



Closure Director's Report Dungeness A Site

May 2019





Round-up from the Closure Director

In line with the company values and safety improvement plan to deliver a 'Target Zero' approach to safety, the site continues to promote monthly themed campaigns including 'Safety Successes', 'Company Transition', 'Safety Conversations', 'Complacency is your Enemy', 'Health and Wellbeing'. The site has now exceeded 1070 days since its last Lost Time Accident.

Magnox continues to support local socio-economic projects and last year the community around Dungeness A benefitted from £51,091 of support for 15 local projects. Details of these can be found later in this report as well as how to apply.

The **Ponds Programme**: Pond drain and decontamination activities have continued. Bulk pond drain is now 100 per cent complete. Decontaminated of the bays is well underway. Completion of the decontamination is forecast May 2019.

Plant & Structures: The bulk asbestos removal project continues but has suffered two specific delays; firstly a slow down to match allocated funding and secondly, a safety pause to address hanger chain failure issues. The former delay will result in the asbestos strip now running until the end of the 2019/20 financial year. A Strategic Options paper has been presented to NDA and recommended that the scope of the reactor building deplant and demolition to provide adequate safestores to include Boilers, Annexes, Blower Halls & Control Block.

Waste Projects: The design of the Wet Waste Transfer Facility (WWTF) is now substantially complete. This facility is expected to be ready for active commissioning by the end of August 2019. The Borderline Wet Waste (BWW) project has progressed well and is now nearing the completion of the detailed design phase. It is planned for retrievals to commence in January 2020.

A handwritten signature in blue ink, appearing to read 'P. Wilkinson'.

Paul Wilkinson
Closure Director

1. SAFETY

SAFETY

In line with the company values and safety improvement plan to deliver a 'Target Zero' approach to safety, the site continues to promote monthly themed campaigns including 'A Safe Return to Work' following the Christmas break, 'Safety Successes', 'Company Transition', 'Safety Conversations', 'Complacency is your Enemy', 'Health and Wellbeing'. The site has now exceeded 1070 days since its last Lost Time Accident.

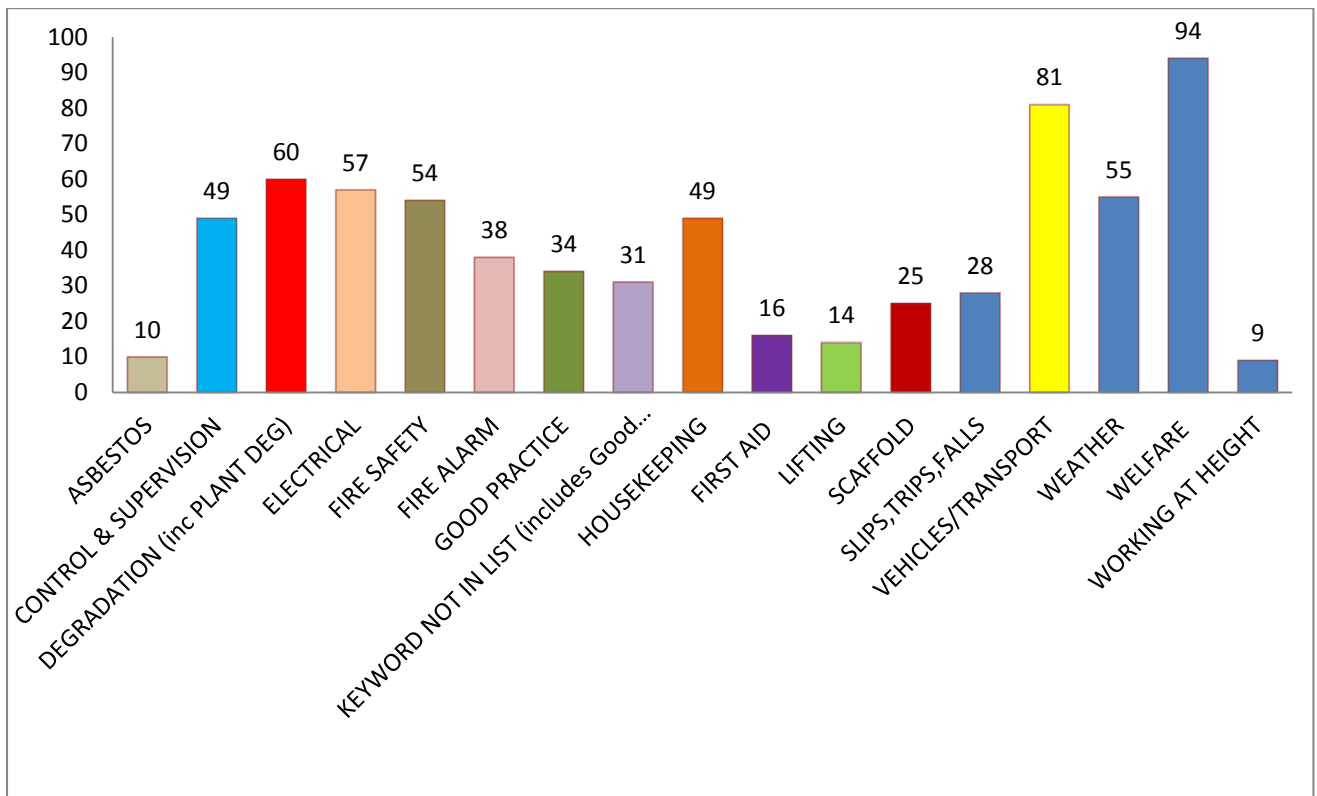
The reporting culture on site remains strong with 965 learning capture forms submitted over the last year.

There have been three events of conventional safety significance in the period; an injury sustained during manual handling operations, a fire exit door that was checked and was unable to be opened, and a long reach carbon fibre tool that became detached from a handrail and fell to the pond floor near an operative working on the pond floor. Event trends and improvement actions are focussing on fire safety, plant degradation and transport safety.

During the last 12 months the Site has had 16 minor first aid events. The same amount as the previous two years. In an aim to reduce these minor injuries, of which 50% were to the hands, the safety team are planning a safety campaign at the end of May with an aim to reduce injuries across the site.

The Days Away Case Rate (DACR) remains at zero and the Total Recordable Incidents Rate (TRIR) is 0.29, following a manual handling injury.

The chart below shows the keyword areas in which learning capture forms have been raised over the last 12 months at Dungeness A:



RADIOLOGICAL PROTECTION AND ENVIRONMENT

Radiation doses remain as low as reasonably practical and below dose limits. The total dose received by all persons in 2018 was slightly below estimate. Performance against the 2019 will be monitored as the year progresses, but is showing close correlation to that estimated.

Following a successful selection process, three radiological protection technician apprentices have begun work at Dungeness A.

The Site made an application to the Environment Agency to vary the radiological EPR permit to include a number of additional gaseous discharge routes as a result of upcoming project work in December 2018. It is also expected that a variation for a change to the conventional effluent discharge permit to include the new Modular Active Effluent Treatment Plant as an authorised discharge route will be submitted following completion of further sample analysis.

EMERGENCY SCHEME

Dungeness A has held the following exercises in the last three months:

- 17/01/2019 – Exercise Kent - Radiological Safety Exercise
- 11/02/2019 – Exercise Sutherland - Joint Safety and Security Exercise
- 13/02/2019 – Exercise Defender - Joint Safety and Security Exercise
- 26/02/2019 – Exercise Somerset - Annual Assurance Demonstration Exercise (Safety and Security)
- 14/03/2019 – Exercise Richmond - Site Wide Fire Evacuation Drill
- 19/03/2019 – Exercise Ironduke – Confined Space / Medical Emergency Exercise

The site adequately demonstrated to the company assessment team its ability to manage a joint safety and security scenario in February 2019. Training and exercising will continue for the Site through 2019/20.

2. SITE AND PROJECT NEWS

PONDS PROGRAMME

Pond drain and decontamination activities have continued since the last report. The bulk pond drain is now 100 percent complete with the floors of the transfer duct, main and standby bays exposed in both ponds. Decontamination of the bays is well underway and pipework removal from the bay walls has commenced. Completion of the decontamination is forecast May 2019.



R1 Pond Floor Decontamination

To enable full decommissioning of the site's Active Effluent Treatment Plant (AETP) an alternative contaminated water treatment facility is required. Since the last report, a Modular Active Effluent Treatment Plant (MAETP) has been installed on site. A new discharge line is currently being installed and it is forecast that the whole system will be ready for inactive commissioning in June 2019.

Water sampling is also being undertaken to support our new water discharge consent permit required to support the operation of the new plant.



Installation of the MAETP

WASTE OPERATIONS PROGRAMME

Low Level Active Waste (LLAW) Operations

From the beginning January until the end of March 2019, the Waste Operations Programme monitored, processed and disposed of the following waste:

Two contaminated waste shipments have been processed and dispatched to Veolia and Tradebe respectively (64m³)

189m³ of contaminated asbestos waste (VLLW) was consigned to Augean for disposal.

A further 48 non radiological waste shipments have been disposed-off, comprising mainly asbestos and metal/general waste.



High Activity Waste (HAW) Operations

Retrieval and conditioning of ILW (Intermediate Level Waste) Resin from sludge tanks ST3 & ST4 has continued with a further 13 MOSAIKs having been filled. This means we have now filled & conditioned a total of 62 MOSAIKs since the process began.

We now believe we have retrieved all we can from ST3 using the current retrieval equipment and only residue remains. This will be retrieved separately once retrievals are completed from ST4.

A further Rail shipment of nine MOSAIKs was dispatched to Bradwell for long term storage.



The future scope of work up to the end of June 2019 is as follows:

- Complete tank change over from ST3 to commence ILW Resin retrievals from ST4
- Retrieval and conditioning of 10 MOSAIKs from ST4
- Transport of two rail shipments to Bradwell containing 18 MOSAIKs
- Continue monitoring and processing of LLW/VLLW and Non-rad waste

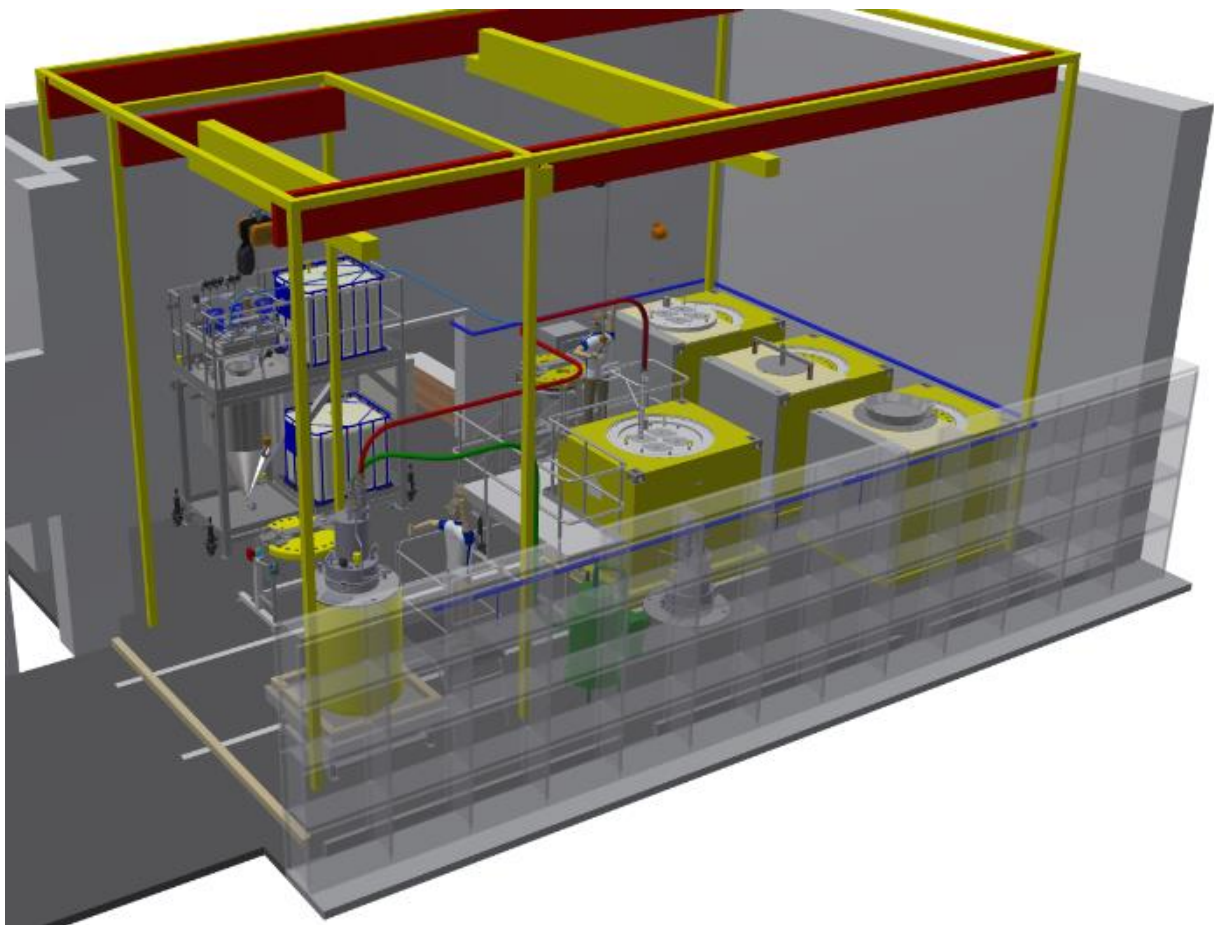
WASTE PROJECTS PROGRAMME

Resin Pathfinders

The strategy for this project has changed over the last year. In addition to its original design intent, this project will now provide a more generic facility that will be able to transfer a number of different wet ILW wastes in to DCIC disposal packages from a range of different containers. This facility is known as the Wet Waste Transfer Facility (WWTF).

The design of the WWTF is now substantially complete. Enabling works are well underway and major components, e.g. Containment Enclosure and Overhead Crane, are in manufacture. Procurement of the transfer equipment is also in progress.

This facility is expected to be ready for active commissioning by the end of August 2019.



3D view of the wet waste transfer facility

Borderline Wet Waste

The Borderline Wet Waste (BWW) project scope is to retrieve a number of wet ILW wastes that have been identified as suitable for encapsulation in cement and disposed to the Low Level Waste Repository (LLWR). The LLWR will be the final repository for the LLW packages generated by this project.

The project strategy is to retrieve the waste in to drums, transport the drums to Tradebe/Inutec's (TI) premises in Dorset where they will be encapsulated and packaged for disposal.

The Borderline Wet Waste (BWW) project has progressed well and is now nearing the completion of the detailed design phase. Wood Group are in partnership with Tradebe/Inutec (TI) to deliver this work. Wood have designed the retrieval equipment and TI have developed the encapsulation recipes and managed the disposal strategy with the LLWR.

It is planned for retrievals to commence in January 2020.

Sludge and Sand

Installation works are progressing well with the Fill House building being fitted out with the retrieval and packaging equipment. All the retrieval and packaging equipment has been pre-assembled and tested at NSG's works in Preston, Lancs. The equipment has now been tested, disassembled and delivered to Dungeness for assembly within, and around, the Fill House building.



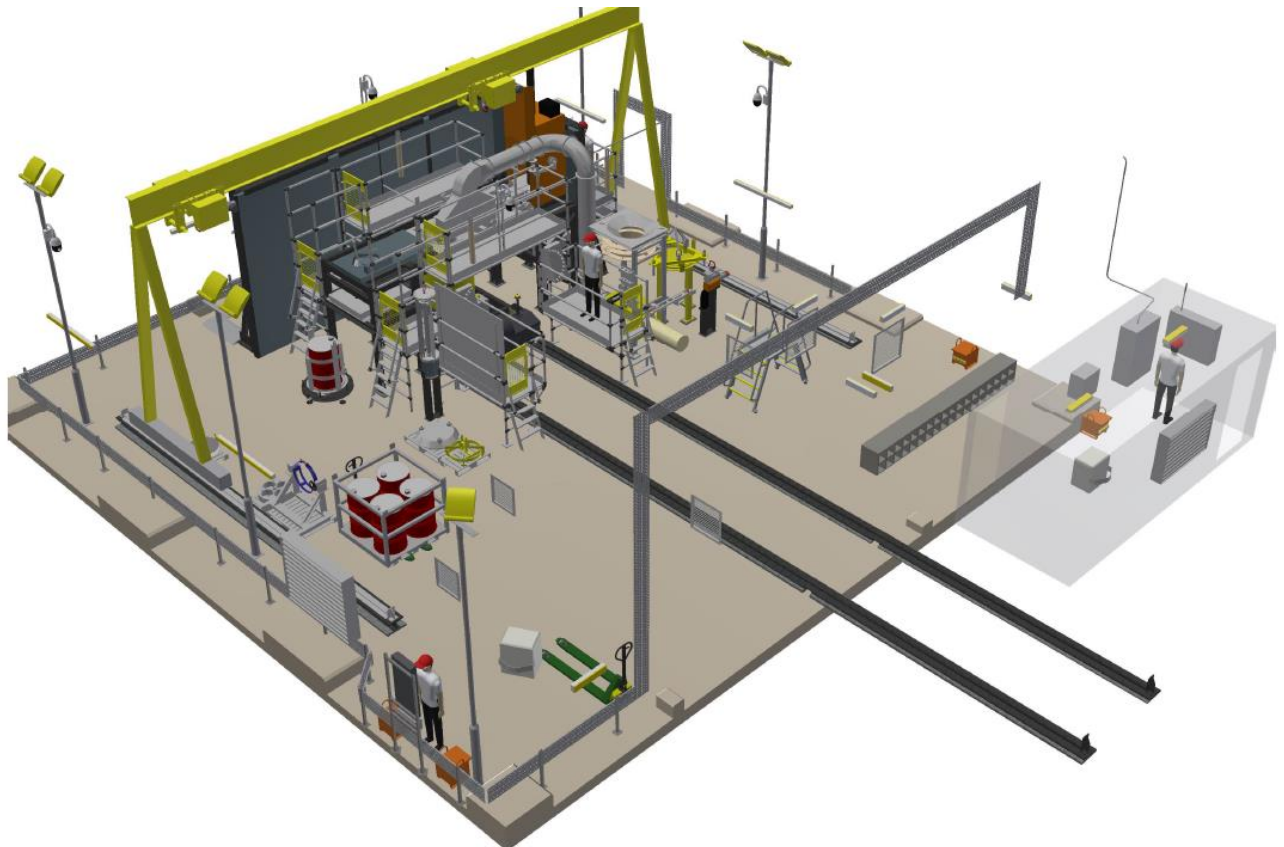
The Fill House building being equipped with retrieval and DCIC filling equipment

The Sludge and Sand Project has a significant milestone to deliver which is for the system being ready for Active Commissioning by August 2020.

Miscellaneous Contaminated Items (MCI)

The detailed design for the Waste Transfer Area is nearing completion. This is where Miscellaneous Contaminated Items (MCI) and Miscellaneous Activated Components (MAC) will be taken for sorting, segregating, size reduction and packaging in to DCICs for conditioning. The contract with Nuvia for the design phase is progressing well.

Nuvia are expected to commence site works in summer 2020.



3D view of the MCI Waste Transfer

PLANT AND STRUCTURES

Boiler house asbestos removal

The bulk asbestos removal project continues but has suffered two specific delays; firstly a slow down to match allocated funding and secondly, a safety pause to address hanger chain failure issues. The former delay will result in the asbestos strip now running until the end of the 2019/20 financial year. In mitigation for safety pause, the central change area has been handed over to the contractor for soft strip and asbestos removal. Also work has started on future scope in the ponds areas. This mitigation is expected to protect the revised date of financial year end.

To match the funding challenge, staffing levels on the project have been reduced from a peak of 120 persons stepping down to ~80 then further downturns to ~60 in early 2020.

Reactor Building deplant and demolition

Structural inspection of the boiler annexes has revealed significant deterioration due to environmental conditions and defective roof structures. Structural assessments have identified significant work to secure these until final site clearance. A Cost / Benefit analysis demonstrates that the best option is to remove annexes. The Boilers are also showing signs of structural degradation and a boilers up seismic safety case are expected to require significant assessment and site modifications. Again a cost / benefit analysis has shown that the best option is to remove the boilers.

A Strategic Options paper has been presented to NDA and recommended that the scope of the reactor building deplant and demolition to provide adequate safestores will to include Boilers, Annexes, Blower Halls and Control Block.

Initial work has started on the early planning phases including electrical isolations, waste characterisation and project scope and planning.

3. STAFFING

- As at 31 March 2019, there are 130.17 full time equivalent (FTE) members of staff at Dungeness A Site. There is also an additional 30.97 FTE who have a central role but are based at Dungeness A.
- There are 53 agency supplied workers and 21 individuals employed through Framework Agreements or as contract supplied workers.
- The number of contractors fluctuates according to the work being undertaken.
- Since the last report to 31 December 2018, there have been four leavers (two resignations and two who left on Selective Voluntary Severance - SVS).

4. COMMUNITY RELATIONS

In 2018 – 2019, Magnox awarded £743,512 to projects across the whole of Magnox to 129 organisations. At Dungeness £51,091 was allocated to support 15 organisations.

Organisation	Funding awarded	Description/outcome
Beckley Parish Council	£995	Better Beckley (phase two) – towards play equipment
5-A-SIDE-FUN	£1,000	5-A-SIDE-FUN Tournaments
Lympne Playing Field and Village Hall	£1,000	Furniture and Equipment for new Annexe to Village Hall
Highways at Hamstreet	£1,000	Sensory Space for pre-school
John Armitage Memorial (JAM)	£4,500	Arts Award accredited photography course for Romney Marsh

Dymchurch Players	£1,000	Upgrade to lighting system in Dymchurch Village Hall
Light Up New Romney Community Lantern Parade	£300	Light Up New Romney 2018 – materials for creative workshops
Strange Cargo	£10,000 (Subject to match funding being received)	Everywhere Means Something to Someone. The People's Guidebook to the Romney Marsh
IMOS Foundation	£1,000	Armistice Centennial – towards commemorative installation
Rye Christmas Festival	£1,000	Rye Christmas Festival
New Romney Country Fayre	£2,854	New Romney Country Fayre 2018, 2019 and 2020 (3 year funding) Reusable equipment
Lydd Club Day Committee	£852	Lydd Club Day 2018
JAM	£4,590	JAM on the Marsh (JOTM) 2018
Turn The Tide Festival	£1,000	Turn The Tide Festival 2018 – towards photographic workshops and exhibition, artist workshops and tours of Marsh Churches.

Magnox has been allocated £977,678 by the NDA to provide socio-economic support across the twelve sites for 2019/20. £6,000 has been allocated to each site for Good Neighbour Applications (up to £1,000). We already have multi-year funding projects committed for this year totalling £467,312 which, with the allocation of £72,000 for the Good Neighbour applications means that there is currently £438,366 available across the Magnox sites for applications above £1,000.

For Good neighbour applications you will only need to complete the first three questions and all applications must complete an End of Project Report and submit good quality photographs to demonstrate that the money was spent as specified in the application which will in turn secure future funding for the scheme.

Please go to <http://www.magnoxsites.co.uk/about-us/community/> or www.magnoxsocioeconomic.com to access the socio-economic web portal where you can apply for funding go to Can I Apply? (to see if you are eligible).

A roundup of the Magnox Socio-economic scheme 2018/19, in the form of an infographic, will be available on www.magnoxsocioeconomic.com or www.magnoxsites.com from 8 May 2019.

If you would like to discuss a potential Good Neighbour application please contact Steve Payne: steve.j.payne@magnoxsites.com or tel: 07712546139 or

Haf Morris: haf.e.morris@magnoxsites.com or tel: 01797 343549 for applications over £1,000.