

ENRMF Restoration Progresses



Restored areas will increase biodiversity

At Augean's East Northants Resource Management Facility (ENRMF) Landfill site, the capping of 12,000 square meters of completed waste cells has been finished. The capping seals the waste within the landfill and these areas are now ready to progress on to the final restoration scheme.

As each section of the site is progressively restored, it forms part of a final landform that has been designed in advance to integrate naturally into the local landscape once the entire site is complete. As well as linking visually into its surroundings, the restored site will also link into the local network of footpaths and other publicly accessible areas in the vicinity. The restoration scheme also offers significant opportunities to increase biodiversity through habitat creation and nature conservation to benefit butterflies, reptiles, birds and small mammals.



New Safety Walkway

Site Safety Improvements at Thornhaugh

When it comes to the safety and well-being of our employees and visitors to our sites there is never any room for complacency. Our staff are encouraged to report near misses (where an accident could but did not happen) so that measures can be taken to prevent an incident actually taking place in the future. We also look out for safe acts, where a safer way of doing something is identified no matter how small or insignificant that improvement might seem.

Recently at Thornhaugh Landfill it was identified that to increase site safety a walkway and crossing needed to be installed to separate pedestrians from site traffic. This now provides much safer, clearly visible and defined routes for people and vehicles.

Thornhaugh Applications Approved

The Planning and Environmental Protection Committee of Peterborough City Council has granted consent to allow excavation and engineering in part of the Thornhaugh Landfill so that it can meet modern standards required of landfills.

New applications became necessary at Augean's Thornhaugh Landfill Site as part of the landfill that was worked under previous ownership, about 20 or 30 years ago, used a different, and now outdated, method of waste disposal into the landfill and did not include the provision of an engineered landfill containment system that is now a fundamental requirement of modern landfills.

The company, with advice from the Environment Agency, concluded that the best solution is to remove the old waste deposited to properly engineered cells elsewhere within the site. This was Augean's preferred solution as it is the only way to guarantee the safe environmental management of the site in the long term, which we hope is reassuring for all concerned. The area of the old workings will be engineered to modern standards to be landfilled in the future, resulting in an increase in time to the overall operational life of the site until December 2034, which was also approved. The site will be fully restored to beneficial use by December 2035.

As a consequence of the application at Thornhaugh Landfill a further application to use clean quarried materials recovered from Thornhaugh Landfill for use in the restoration of the adjacent quarry, Cook's Hole, which is also owned by Augean, was also considered and has been granted consent by the Committee. This will also mean that the restoration of Cook's Hole will be achieved earlier than anticipated.

Thornhaugh Landfill Site will be progressively landscaped as each phase is completed with the final restoration of the site creating a nature conversation area. This will be complimentary to the adjacent Bedford Purlieu which is a Site of Special Scientific Interest. Over the last year 6,000 woodland native species trees have been planted in the restored part of the site and a footpath has been created which links this with Bedford Purlieu. The company is committed to restoring parts of the site that are no longer in their operational phase as soon as is practically possible.

ENRMF Open Day

In October ENRMF opened its gates to the general public so that they could see for themselves how a modern, engineered landfill site is operated and monitored as well as seeing the state of the art laboratory and nationally significant soil treatment plant.

We were delighted that the Open Day was very well attended by members of the local community, with much positive feedback about the site and Augean. Members of the Environment Agency were also present as part of their consultation on the Environmental Permit on Low Level Waste (LLW).

While we will continue to hold open days at ENRMF on an annual basis, we would like to remind you that Augean has an open door policy at all of its sites and a site visit can be arranged at any time throughout the year by appointment with the Site Manager Simon Moyle.

The Augean Community Fund



About the Augean Community Fund

The Augean Community Fund helps community projects within a 10 mile radius of ENRMF in Northamptonshire and Thornhaugh Landfill near Peterborough. The fund is managed by Grantscape with qualifying projects decided by community volunteers on the Kings Cliffe Environmental Association (KCEA) and the Thornhaugh Environmental Association (TEA). If you have a community project why not talk to

Grantscape to see if it could qualify for support from the Augean Community Fund?

Please contact:

Andrew Budd, Grantscape, Office E, Whitsundoles, Broughton Road, Salford, Milton Keynes MK17 8BU

Email: andrew.budd@grantscape.org.uk

Tel: 01908 247638



Recent projects that have recently been approved or completed through the Augean Community Fund include:

Village Hall, Duddington

An award of £17,000 has been granted to allow repairs to the Collyweston slate roof of Duddington Village Hall.

St Mary & All Saints Church, Fotheringhay

This Grade I listed church, with royal connections, is of great architectural and historical importance. Just over £28,000 has been awarded to go towards urgent repairs to this gravely at risk building.

Village Hall, Harringworth

Villagers in Harringworth will soon be a bit cosier when using the Village Hall, with a £5000 grant to upgrade the heating system.

All Saints Church, Easton on the Hill

Parishioners of All Saints will also be able to cut down on warm clothing as nearly £11,500 has been awarded to replace the heating system.

The Christie Hall, Wansford

A community hub that hosts a diverse range of activities, The Christie Hall has been awarded £25,000 to replace the roof.

St Leonard's Church, Apethorpe

Because of poor access due to a rotten floor at the base of the spire, the parapet of St Leonard's Church was in very poor condition. With a £25,000 grant a project to replace the beams and flooring and repair the parapet has now been completed.



Fotheringhay Church



Apethorpe church tower floor repair before and after
Photos: Richard Parkinson

Environment Agency Visits

A modern, engineered and well run landfill site is subject to very strict environmental and operational regulation and scrutiny. Extensive monitoring schemes around our sites are used to confirm that the design, construction and operating methods of the site are effective and robust.

We continually review our working practices to ensure that appropriate training and improvements mean that our staff are skilled and competent in observing strict site safety and operational procedures. Air and water samples are regularly taken so that quantitative data can be collected on the environmental performance of the site with regards to landfill gas, air emissions, leachate, surface water, groundwater, dust and noise.

Monitoring information is reported on a regular basis to the Environment Agency (EA), our regulatory organisation. The EA make this information publicly available and also inspect sites on a regular basis to ensure that operational regulatory standards are adhered to and to carry out their own monitoring. As well as duties on the sites, members of the EA are also available at meetings of the Liaison Groups of both ENRMF and Thornhaugh Landfills.

Augean recently hosted a very successful visit to ENRMF from seven members of the EA from the Lincolnshire and Northamptonshire Area Team. Following the visit the Area Manager, Phil Younge, said of the visit, "The professionalism and care in your company came across clearly in the presentation, discussions and site visit."

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. The largest internal engagement event in Augean's history.

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 a

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.



Public Health England Audit

At ENRMF Augean hosted an Annual Radiation Protection Advisor visit with members of Public Health England. In order to accept Low Level Waste (LLW) at ENRMF, strict pre-acceptance procedures take place before the waste even leaves the originating site and equally strict procedures must be observed when it arrives. The visit from Public Health England audited our acceptance procedures and also recorded independent monitoring of the dose rate at the boundary of the site to compare against background readings, which would confirm the data from Augean's own monitoring.

Energy and Construction Performs Strongly

2015 was a very busy year for Energy and Construction. Through treatment and ultimately landfill, the main focus of this business unit of Augean is the disposal of Air Pollution Control Residues (APCR), furnace bottom ash, asbestos and other contaminated waste materials and soils, mainly from energy-from-waste facilities and the construction industry. Energy and Construction operates from our permitted sites at Port Clarence, ENRMF and the permitted non-hazardous site at Thornhaugh.

The high level of activity in the early part of 2015 was attributed to renewed confidence in the construction industry and the resulting construction soils from the preparation of new building sites.

As the urgency to get construction sites on stream diminishes, lower volumes of construction soils are expected through the site but the APCR volumes are expected to remain steady.



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.

To report any concerns regarding our ENRMF and Thornhaugh sites or to arrange a site visit so that you can see our operations first-hand, please contact:

Simon Moyle
Site Manager, ENRMF and Thornhaugh
Tel: 01780 444900
Email: info@augeanplc.com

New Cell at Thornhaugh

Engineering works are nearly complete at Thornhaugh Landfill site to construct the latest cell to accept waste. The phase 7A cell has already been lined and work is well underway to install the drainage layer. Members of the Environment Agency, Peterborough city Council officers and members of the Liaison Group have all visited the site to see how work on the new cell has been progressing.