

eagle

NEWS

The newsletter for the nuclear & nuclear medicine professional

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INTRODUCTION



“ This year, we’ve seen a significant increase in activity in all of our nuclear markets, including decommissioning, plant life extension, research/development, defence and now, new nuclear build. We’ve also gained good opportunities within Europe and have recently won a design and build contract for a remote handling facility in central Europe.

The resilience of the Aquila team during slow trading in the nuclear sector has been rewarded with order intake more than doubling in the past six months, and the future looks nuclear! The performance of our delivery team, headed by Chris Thomson, is recognised as first-in-class, open, honest and we’re known for doing what we say we will do, always.



Dave Barker, CEO,
Aquila Nuclear Engineering Ltd



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CONTAINMENT



CONTRACT WINS

Aquila Nuclear Engineering Ltd has recently been awarded two contracts with Magnox Limited.

We will design and manufacture a Drum Housing Unit (DHU) for the detection of radon, to be installed at Magnox’s Harwell site. The DHU will house radioactive waste drums to enable the measurement of radon gas emanating, prior to their transfer to another site for long-term storage.

We will also undertake the design and manufacture of an external mixing unit as part of the modular ILW Encapsulation Pre-Conditioning Project at Hinkley Point A. Work will comprise the design and supply of a horizontal shaft mixer for the immobilisation of sludge with cement powders and an associated washing system. The equipment will be installed on a mezzanine steelwork platform to be located within a new portal frame clad building.



EQUIPMENT DELIVERIES



NNL FLASK SADDLES

Aquila has delivered Flask Saddles to the National Nuclear Laboratory (NNL) Windscale Laboratory.

Required to support a flask of approximately 12t SWL, the saddle was designed to hold the flask horizontally for posting the contents to a new cave location and hold the flask in the relative positions for posting height and distance to the centre of the relative bogie.



DSRL IMPORT TROLLEYS



Aquila has successfully delivered six import trolleys to Dounreay. Playing a key part in the decommissioning process at Dounreay, the trolleys will provide safe transport of sacrificial cans (containing active materials) from the storage facilities to the repackaging area.

Aquila led the manufacture, procurement, assembly and testing, including design modifications for three of the trolleys to enable the handling and transport of specially extended sacrificial cans; to provide a trolley fleet capable of handling all sacrificial can forms.

The six trolleys incorporate a commercially available proprietary motorised trolley, with modifications, which acts as the main platform for the combination of steel support frames and Jabroc shielding.

UKAEA DELIVERIES

The United Kingdom Atomic Energy Authority (UKAEA) has recently received two deliveries from Aquila; a Vacuum Containment Vessel and a Primary Circuit for a Permeator, and four WDS Valve Boxes.

The fabrication required full material and weld traceability and followed UKAEA approval of welding specifications, welding procedure and welder qualifications.



Photo Credit: UKAEA



Photo Credit: UKAEA



↓ AQUILA NEWS



AWE CATEGORY CODE APPROVAL



AQUILA HAS AN AWE CORE QUALITY SCORE OF 100%

	DESCRIPTION
24.11.01.00N	Packaging for the Storage or Transport of Hazardous Materials (Bespoke designs, drums, boxes, cradle assemblies etc.)
41.10.20.03N	Gloveboxes
72.10.14.01N	Blast Doors
73.00.00.00N	Manufacturing Support, Machining, Forming, Welding, Fabrication etc.
73.00.00.01N	Machining. Built to Drawing (Non Commercial off the Shelf)
73.31.00.00N	Fabrication Built to Drawing (Non Commercial off the Shelf item)
79.01.00.00N	Task-based Consultancy - Decommissioning
79.02.00.00N	Task-based Consultancy - Design
79.03.00.00N	Task-based Consultancy - Engineering
79.08.00.00N	Task-based Consultancy - Manufacturing
79.09.00.00N	Task-based Consultancy - Procurement
79.10.00.00N	Task-based Consultancy - Project Management

AQUILA MEMBERSHIPS

Aquila is now a member of the Britain's Energy Coast Business Cluster (BECBC), enabling increased knowledge sharing and relationship development with key stakeholders in the supply chain and Cumbrian economy.

Aquila is also now a member of the South West Nuclear Hub which plays a leading role in co-ordinating and growing regional nuclear energy activities, in support of the Government's Nuclear Industrial Strategy.



AQUILA NEWS BULLETIN

AQUILA EXPANSION

The Aquila site at Hazeley Enterprise Park in Twyford, Winchester, continues to grow. A new engineering complex is now in use, with plans for more growth in 2018.

NEW WEBSITE LAUNCH

Aquila has launched its new-look website and it's up and running at aquilaeurope.eu. Keep an eye out for the latest news and case studies.

NUCLEAR FUEL

To celebrate our summer of success, Aquila collaborated with our marketing and design agency, The Glow Studio, to design our own 'Nuclear Fuel' ale brand. Bowman Ales, an award-winning brewery local to Aquila's Twyford offices (near Winchester), kindly agreed to let us re-label their own Meon Valley Bitter bottles to feature Aquila's very own customised label.

The bottles have been given out to clients, and employees at a recent staff event.

↓ CONTRACT PROGRESS

AQUILA HU HOT CELLS

The images in nuclear medicine are mainly obtained through Single Photon Emission Computed Tomography (SPECT) and Positron-Emission Tomography (PET). These procedures are carried out with various radionuclides. The most common SPECT and PET techniques in the world are Tc-99m, F-18, C-11, I-123, In-111, and TI-201.

Aquila are assisting the advancement of nuclear medicines imaging with our leading edge products, HU Hot Cells.

Aquila's HU Hot Cells are shielded hot cells used within a preclinical facility dealing with research into positron emitting isotopes (non-GMP). The Hot Cells are used for the manufacture of fluoride-18, carbon-11 and other radiopharmaceutical compounds incorporating metal and iodine isotopes.

This facility includes a low-power cyclotron, hot cells for isotope dispensing, shielded fumehoods and preclinical scanning facilities across two floors in a new extension to an existing biomedical science research building.

The facility uses both internally and externally produced isotopes (delivery from other commercial and research cyclotron sites). Synthesis of radiotracers is carried out using commercial synthesis units and bespoke microfluidic systems.



VACUUM BLASTING EQUIPMENT

Aquila has developed a range of vacuum blasting equipment for remotely decontaminating surfaces of cells. The solution involved a Modification Off The Shelf (MOTS) vacuum blaster. Aquila completed the scheme design, mock-up, detail design, manufacture, assembly and commissioning of the Vacuum Blasting Equipment. Remote filter canisters allowed the blasting filter to be replaced when required. Power and air services were provided via the Multi-Purpose Port Bung and an extended lead provided power to the vacuum head.



RESIDUAL STRESS RIG

Following the presentation of concept designs, verification of process requirements and engineering schemes to NNL, Aquila is in the process of manufacturing, assembling and testing a residual stress rig, in preparation for delivery.

XY HYDRAULIC PRESS

Aquila is modifying a proprietary hydraulic press to be operated by a Master Slave Manipulator (MSM). The equipment receives a component and, via remotely controlled X and Y drives, accurately positions the component to allow samples to be punched out at specific locations for further inspection and testing.

ANALYSIS BREAKDOWN EQUIPMENT

Aquila is developing a range of equipment to receive and process irradiated components to allow for the size reduction, preparation and inspection. The equipment consists of an XY gantry, complete with a Z drive slitting saw machining head, a Z drive and rotation unit and a large cut off saw. The equipment is being developed in conjunction with NNL in order to achieve the best integrated package of works.

NDA ESTATE SME STEERING GROUP – SOUTHERN REGION

Dave Barker, CEO, Aquila Nuclear Engineering has been appointed Chairman of the Nuclear Decommissioning Authority (NDA) Estate SME Steering Group – Southern Region.

Appointed in May 2017, Dave will chair the group for a period of 3 years

The group provides a forum for strategic engagement between the NDA, the Site Licence Companies (SLCs), Tier 2 suppliers and SMEs representing the supply chain, and feeds into the National SME Steering Group to promote shared learning, best practice and coordination.

NDA ESTATE NEWS

Since taking over ownership of Sellafield in 2016, The Nuclear Decommissioning Authority (NDA) is continuing to deliver against the Sellafield Transformation Programme. The first drum of historic sludge to be encapsulated and stored for long-term storage was removed at the beginning of 2017. The project will continue for several years to ensure that the facility can be safely decommissioned and will still be in progress in 2019, when the project to dewater the pond will begin.

The first of six holes has been successfully cut in the Pile Fuel Cladding Silo. Once all six holes are complete, they will allow radioactive waste to be removed from the building.

A remotely operated machine, the Avexis robot, has used its cameras to view inside the Magnox Swarf Storage Silo (MSSS), to help dislodge and clear waste and, a share of a multi-million pound 'container' contract has been awarded to TPS Engineering Ltd and Cavendish Nuclear. The contract is for the supply of containers to move radioactive materials from the Magnox Swarf Storage Silo (MSSS) to the newly constructed facilities on site.

UK-EUROPEAN SPALLATION SOURCE (UK-ESS)

UKAEA Culham is leading the delivery of the Hot Cell Remote Handling Facility for the UK-European Spallation Source (ESS), part of the UK's contribution to the ESS currently under construction in Lund, Sweden.

The ESS is due to begin operations in 2019 as a multi-disciplinary research facility based on what will be the world's most powerful pulsed neutron source.

We are looking forward to seeing what further opportunities are available for the UK nuclear industry.

“ I'M DELIGHTED TO HAVE BEEN VOTED CHAIRMAN OF THE STEERING GROUP & I BELIEVE THE MIX OF COMPANIES REPRESENTED WILL WORK WELL WITH THE SITE LICENCE COMPANIES IN HELPING TO IMPROVE PERFORMANCE AND INCREASING THE PERCENTAGE OF BUSINESS FLOWING INTO THE SUPPLY CHAIN AT THE SME LEVEL.

THERE ARE GREAT OPPORTUNITIES FOR SMES IN THE SOUTH, NOT JUST WITHIN THE NDA ESTATE, BUT ALSO AT AWE AND EDF, SO WE HAVE A LOT TO GO FOR.

Dave Barker, CEO
Aquila Nuclear Engineering

WORDS FROM SAMANTHA BIRD – TENDERING MANAGER

Over the previous 12 months, Aquila have seen the commercial tendering team grow in strength and size. I started the position of Tendering and Proposals Manager in February 2017 replacing Pete Crockford who now takes the role of Senior Proposal Engineer. We have since been joined by Jonathon Bone, Senior Proposals Engineer transferring from the Aquila Projects team with 10 years Nuclear projects experience and Steven Barker, Commercial Specialist, qualified in Law and with a background of project management and commercial experience.

Together as a team, we are becoming commercially and technically stronger as we put tools in place to improve

our tender preparations and customer relationships, for example, our introduction of our internal information database and our focus on tailoring each tender submission for individual customer requirements. We have formed close working relationships with AWE, Cavendish and Wood (formerly AmecFW) to name only a few, with our capability to respond with quality information efficiently during tender stage.

To date, 2017 records our highest conversion rate of opportunities to projects. We entered into the European market winning our first project in Austria for a containment cell in February 2017, we have also secured a significant number of work packages

from AWE. Our opportunity levels are continuing to increase hence the growth of the team, with 2017 set to exceed last year's number of opportunities by 20%. Many of these opportunities include additional scope to existing projects, Getinge La Calhene products and spares and typically managed by our commercial team. We continue to receive opportunities and projects from NNL, UKAEA and Magnox and we support manufacturers with design and engineering services including Gow's Lybster, Jordan Manufacturing, Oxford Technologies and Yarl Hydracentre. All of which keeps the commercial tendering team on their toes and our delivery team busy.

↓ AQUILA CASE STUDIES

DOWNLOAD OUR LATEST CASE STUDIES AT
WWW.AQUILAEUROPE.EU/DOWNLOADS



↓ EVENTS & NEWS



SPREADING THE EAGLES' WINGS



Sunny summer days now seem a distant memory and the autumn event season has just finished. We had a packed agenda and attended the CCFE SME exhibition, Nutech's Daresbury Exhibition, NI Central England dinner and the NDA Supply Chain event. We will continue to attend the NIA's International & Decommissioning Working Group meetings and the NIA/NI Annual Nuclear Dinner takes place on 7 December this year, when we look forward to hosting Aquila's guests.

From an international perspective, we have travelled to the annual Hotlabs Event in Mito, Japan and hope to join the Department of International Trade's delegation to CERN. As progress is made at Hinckley point C and the focus begins to move past the impressive civil works, Aquila have made an exciting commitment and opened a satellite office at the superb Somerset Energy Innovation Centre in Bridgwater. We look forward to working with the HPC supply Chain team and seeking opportunities to engage with new and existing clients and potential collaborators.

With major UK decommissioning projects well underway, Hinckley Point C gathering pace, ongoing opportunities at Sellafield and international organisations looking to engage with the UK Nuclear supply chain, it certainly is a great time to be operating in the Nuclear Marketplace.

Drew Corbett,
Business Development Manager

ATTENDED AND UPCOMING EVENTS

18TH - 21ST SEPTEMBER 2017
Hotlabs 2017 in Mito, Japan

2ND NOVEMBER 2017
NDA Supply Chain Event

7TH DECEMBER 2017
NIA Annual Conference in London

7TH DECEMBER 2017
NI/NIA Annual Dinner in London

26TH - 28TH FEBRUARY 2018
Big Science Business Conference in Copenhagen

12TH MARCH 2018
EDF Energy Exhibition

19TH APRIL 2018
Daresbury Laboratories Exhibition

FIND OUT MORE

Aquila Nuclear Engineering Ltd

Aquila House,
Hazeley Enterprise Park,
Hazeley Road, Twyford,
Hampshire, SO21 1QA,
United Kingdom

T: +44 (0) 1962 717 000
E: info@aquilaeurope.eu

[linkedin.com/company/2439808](https://www.linkedin.com/company/2439808)



twitter.com/aquilanuclear1

