

Augean's Avonmouth site is the Company's principal organic waste treatment centre, with a range of physical treatments for organic as well as water based wastes.

One of the processes at the site is oil recovery, involving blending and heat treatment to improve the quality of waste oils and therefore the usability and value of those oils. The site also has the ability to treat water based wastes, including adjusting alkalinity or acidity or the removal of solids. The volume of wastes can also be reduced by the removal of liquids.

We operate an open door policy and if you would like to see these and other treatment processes, a site visit can be arranged by appointment at any time.. Augean always aims to be a good neighbour; to report any concerns regarding our site or to arrange for a site visit, please do not hesitate to contact me.

Tim Young – Site Manager, Augean Avonmouth Tel: 0117 9820303 Email: info@augeanplc.com

Successful BSI Audit Augean

Accreditation from the British Standards Institute (BSI) gives assurance that a company has been independently assessed against internationally recognised standards and operates to the highest levels of quality and service. Augean is assessed on a regular basis by BSI for standards of Quality Management (ISO 9001), Environmental Management (ISO 14001), Occupational Health and Safety Management

(OHSAS 18001)..As part of the continuous assessment of Augean by BSI, our Avonmouth site was recently audited and we are very pleased to report that the auditor from BSI was very impressed by our knowledgeable plant personnel and no issues were identified.



Tanker Washout

A tanker wash out facility has been developed at Augean Avonmouth that allows a complete wash out to be carried out without the need for someone to enter the tanker and work in a confined space, requiring a much greater level of safety systems and equipment.

The wash out facility consists of a high pressure water cannon mounted on a moveable platform, which in turn sits on a catch tray that is 12 square meters. All the wash water used and any solid material are captured, contained and are then further distributed within the site for additional treatment.



All Together Better at Augean

Augean has always believed that our main asset are the people that work for us. For the Company to do well it is essential that our employees are satisfied, motivated and can work together effectively with common objectives and values.

A representative Working Group of senior managers at Augean were tasked with considering how the Company core values of Respect, Integrity, Teamwork and Excellence could be embedded into the everyday culture of the business. To deliver this the Working Group formulated a Values, Beliefs and Behaviours Framework and a series of key initiatives.

Under the banner All Together Better, the framework and key initiatives have been formally launched so they can be integrated into every aspect of Augean's business practice. As part of the launch, members of the Working Group met with as many colleagues as possible; in total around 310 colleagues attended one of the 24 sessions held across ten sites, making it the largest internal engagement event in Augean's history.

While the focus of All Together Better has been on attitudes and behaviours within the Company to help deliver the needs of our customers, we believe that the same values extended to our colleagues and customers should also be expected when dealing with outside organisations, visitors and the local communities around every Augean site.



Augean

All Together Better

Respect • Integrity • Teamwork • Excellence

Delivering a more sustainable future

Augean has for many years been at the forefront of handling more difficult to manage wastes, and has pioneered new ways of bringing materials back into beneficial use that would once have gone straight into landfill. We are active in helping to research and develop new techniques that will help to ensure that even more materials can be recovered and reused in the future.

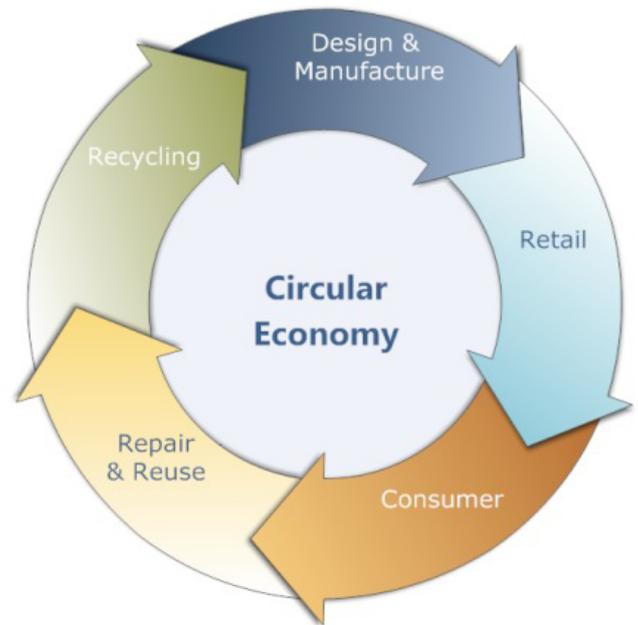
Many people will be familiar with the concept of the Waste Hierarchy that underpins much of current waste legislation and practise. This is a clearly defined list of the preferred outcomes of dealing with waste, from the most preferred option of Prevention through to Reuse, then Recycle, Recover and the finally the least preferred option of Disposal.

However, how familiar are you with the term Circular Economy? The Circular Economy is not a replacement or repackaging of the Waste Hierarchy, it is a far more complex, and therefore less clearly defined, concept with far reaching implications for how we behave and manage finite resources in the long term. For much of modern human history we have operated a Linear Economy, where there is a start, a middle and an end; we take resources, make use of them and then dispose of them. In this economic model there is an emphasis on virgin resources being freely and cheaply available. However, in a Circular Economy resources are kept in use for as long as possible, maximising the value of the resource while it is being used and finally to regenerate and recover products and materials when the resource can no longer be used in its current form.

One of the difficulties in delivering a Circular Economy is the availability of techniques that enable materials to be recovered and fed back in to the beginning of their lifecycle. While we are all familiar with the ease with which newspapers, bottles or tin cans can be recycled, not all wastes are as easy as these to recover material from for reuse. At Augean's Waste Recovery Park at Port Clarence, we have developed an integrated range of innovative hazardous waste technologies that are used to efficiently recycle, recover and reuse waste materials, such as oil and mercury. Even more techniques are expected to be added in the future as new processes become more readily available or new research comes to fruition. At the Port Clarence Landfill and the East Northants Resource Management Facility (ENRMF) are the country's largest soil treatment centres, where contaminated soils are cleansed to remove a wide range of contaminants and clean material is recovered and recycled. The soil treatment centres have supported large scale remediation and infrastructure projects like the Olympic Park and Crossrail.

In moving towards a more Circular Economy there is also a greater emphasis on designing out waste from the very beginning so that manufacture is less wasteful, the product or component is intended to last longer and be easily repaired and at the end of its life the product could be remanufactured for another purpose or materials can be recovered or recycled and fed back in to the beginning of the process. Augean's knowledge and experience of waste and the waste industry is already being drawn on to create ways to make this goal a reality.

In a consortium led by the University of Warwick, Augean is currently helping to develop research for the reuse and recycling of Lithium batteries that are typically used in electric vehicles. The research looks at ways that innovative approaches to battery system design can extend the life and serviceability of the battery. Augean is especially helping to



deliver an entire lifecycle for the battery, so that options have already been mapped out at the beginning of its life for ways in which it can be recycled, remanufactured or used in a different way from the original purpose at the end of its life.

Augean is continuously pushing the boundaries of increasing the amount of material that can be recovered, but some wastes by necessity do need complete destruction in order to ensure there is no further possibility of harm to human health or the environment. An example of these include wastes classed as persistent organic pollutants, such as polychlorinated biphenyl (PCB), which has been used in a wide range of applications such as a coolant for electrical equipment. The High Temperature Incinerator located at our East Kent site can operate at temperatures up to 1200 degrees Centigrade which can ensure these are completely destroyed. Even though the actual waste is not recoverable or reusable, the heat from the incineration is not wasted, but harnessed and converted into energy that is used to provide heating for the adjacent business park.

Building a more sustainable future will not be easy or quick; the latest European target is a recycling rate of 65 per cent by 2030, so there is still a long way to go. However, through research and further innovation, Augean is already helping to lead the way.

Augean Industry and Infrastructure

The Avonmouth site is part of the Industry and Infrastructure business unit of the Augean Group. Industry and Infrastructure principally deals with the recovery and recycling of oil and solvents, as well as the provision of specialist industrial cleaning and other waste management services to a range of markets, including chemical processing and manufacturing, port and shipping operations, water treatment supply and onshore demolition and clean up. This includes the treatment of drill cuttings from the North Sea Oil and Gas market, which are supplied through the Augean North Sea Services business.

In addition to operating the site in Avonmouth, Augean Industry and Infrastructure also operates our site in Paisley, as well as operating our Port Clarence Waste Recovery Park (PCWRP) on Teesside.



Site Improvements

The site has seen many improvements recently as part of Augean's continuous programme of enhancing the facilities available at our sites for both the treatment and handling of waste and for the comfort and welfare of our staff.

At Avonmouth two solvent blending tanks have undergone inspection and repair and have been put back into service with a new circulating line to aid blending and new transfer bays have been put into use after a redesign. The mess room and laboratory buildings have also been upgraded.