatment capability being delivered by RWM/NWP/LLWR.