



Norfolk and Norwich University Hospitals

NHS Foundation Trust

Serco in Healthcare - United Kingdom

Disposing of food waste safely, economically and sustainably with an aerobic food waste digester



Each year, tonnes of food waste enter the waste system. Macerators are expensive to operate and are being phased out. Refuse bags, waste bins and traditional waste collection methods create carbon emissions in themselves and can in extreme cases present health issues and safety concerns.

Over the next few years, it is very likely that legislation will be introduced to eliminate the use of food macerators and prevent the discharge of food waste into the sewers. This legislation came into force in Scotland several years ago and DEFRA is currently developing similar rules for England.

At our Norfolk and Norwich University Hospital (NNUH) Contract, we have implemented a new, more efficient and environmentally friendly way of disposing of food waste with an aerobic digester.

Collaborating with our supplier on sustainability

Working alongside our supply partner, Aerobic Technologies Limited (ATL), we identified the potential to install an aerobic food waste digester to increase sustainability in our patient catering, retail and waste services. ATL's digesters have been successfully introduced at several NHS Trust sites, including Northern Lincolnshire & Goole.

The digester model handles up to 300kg of waste every 24 hours and works by converting food waste to grey water, before discharging into the drainage system. We are expecting to reduce food waste costs at NNUH and reduce impact on the environment, compared to the Trust's current macerator disposal process.



This digester saves us time, money, it's more environmentally friendly and overall it is driving sustainability.

Adam Simpson
Customer Support Manager

If you want to find out more about the services we offer in Healthcare, visit www.serco.com or email health@serco.com

Supporting the NHS Net Zero Agenda - Serco's Green Credentials

Reducing our carbon footprint

Implementing a new aerobic food waste digester will help us reduce the carbon footprint of food waste at NNUH. We will be able to reduce emissions and costs by reducing the number of vehicular food waste collections.

On-site aerobic digestion offers a range of benefits to the Trust including:

- Removing reactive maintenance costs and PPM requirements for existing macerators;
- Minimising risk of drains becoming clogged with food debris;
- Potential reduction in utilities consumption and costs – one digester is replacing the output of the 16 existing macerators at NNUH;
- Contribution to local and national environmental targets, including the NHS Sustainability Programme, by reducing CO₂ emissions.

The new food waste disposal process at NNUH

We installed the digester adjacent to the waste area, where sufficient power, water and drainage were already available.

On the wards, food waste is placed into small, sealed caddies for transport back to the waste department. Once emptied, caddies are washed and returned to ward kitchens to cover the next service period. We can also provide caddies to other departments as needed, to help prevent food waste from being placed in the general waste streams.

ATL's machinery is extremely reliable. However, should any fault develop, they are committed to having an engineer on-site on the day of call-out to provide resilience for their customers. ATL works in partnership with Compactors Direct, a UK-wide supplier that can provide an emergency waste collection if it is ever needed.

An innovative, resilient food waste solution

The digester has innovative, in-built capability to provide detailed reports on food waste volumes via Wi-Fi, with a breakdown by ward or department. These reports allow for a more targeted approach to reducing food production and service waste costs. Through its internet connection, it also sends automatic alerts of any maintenance requirements, so ATL can monitor the system remotely, identifying any anomalies and communicating these to the operator to investigate.

Supporting the NHS net zero agenda

Overall, the implementation of an aerobic food waste digester is reducing food waste, emissions and costs, and demonstrates Serco's commitment to supporting the NHS net zero agenda by driving sustainability across our contracts.

