



UNDERGROUND WASTE STORAGE FACILITY

sharing responsibility for the future



170m below the surface

Our underground waste storage facility is the only one of its kind in the UK. It is a safe, secure and permanent storage site located

in a Cheshire rock salt mine working a 200 million year old salt bed.

Created in 1997 in anticipation of the 2004 ban on co-disposal of hazardous and non-hazardous wastes, the operation was granted planning permission from the Office of the Deputy Prime Minister. It was agreed that hazardous waste storage in a dry, stable and gas-free underground location was a better practicable environmental option than surface disposal at a hazardous waste landfill.

2 million
cubic metres void

Active since 2005, the facility operates within a

- less than 10% of the mine's total void capacity.

100,000 tonnes

Our facility is permitted to receive up to

per annum of suitably packaged dry materials within a defined list that comprises hazardous waste in solid, granular and powder form.

Under the Environment Agency permit, the operation is licensed to accept 42 different categories of hazardous waste from the European Waste Catalogue. The permitted list is dominated by residues from other waste management facilities and processes such as thermal treatment that generate Air Pollution Control (APC) residues and electric arc furnace dust.

A further 24 potential waste categories can be accepted, such as construction waste contaminated by dangerous substances, metal containing wastes from organic processes and casting cores and moulds, with prior agreement from the Environment Agency.

Acceptable waste streams are governed by Veolia's own stringent waste acceptance criteria and the facility does not accept any waste types that are flammable, reactive, biodegradable or radioactive - anything that could impact on the safety of the site or change its nature or environment.

Waste Producer Benefits

Hazardous waste will not become less hazardous over time. Our underground waste storage facility offers the following benefits to the producers of such wastes:

- o Safe and secure disposal - with no credible pathways between mine, surface and groundwater, this unique facility offers the best practicable environmental option and most sustainable method
- o Exemption from the need to meet the majority of leaching limit values imposed by the Waste Acceptance Criteria
- o Planning consent to accept waste until 2025 enabling Veolia to facilitate long term contracts and operate beyond the dates when many landfills will be closed
- o Constant monitoring of waste during storage by a number of sophisticated monitoring stations
- o Permanent sealing of the current disposal area from the rest of the mine once this area is filled
- o Storage costs are highly predictable which helps with your business planning.

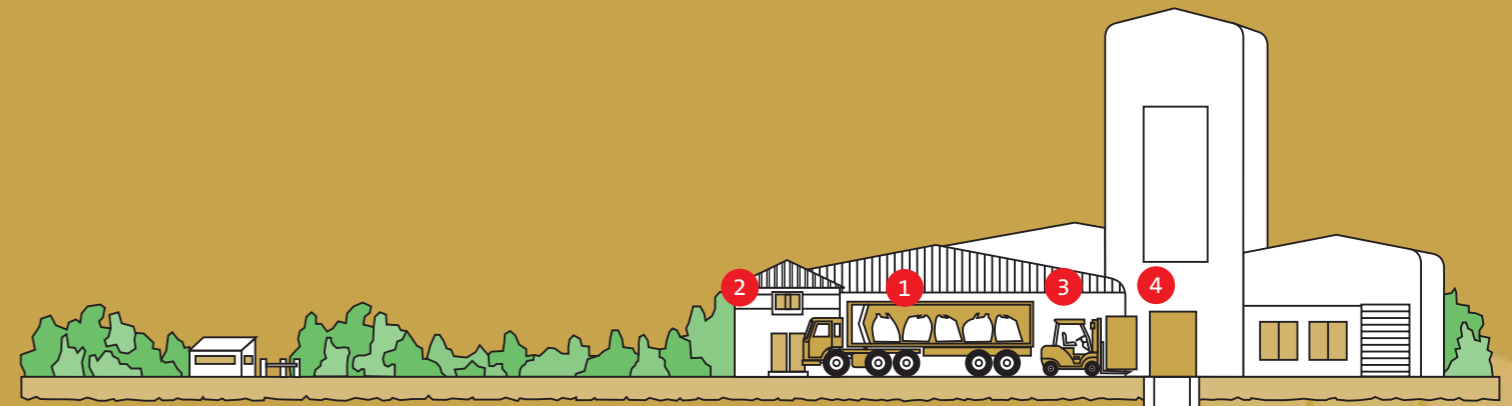


How the underground waste storage facility operates

Before Veolia Environmental Services can agree to accept waste it needs full details of the waste's type and characteristics and a sample which will be analysed at an independent laboratory.

If the waste is suitable for underground disposal a schedule of delivery dates and times will be established.

- 1 The material can be accepted in bulk containers (big bags) or from a tanker. In each case the waste is off-loaded in a specially engineered, fully enclosed reception building. For tankered waste, the material is discharged into one of two silos from where it is transferred into bulk containers.
- 2 A sample of the waste is taken and tested in the on-site laboratory to ensure that the load is fully compliant.
- 3 Waste that has been accepted by the site chemist is loaded on pallets into transit capsules – purpose built steel containers that are used to transport the waste from the surface to the final underground disposal location, details of which will be logged permanently.



- 4 An automated conveyor system loads the transit capsules into the lift cage at the surface.
- 5 An automated conveyor system removes them from the cage on their arrival underground.
- 6 Two tractor units - each capable of pulling 90 tonnes - tow the capsules on self-steer trailers to the disposal area 2.5 kms from the lift shaft. On arrival, the capsules are opened and the contents removed.
- 7 A telescopic forklift removes the bags from the pallets and stacks them in their final disposal position. The pallets and empty capsules are returned to the surface for the cycle to begin once again.





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