Tradebe Healthcare National Limited (THNL) are applying for a Pollution Prevention and Control (PPC) Part A permit for a clinical waste transfer and treatment facility at 50 Carmaben Road, Queenslie Industrial Estate, Glasgow, G33 4UN.

About Tradebe

THNL, who will be the operators at the Queenslie site, are a subsidiary of Tradebe Environmental Services Ltd, an international company that specialises in waste reclamation and recycling solutions managing 90 fixed plants in Europe (Spain, UK and France), the United States and Oman.

THNL have been awarded a contract with NHS Scotland to collect, transport, treat and dispose of healthcare waste from 18 NHS Health Boards in Scotland.

In order to satisfy the requirements of this contract and ensure that healthcare waste is managed efficiently and appropriately, THNL require a waste treatment facility in Scotland to handle the waste.

The Queenslie Site

The site that will serve as the Queenslie Clinical Waste Transfer and Treatment Facility occupies an area of approximately 1.3 hectares and is located in Queenslie Industrial Estate, Glasgow, adjacent to the M8.

THNL have carefully selected the site for the proposed treatment facility. THNL have chosen a site with the required infrastructure and plan to invest in the site to develop it as required and to ensure that any impacts to the environment and human health are minimised. The site is ideally placed to receive waste from all parts of Scotland and is close to major roads that will help to limit any impact from vehicle movements on the area around it.

The Queenslie site will manage clinical waste disposal in Scotland for a range of waste producers. This will primarily involve waste produced by NHS Scotland (NHSS) trusts, but could also include waste arising from private hospitals, pharmacies, care homes, beauticians and veterinary practices. The service will include collecting, transporting, treating and disposing of the clinical wastes.

Waste will be collected from medical and research sites and brought back to the site where, depending upon what it is, it will be either bulked up and sent off site (for incineration, recovery, recycling, …) or treated on site via a shredder and steam auger, before compaction.

The Process

Waste will be transported to site in containers in road vehicles.

A relatively small proportion of the waste accepted onto site will not be suitable for treatment through the site's treatment process. This waste will be bulked up on site and then transferred to an alternative appropriately permitted site for recovery, incineration or disposal.

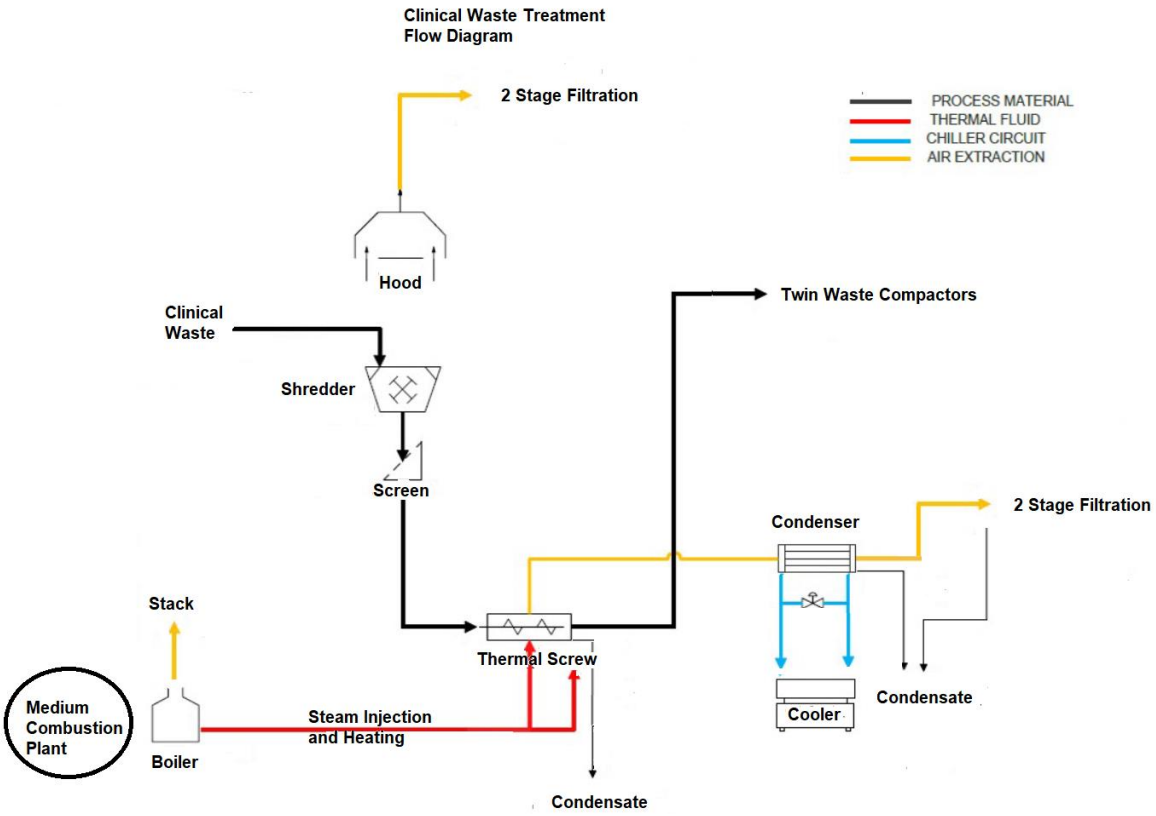
The vast majority of waste received is typically classified as solid as although there is the potential for a small amount of liquid within the waste, the amount of absorbent and other dry waste in the waste stream results in the waste being solid.

Any liquid wastes received at the site will be in small quantities and will be stored in containers within a bunded area. Different liquid wastes will be kept segregated to ensure there is no cross contamination with other wastes accepted at the site. Vehicles will be directed to either immediately reverse into one of the current 4 unloading bays (if one is available) or temporarily wait in the yard area until an unloading bay becomes available.

Once waste has been unloaded from vehicles the door into the building will be closed. This mode of operation will ensure noise from within the process building to external areas is minimised wherever possible.

Waste accepted at site for treatment will be tipped into a shredder hopper fitted with an extraction hood and will be maintained under negative pressure to ensure all airborne pathogens are contained and filtered. Once shredded the waste will then pass through a screen into the thermal screw auger system (steam auger).

Steam is produced by the boilers and is injected into the steam jacket on the thermal screw auger and via "live" steam injection to disinfect the waste to an acceptable level. Steam will be provided at a temperature of 122oC. The residence time in the thermal screw auger system is approx. 80 minutes which has been determined to be adequate to disinfect the waste to make it microbiologically inactive (rendered "safe"). After which the waste is then routed via a sealed screw auger directly into sealed waste compactors. When full the compacted waste skips will be replaced and removed either temporarily into a designated storage area designed with an impermeable surface and a sealed drainage system discharging to foul sewer to await transport offsite or moved directly offsite.



What is our aim

The objective of the waste treatment process proposed for Queenslie is to disinfect clinical waste with heat to render it safe and unrecognisable, and to produce a waste floc suitable for plastic recycling or blending with Refuse Derived Fuel for use in an Energy from Waste Plant and thereby avoiding the need to landfill the waste