SERVICES FOR THE RADIOACTIVE WASTE SECTOR

- + Low Level Waste Services
- Full Lifecycle Waste Management for Decommissioning Nuclear Sites
- Metal Decontamination and Recycling

- Sort and Segregation
- + Disposal of LLW
- NORM Management
- + Specialist Industrial Services



WHO WE ARE

AUGEAN IS LEADING THE WAY THROUGH COMPLIANCE DRIVEN SERVICES AND FACILITIES FOR THE UK'S RADIOACTIVE WASTE SECTOR

Aberdeen (3 Sites) Dundee Berwick Upon Tweed Waste Recovery Park Port Clarence Wetherby Hull Kirkby (2 Sites Great Yarmouth ENRME Essington Rugby Thornhaugh Newport Avonmouth Honiton Wareham Plymouth

Peterhead

INDUSTRY OVERVIEW

The UK has a well-established civil nuclear industry and the decommissioning of the older sites is managed by the Nuclear Decommissioning Authority (NDA). Augean supports the NDA's mission to clean up the UK's earliest nuclear sites safely, securely and cost effectively. Alongside the NDA, Augean manages radioactive waste from a range of other sources, including NORM and Research Sites.

THE WASTE HIERARCHY

Our customers have confidence that all of Augean's service offerings consider the Waste Hierarchy at all stages.

The Waste Hierarchy ranks waste management options according to what is best for the environment. Preventing generation of the waste in the first instance is at the top of the Waste Hierarchy, followed by reuse, recycling and recovery, with disposal being the final option.

Augean can offer waste management solutions that support our customers in complying with the Waste Hierarchy.



OUR COMMITMENT



COMPLIANCE

We ensure that our waste solutions are sustainable by monitoring forthcoming changes in regulation and legislation so that compliance objectives are understood, communicated to our operational teams and customers, and new protocols are implemented as necessary ahead of regulatory deadlines.

HEALTH & SAFETY

Safety is consistently at the forefront of how we operate our business. We operate under a fully integrated Management System, which is accredited to ISO 9001, ISO 14001 & ISO 45001 standards.



WASTE MANAGEMENT

All wastes are managed with due regard to the Waste Hierarchy and Best Available Techniques. We specialise in the development of innovative solutions for the UK's more hard to handle wastes, backed-up by industrial services and decommissioning capability for a complete end-to-end service.



EXPERIENCED STAFF

Our knowledge and experience set us apart from our competitors. We pride ourselves on having the most experienced and capable team who service our customers whilst drawing from decades of experience. Together, with our wide-ranging service offering, we can be confident that we will deliver the best quality of services.

CARBON FOOTPRINT AND ENVIRONMENTAL IMPACT

Our range of eco-friendly solutions aid in reducing the carbon footprint and environmental impact for ourselves and our customers. Our certification to ISO 14001 demonstrates our commitment for achieving legal and regulatory compliance to regulators and government. Focussing on best environmental outcomes.



METAL TREATMENT





WHY CHOOSE US?

Metal is a valuable resource and should be recycled wherever possible.

Recycling 1 tonne of steel saves around 1.5 tonnes of CO₂.

Augean has been decontaminating and recycling metal from the nuclear industry since 2019.

Generally the radioactive contamination is found within the paint, rust layers or upper surface of the metal. By removing these surfaces we can remove the contamination and then recycle the metal.

SERVICES & PROCESSES WE PROVIDE

- Surface decontamination using Ultra-High Pressure (UHP) water jetting and/or grit blasting
- Cable stripping and copper recycling
- Recycling of metal waste as out of scope
- Size reduction and segregation of non-recyclable materials

USING A RANGE OF TECHNIQUES WE ARE ABLE TO OFFER OUR CUSTOMERS A FIT FOR PURPOSE, COST EFFECTIVE SOLUTION FOR THE TREATMENT OF RADIOACTIVE METAL WASTES

OUR STRENGTHS

Augean uses grit blasting and UHP water jetting to remove the contamination.

By using a range of techniques we are able to offer our customers a fit for purpose, cost effective solution.

Once treated, the metal is sampled and monitored before being recycled in line with the Waste Hierarchy.

CUSTOMER **BENEFITS**

- Our flexible approach means less preparatory work for the customer on their site
- Reduced volumes of waste destined for disposal
- Secondary waste treated and disposed of - no waste returned to the customer
- Customers have realised efficiencies by working with Augean as we can accept LLW with other hazardous properties, e.g. asbestos and acids
- We provide industry leading, cost effective solutions for all metallic wastes



AUGEAN'S RADIOACTIVE WASTE SERVICES (RWS):

Over 2,000 tonnes of metal accepted for treatment

More than 85% of metal received has been recycled

30+ tonnes

of copper from old cables stripped and recycled

Over 300 Half-Height ISO containers of waste accepted for Sort & Segregation

50,000+ tonnes

of Low Level Waste (LLW) accepted for disposal since operations began

WE OFFER WASTE MANAGEMENT SOLUTIONS THAT SUPPORT OUR CUSTOMERS IN COMPLYING WITH THE WASTE HIERARCHY



LLW DISPOSAL

- All metal types (mild steel, stainless steel, galvanised steel, aluminium, lead, copper, brass, depleted uranium, etc.)
- Cables for stripping
- All material types (wood, metal, plastic, soft waste, redundant batteries, used electronic items, etc.)
- Solid, aqueous liquid and organic liquid
- Individual items up to 25 tonnes
- Containerised and unpackaged wastes

OUR STRENGTHS

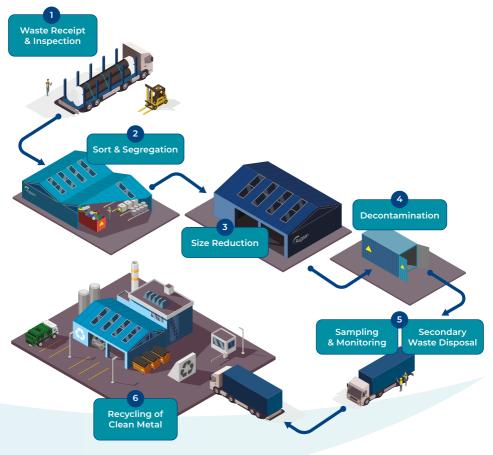
- A flexible approach using a range of metal treatment techniques
- We accept both hazardous solid and liquid waste
- Very large secure permitted area for waste storage

CUSTOMER **BENEFITS**

- All waste types accepted and no need for the customer to segregate the waste first
- All waste packages accepted
- Waste routes available for all types of LLW



METAL TREATMENT PROCESS



SORT & SEGREGATION

WHY CHOOSE US?

QE

Augean has received over 300 Half Height ISO containers (HHISO) of mixed waste for Sort and Segregation since 2020. These HHISO contained a mixture of incinerable waste, metal for treatment, cables for stripping and waste for disposal.

FTU

All waste is segregated and repackaged prior to being consolidated with other similar wastes, and consigned to the appropriate final treatment or disposal site.







OUR STRENGTHS

Augean's flexibility and responsiveness are our two key strengths. Our facility is capable of deploying new techniques for the treatment of unique waste streams safely and compliantly.

Our experience of working in other high hazard waste sectors can be used to quickly deploy techniques used elsewhere to the treatment of LLW.

CUSTOMER BENEFITS

- Customers have realised significant time and cost savings due to not having to segregate their wastes
- Augean's broad permit allows customers to send multiple different types of waste under one contract
- Augean has developed innovative new techniques allowing recycling of wastes that would have previously been routed for disposal
- Customers have saved more time and effort working with Augean as we're able to offer a solution for all their differing wastes

LA-LLW **DISPOSAL**



OUR LLW SERVICES

Augean operates the East Northants Resource Management Facility (ENRMF) which is permitted to dispose of solid Low Level Waste (LLW) up to 1000 Bq/g.

Each year we safely dispose of 5,000 to 12,000 tonnes of LLW, mainly from the decommissioning of the UK's nuclear reactors.

The material is predominantly contaminated building materials and soils that cannot be reused or recycled.

OUR STRENGTHS

- Augean's ENRMF disposal site allows waste to be diverted from the national Low Level Waste Repository, conserving capacity for higher activity wastes
- Accept both hazardous and non-hazardous waste as defined in WM3
- Maximum package activity up to 1000 Bq/g
- Average activity up to 200 Bq/g
- Large items up to 60 tonnes can be disposed

SPECIALIST INDUSTRIAL SERVICES

WHY CHOOSE US?

Some customers do not generate significant volumes of radioactive waste or they may not have the necessary resources available for packing and processing waste.

In these cases, Augean can offer added value by deploying a team of trained operatives onto the customer's site to perform these enabling actions and ensure the waste is suitable for onward transport and treatment.



OUR STRENGTHS

- Work compliant with lonising Radiation Regulations 2017
- Augean appointed Radiation Protection Supervisors
- Experienced in handling all types of LLW
- IP-1/IP-2 packages and Class 7 transport included
- All secondary waste removed and disposed



- OUR TESTIMONIALS

Augean is a **trusted and** reliable sub-contractor to Veolia on the Sellafield Bulk Waste contract. They consistently provide high levels of service and are always looking for ways to improve in terms of efficiency, safety and environmental performance.

- Business Development Lead, Veolia

The sort & segregation service to fit Veolia's Waste Acceptance Criteria (WAC) specification and/or utilising the landfill option that Augean can provide offers a disposal option which doesn't fit any of the single standard service options.

> This has been **invaluable** in diverting materials from the Repository and Nuclear Waste Services are **looking to expand this service** across the wider business sector.

- Radioactive Waste Management Specialist, Veolia ES UK Limited It's a pleasure to work with Augean, a company that make business uncomplicated.

Staff are **easy to communicate with**, always available as well as being **extremely knowledgeable**. A glass is always half full approach!

10 out of 10 from us.

- Director, Smartlift Bulk Packaging

Under the NWS framework, Augean provided a **bespoke service** to achieve a recycling rate of **over 99%** of metallic Offsite Discharge Pipework from the Harwell Site, through an approach already established in the oil and gas industry.

By transferring the technology to the nuclear decommissioning sector, this **reduced volumes of radioactive waste** which would have otherwise been destined for landfill and **established new waste routes** for similar future projects in the nuclear industry.

- Head of Waste, Magnox Ltd

OUR MEMBERSHIPS & CERTIFICATIONS -



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