



Nuclear
Decommissioning
Authority

NDA Mid-Year Performance Report

Mid-Year (end of September 2017) status for
2017/18

Performance against this year's targets

Our current Business Plan outlines what we intend to achieve this year. Specific targets sit behind this planned activity.

This report shows the performance against these targets at the end of September 2017. They are grouped by strategic theme under each Site Licence Company (SLC). Also reported is Safety and Environmental information for each SLC.

Strategic themes key:

SD&R	Site Decommissioning & Remediation
SF	Spent Fuels
NM	Nuclear Materials
IWM	Integrated Waste Management
CE	Critical Enablers

Status key:

Red	The key milestone or activity is due for completion before 31 March 2018. There is a forecast delay against the planned schedule and the target is expected to be missed.
Amber	The key milestone or activity is due for completion before 31 March 2018. There has been a delay against the planned schedule but there remains a possibility of recovery.
Green	On target, the key milestone or activity is due for completion before 31 March 2018 and is on track to be completed to schedule.
Blue	Target complete, the key milestone or activity has been completed during the financial year 2017/2018.
Grey	Deferred – activity deferred due to re-prioritisation and/or reallocation of funding.

Sellafield Limited

Target Summary

Status		Number of targets
Red	Behind target	0
Amber	Behind target with possibility of recovery	4
Green	On target	27
Blue	Target complete	0
Grey	Deferred	0

	Target	Status	Comments
SD&R	PILE FUEL STORAGE POND:		
	Remove sludge from a set of wet bays.	Green	
	Continue consolidation of sludge within the pond.	Green	
	Continue with consolidation and export of contaminated metals and recovery of residual fuel for treatment and storage.	Green	
	PILE FUEL CLADDING SILO:		
	Continue development of the capability to retrieve waste.	Green	
	FIRST GENERATION MAGNOX STORAGE POND:		
	Continue export of contaminated metal wastes from wet bays.	Green	
	Continue export of material from pond to the Fuel Handling Plant.	Green	

Sellafield Limited

	Target	Status	Comments
	Continue export of sludge from pond to Sludge Packaging Plant 1 buffer.	Green	
	MAGNOX SWARF STORAGE SILO:		
	Progress capability required to implement the revised Magnox Swarf Storage Silo waste handling strategy to develop the downstream capability to receive and store material from this facility.	Green	
	Complete build of Silos Emptying Machine 1.	Green	
	DECOMMISSIONING:		
	Continue the decommissioning and demolition of Windscale Pile Chimney Number 1.	Green	
	Begin the demolition of First Generation Reprocessing Plant stack.	Green	
SF	Continue to reprocess Magnox spent fuel in line with MOP9.	Green	
	Continue to receive and manage AGR spent fuel from EDF Energy.	Green	
	Reprocess oxide spent fuel through THORP from EDF Energy and overseas customers.	Green	
	Continue preparations for the long-term interim storage of AGR spent fuel following the completion of THORP reprocessing.	Green	

Sellafield Limited

	Target	Status	Comments
NM	Continue the safe and secure storage of plutonium in line with UK policy.	Green	
	Continue to receive and securely store special nuclear materials from Dounreay.	Green	
	Ensure safe, secure management of our uranics inventory.	Green	
IWM	Continue to process HAL through the Waste Vitrification Plant.	Amber	In year production is currently running behind plan, recovery plans rely on having 2 lines available for the majority of the last 6 months of the year.
	Continue the programme to repatriate overseas owned vitrified waste to its country of origin.	Amber	Current issues with availability of receipt facilities in host countries which are delaying in year loading plans; engagement with the customers in November is expected to focus on developing the forward plan.
	Start use of the new Evaporator D for HAL stock management.	Green	
	Continue to generate savings and preserve capacity at the LLW Repository (LLWR) by diversion of materials into the supply chain.	Green	

Sellafield Limited

	Target	Status	Comments
	Continue the programmes to receive and treat waste materials from Harwell and AWE Aldermaston.	Green	
CE	Continue the Sellafield security and resilience enhancement programme.	Green	
	Continue with improvements to the site steam, electricity and water infrastructure and Analytical Services.	Green	
	Continue the Sellafield Limited transformation to support future business requirements.	Green	
	Progress the transformation of Major Project delivery on site.	Green	
	Support Small and Medium Enterprise organisations by targeting overall spend with them in line with the government Growth Agenda.	Amber	NDA is working with Sellafield to help them achieve the target.
	Continuation of information assurance activities and supporting processes.	Green	
	Complete Fellside Boiler Park to ensure reliable steam supplies to Sellafield site.	Amber	The plan at the start of the year will not be met but it will complete before 31 March 2018.
	Prepare the business to move out of reprocessing.	Green	

Magnox Limited

Target Summary

Status		Number of targets
Red	Behind target	3
Amber	Behind target with possibility of recovery	7
Green	On target	50
Blue	Target complete	4
Grey	Deferred	0

Target	Status	Comments
MAGNOX LIMITED		
SD&R	Continuation of estate decommissioning and demolition activities working towards Interim States.	Green
	Management of MOP9 and co-ordination of Magnox fuel management activities with Sellafield and Dounreay.	Green
SF	Progression of Wylfa defueling.	Red Unlikely to meet current year end target for delivery of fuel to Sellafield. Defueling complete milestone still forecast for 2019. Any impacts to the MOP are being closely monitored.

Magnox Limited

	Target	Status	Comments
NM	Delivery of the Magnox nuclear materials programme activities.	Red	Behind programme due to transport container availability. This has potential to delay the programme and efforts are underway to mitigate this impact.
IWM	Delivery of the Magnox elements of the estate-wide low level waste management plan.	Green	
	Progression of activities to retrieve, process and package wastes.	Green	
CE	Support to the Government in activities to deliver the new build agenda.	Green	
	Continuation of information assurance activities and supporting processes.	Green	
	Support Small and Medium Enterprise organisations by targeting overall spend with them in line with government Growth Agenda.	Green	
	Support to NDA in property activities to reduce NDA decommissioning liability and achieve best value on asset disposal.	Green	

Magnox Limited

	Target	Status	Comments
	Development of Interim End State approaches, utilising revised management arrangements.	Green	
BERKELEY			
IWM	Continuation of retrieval and packaging activities in the active waste vaults.	Amber	Design phase of project slightly behind schedule but not forecasting impact to end of operational phase.
	Continuation of design and commissioning of shielded area waste retrieval equipment.	Green	
	Design and Build of encapsulation facility.	Green	
BRADWELL			
SD&R	Decommissioning and demolition activities in preparation for entry into Care and Maintenance.	Green	
	Ponds complex and contaminated structures (vaults) completed for entry into Care and Maintenance.	Green	
IWM	Continue Fuel Element Debris (FED) dissolution.	Blue	
	Continuation of ILW conditioning activities.	Green	

Magnox Limited

	Target	Status	Comments
	Consign LLW FED to LLWR.	Green	
CHAPELCROSS			
SD&R	Decommissioning and demolition activities in preparation for entry into Care and Maintenance.	Green	
	Continuation of pond operations.	Amber	Recovery plan being developed.
IWM	Preparation for ILW retrievals.	Green	
DUNGNESS A			
SD&R	Decommissioning and demolition activities in preparation for entry into Interim Care and Maintenance.	Green	
	Ponds drained, cleaned and stabilised.	Green	
IWM	Complete conditioning facility build.	Green	
	Begin retrievals, treatment and transport of ILW.	Green	
	Maintain contingency option of FED dissolution in support of Bradwell's entry into Care and Maintenance.	Blue	

Magnox Limited

HARWELL			
SD&R	Continuation of Liquid Effluent Treatment Plant (LETP) area environmental restoration.	Amber	Difficulties encountered with waste retrieval and building demolition.
	Decommissioning and demolition activities.	Green	
NM	Continuation of the programme for the transfer of nuclear materials and contact-handled ILW.	Amber	Behind programme due to transport container availability.
IWM	Recovery, processing and packaging of solid ILW.	Green	
	Continuation of ILW Store design and construction.	Green	
HINKLEY POINT A			
SD&R	Decommissioning and demolition activities in preparation for entry into Care and Maintenance.	Green	
	Begin deplant and demolition of Turbine Hall.	Green	
IWM	Commence Interim Storage Facility construction.	Blue	
	Continuation of preparations for FED retrieval activities.	Green	
	Continuation of ILW skip management arrangements.	Green	

Magnox Limited

	Continuation of Wet Waste and Vessel consolidations.	Green	
	Commence conditioning facility construction.	Green	
HUNTERSTON A			
SD&R	Decommissioning and demolition activities in preparation for entry into Care and Maintenance.	Green	
IWM	Completion of solid ILW encapsulation plant construction and mechanical and electrical installation.	Red	Project is behind schedule with issues currently being investigated. A revised schedule is currently being developed.
	Progressing of ILW retrievals, processing and storage activities.	Green	
OLDBURY			
SD&R	Decommissioning and demolition activities in preparation for entry into Care and Maintenance.	Green	
	Continue ponds decommissioning enablers.	Green	
IWM	Continue ILW retrieval enabling works.	Green	
	Progression of activities supporting consolidated ILW storage.	Green	

Magnox Limited

SIZEWELL A			
SD&R	Decommissioning and demolition activities in preparation for entry into Care and Maintenance.	Green	
	Continuation of ponds decommissioning.	Amber	Additional work has been required to deliver this target. The diving programme at Dungeness experienced delays.
IWM	Continuation of FED retrieval enablers.	Green	
	Continue ILW retrieval enabling works.	Green	
	Progression of activities to support consolidation of ILW storage.	Green	
TRAWSFYNYDD			
SD&R	Continue developing strategy for ponds End State conditions.	Green	
	Decommissioning and demolition activities in preparation for entry into Care and Maintenance.	Green	
IWM	Begin FED retrievals and encapsulation.	Blue	
	Complete sludge and resin encapsulation.	Green	

Magnox Limited

WINFRITH			
SD&R	DRAGON – continue reactor decommissioning.	Green	
	SGHWR – continue design and build of reactor decommissioning equipment.	Green	
	SGHWR – continue decommissioning of the primary and secondary containment areas.	Amber	Additional work identified which is delaying delivery.
	Decommissioning and demolition activities.	Green	
WYLFA			
SD&R	Decommissioning and demolition activities in preparation for entry into Care and Maintenance.	Green	
	Provision of support and assets to nuclear new build programme.	Green	
IWM	Continuation of ILW retrievals and packaging.	Green	
	Continuation of waste retrieval enabling activities.	Green	
SF	Defueling activities in line with MOP9.	Amber	Unlikely to meet current year end target for delivery of fuel to Sellafield. Overall performance remains within MOP9 tolerances.

Dounreay Site Restoration Limited

Target Summary

Status		Number of targets
Red	Behind target	1
Amber	Behind target with possibility of recovery	0
Green	On target	0
Blue	Target complete	0
Grey	Deferred	3

	Target	Status	Comments
SD&R	Dounreay Materials Test Reactor (DMTR) building complex decontamination complete.	Grey	This milestone will not be met this year due to funding reprioritisation
	Complete decontamination of PFR pond.	Grey	Work deferred due to 'Exotics' Reprioritisation.
	D1225 demolition complete.	Grey	Work deferred due to 'Exotics' Reprioritisation.
NM	Complete removal of all fuels from the DFR.	Red	The breeder fuel removal commissioning was delayed to replace the retrieval mast and cable management systems which were determined not fit for purpose. This has added over two years to the schedule.

Low Level Waste Repository Limited

Target Summary

Status		Number of targets
Red	Behind target	0
Amber	Behind target with possibility of recovery	2
Green	On target	8
Blue	Target complete	0
Grey	Deferred	0

	Target	Status	Comments
SD&R	Ongoing site preparation for phased construction of the final cap for trenches 1 to 7 and Vault 8.	Green	
	Ongoing decommissioning of Plutonium Contaminated Material facilities.	Amber	Progress maintained despite some challenges associated with legacy wastes and unavailability of transport packages.
IWM	Continue segregated waste, treatment and disposal services in line with UK LLW Strategy.	Green	
	Support hazard reduction across the NDA estate.	Green	

Low Level Waste Repository Limited

	Target	Status	Comments
	Delivery of the National LLW Programme to optimise LLW Strategy implementation. Work with consigning SLC's to improve waste forecasts and inventory.	Green	
	Support hazard reduction across the NDA estate.	Amber	Progress on manufacture of new fleet of transport containers has been delayed.
	Consideration of options to further optimise operations at the LLWR.	Green	
CE	Continue to pursue overall cost savings in delivery of the Lifetime Plan.	Green	
	Continue to pursue positive SLC behaviours.	Green	
	Support Small and Medium Enterprise organisations by targeting overall spend with them in line with the government Growth Agenda.	Green	

Springfield Fuels Limited

Target Summary

Status		Number of targets
Red	Behind target	0
Amber	Behind target with possibility of recovery	0
Green	On target	3
Blue	Target complete	0
Grey	Deferred	0

SD&R	Complete Post Operations Clean Out (POCO) of Residues Recovery Plant (RRP).	Green	
	Complete planning activities to support proposals to decommission the Magnox Island on site.	Green	
NM	Complete processing of natural uranic materials through the RRP processing.	Green	

Urenco Nuclear Stewardship Ltd (formerly known as Capenhurst Nuclear Services Ltd)

Target Summary

Status		Number of targets
Red	Behind target	1
Amber	Behind target with possibility of recovery	0
Green	On target	0
Blue	Target complete	0
Grey	Deferred	0

	Target	Status	Comments
SD&R	Complete phase 1 of East Side Curtilage raft construction.	Red	The raft construction will not be complete this financial year due to land remediation delays and the current estimate for completion is May 2018 at the earliest. Mitigation steps have been taken to ensure this does not prevent the ability to accept NDA cylinders from URENCO storage into the new facility when needed.

Health & Safety, Security and Environmental Performance

Below is a summary of safety and environmental information for April – September 2017.

The NDA has made clear its absolute commitment to the highest standards for health and safety, security and protection of the environment and expects its contractors to deliver sustained excellence in Health, Safety, Security, and Environmental (HSSE) performance.

This report gives details on any reportable safety incidents and environmental impact that have occurred at an NDA site in the reporting period.

Key:

Nuclear and Radiological Safety:

- No incidents
- One or more INES* Level 1 or above

Conventional Safety:

- No incidents
- One or more RIDDOR** reportable events

Environment:

- No incidents
- One or more environmental non compliances

* International Nuclear Events Scale

** Reporting of Injuries, Diseases and Dangerous Occurrences Regulations

Health & Safety, Security and Environmental Performance

RAG Definition

Status		Safety	Env't	Security
Red	Unacceptable performance, insufficient actions are in place to recover within an acceptable timeframe	0	0	0
Amber	Unacceptable performance, however, appropriate actions are in place to recover within an acceptable timeframe	2	2	0
Green	Acceptable performance	10	10	12

SITE	SAFETY	ENV'T	SECURITY	COMMENTS
Sellafield	Amber	Green	Green	Sellafield's Amber rating for safety reflects both the ongoing response to the 3 INES2 events reported last year, and the recent destruction of 2 batches of hazardous chemicals by Army Explosive Ordnance Disposal.
Magnox	Green	Green	Green	
Dounreay	Amber	Amber	Green	Dounreay/DSRL has experienced a long period of underperformance in safety and environment resulting in regulatory action from the Scottish Environment Protection Agency (SEPA), and enhanced attention from the Office for Nuclear Regulation (ONR). It is too early to be confident that HSE improvements have been embedded, but HSE metrics, including injury rates and the number of environmental non-compliances, have improved.

Health & Safety, Security and Environmental Performance

SITE	SAFETY	ENV'T	SECURITY	COMMENTS
LLWR	Green	Green	Green	
Capenhurst	Green	Green	Green	
Springfields	Green	Green	Green	
RWM	Green	Green	Green	
INS	Green	Green	Green	
DRS	Green	Green	Green	
NDA Properties	Green	Green	Green	
NDA Archives	Green	Green	Green	
Corporate Centre	Green	Amber	Green	Corporate Centre's Amber rating for environment refers to high water usage at Herdus House (NDA HQ), which remains under investigation, and a significant increase in rail mileage.

Health & Safety, Security and Environmental Performance

Nuclear and Radiological Safety

Our sites reported one INES1 event, a small spillage of Uranium Trioxide powder at Sellafield. The spillage had no safety consequence for the workers involved, and caused no radioactive pollution. The INES1 rating follows from an assessment of the spill quantity, which exceeded the limits specified in the Ionising Radiation Regulations.

Conventional Safety

The Reporting of Injuries Diseases and Dangerous Occurrences Regulations 2013 (RIDDOR) requires employers to inform the regulators of some work-related incidents. RIDDOR applies to all work activities, but not to all incidents. Four types of incident must be reported:

- Specified Injuries, as defined in the regulations.
- Lost Time Accidents, where a worker has been unable to undertake normal work activities for a period of greater than seven days.
- Dangerous Occurrences, as specified in the regulations.
- Industrial Diseases, as specified in the regulations

By the end of Q2, a total of 11 RIDDOR injuries had been reported to the NDA.

Number of RIDDOR injuries by SLC to the end of Q2	
Sellafield Ltd	7
Magnox Ltd	3
DSRL	1
LLWR	0
Total	11

At the end of Q2, the total population of all NDA sites was 16,410, making the RIDDOR rate (accidents/employee) slightly lower than at the same time last year. Additionally, the NDA Total Recordable Incident Rate at the end of Q2 was 0.27, which compares well with previous performance, and the UK manufacturing sector.

While all accidents are of concern to us, this level of performance is slightly better than in previous years.

Health & Safety, Security and Environmental Performance

(Total Recordable Incident Rate (TRIR) is a metric defined by the US Occupational Safety and Health Administration (OSHA). TRIR is used extensively by major corporations and we use it as a proxy to benchmark our performance against international safety standards).

Environmental Events

We measure environmental performance by counting up the number of non-compliances with each site's regulatory authorisation. At the end of Q2, NDA sites had recorded 23 non compliances, 10 fewer than recorded at the same time last year.

Number of environmental non-compliances by SLC to the end of Q2	
Sellafield Ltd	8
Magnox Ltd	9
DSRL	6
LLWR	0
Total	23

It is rare for our sites to have serious environmental events. The majority of non-compliances were associated with failures of management arrangements and none caused any form of pollution.