

**Document 9: Justifying of Compliance with BAT/Appropriate Measures (Areera Ltd,
Bury St Edmunds WTEE Storage Installation)**

Best available techniques (BAT) for this activity are detailed in the Environment Agency's Appropriate Measures for WTEE (Waste Temperature Exchange Equipment). This can be accessed via the following link:

<https://www.gov.uk/guidance/waste-temperature-exchange-equipment-appropriate-measures-for-permitted-facilities/4-waste-storage-and-handling-appropriate-measures>

Also of relevance is the Environment Agency's Regulatory Position Statement (RPS375) which details extra allowances for storage of WTEE - including relaxing of the 3-month maximum storage duration limit:

<https://www.gov.uk/government/publications/temporary-waste-temperature-exchange-equipment-wtee-storage-due-to-national-treatment-capacity-constraints-rps-375/temporary-waste-temperature-exchange-equipment-wtee-storage-due-to-national-treatment-capacity-constraints-rps-375>

The key principles of the appropriate measures are as follows, with justification of compliance in the right-hand column.

Requirement as set out in the Appropriate Measures:	How this is complied with:
1. You must store and handle WTEE in a way that protects and prevents damage to cooling circuits, compressors, the appliance casing and foam insulation. WTEE must not be tipped.	WTEE will be subject to storage only, and within the storage configurations set out in RPS375, i.e. maximum storage piles of 3.6m in height and 450m ² in volume. Additionally, WTEE will be stored upright and will be placed in the above configurations via fork-lift truck and will not be tipped.
2. You must store and handle WTEE that has not been degassed whole. You must not store or handle it in a way that could damage the cooling circuit, for example, by storing or resting it horizontally on its back or in a way that could cause the cooling circuits to interlink or entangle.	The units will be stored whole and stored upright and will be handled in such a way to protect the cooling circuit.
3. You must make sure that sufficient space is maintained between WTEE, and between it and other structures (for example, storage bay walls), This is so: • it can be picked up and handled safely and easily • it minimises the need to handle or move it, or WTEE next to it	There will be at least 3m separation distance between each storage block and other structures for external storage and 6m for internal storage, allowing the WTEE units to be picked up and handled safely and easily and to minimise required handling.
4. Any mechanical equipment you use to handle WTEE (for example, forklifts and their associated attachments) must be designed and used in a way that makes sure they do not damage the cooling circuit, appliance casing or insulation foam of the equipment. You must control and minimise any force or pressure applied to WTEE during handling whilst ensuring it is done safely (for example, that it will not slip or fall).	This will be the case – movement of WTEE units will be via fork-lift truck and they will be handled appropriately to prevent damage.
5. Following visual inspection (during initial waste acceptance or routine site inspection), if WTEE is found to be damaged to the extent that insulation foam can be seen exposed or it is assessed as posing a significant risk of releasing refrigerant gas or oil, you must:	A quarantine area is in place for any non-compliant WTEE - such as that which has potential leaking of refrigerant gas or oil or with exposed insulation foam - for prioritised removal off-site for processing and with feasible fixing of any leaks where safe and practicable. The quarantine area is away from potential sources of ignition or other combustible wastes.

• move it to a well-ventilated area, away from potential sources of ignition and other combustible wastes • store it under weatherproof covering • prioritise its treatment or transfer, where it is safe and possible to do so Before treatment or transfer, if safe and practicable to do so, you may be able to fix leaks from the cooling circuit or compressor of the WTEE by applying an epoxy resin or similar material.	
6. You must not store WTEE for longer than 3 months before treatment or off-site transfer. You should remove all other wastes from your site within a maximum of 6 months from receipt.	It is intended to have a maximum storage duration of 3 months before treatment or off-site transfer. It is noted, however, that under RPS375, a regulatory position statement from the EA, this storage duration limit is rescinded. As such, WTEE (fridges/freezers and wider WTEE) will be moved off site within 3 months only when technically and economically feasible - and otherwise the RPS375 position of non-time-bound storage will be adopted.
7. You must store WTEE and any combustible waste materials resulting from the treatment of WTEE (for example, plastic, foam and waste packaging) in line with an approved fire prevention plan. This includes: • maintaining adequate fire breaks between waste storage areas • making sure there is safe access in and around storage areas and storage containers and vessels to allow inspection	Storage will be in line with the Fire Prevention Plan detailing adequate fire breaks between waste storage areas and storage to allow inspection of the stored material.

8. You must store WTEE in a safe and stable manner on level ground and on an impermeable surface provided with sealed drainage. You must not stack or store equipment more than 3.6m high.	This is the case - level ground and impermeable surface for storage with a sealed drainage system and storage limited to 3.6m in height.
9. Where WTEE has been dismantled into panels (for example, cold room panels or large commercial refrigeration units), you must make sure you store and handle them in a way that prevents damage to the foam (for example, fragmentation or compaction). If you stack panels, you must do this in a way that makes sure the stack is stable and the panels are not damaged, particularly those at the base of the stack. You must protect dismantled foam panels from the weather (wind and rain) and sources of heat – for example, by storing them in a dedicated area of a roofed building or under weatherproof covering.	This is not relevant as whole items of WTEE (predominantly fridges/freezers) only.
10. You must store compressors removed from equipment in containers or heavy-duty bags that are secure, weatherproof and leak-proof, and on an impermeable surface with sealed drainage. This is to contain any spills from the small residual quantities of oil they may contain and to minimise handling. The containers or bags must be: • closed or kept under cover to prevent the accumulation and contamination of rainwater • kept away from sources of heat (for example, direct sunlight)	This is not relevant as whole items of WTEE (fridges) only.
11. You must collect and store blowing agents, refrigerants, and compressor oil that has not been degassed in appropriate gas-tight containers that are sealed. Recovered blowing agents and refrigerants sent for off-site destruction should be collected and stored in pressurised collection vessels suitable for road transportation.	This is not relevant as whole items of WTEE (fridges) only.
12. You must store degassed oil, recovered from compressors and cooling circuits, in	This is not relevant as whole items of WTEE (fridges) only.

above-ground storage tanks or sealed containers. These must: • have appropriate secondary containment systems • be located on an area of impermeable surfacing provided with sealed drainage	
13. If you treat different types of WTEE in separate batches or by using different plant or processes (for example, based upon refrigerant or blowing agent type), you must sort them by type and store them separately before treatment. If you are not permitted to treat certain types of WTEE and only accept them for storage and transfer (for example, you are not permitted to treat WTEE containing volatile fluorocarbon (VFC) blowing agents through your stage 2 process, or you are unable to degas ammonia refrigerants) then you must identify and store these wastes separately from those that you are permitted to treat (for example, based upon blowing agent or refrigerant type). You must label the areas of a site where you store different types of WTEE (using signs or markings), so it is clear what WTEE is to be stored where.	Not relevant as no treatment on site. Where additional categories of WTEE (other than fridges/freezers) are stored, these will be labelled accordingly to detail storage of fridges / air conditioning systems / water coolers / heat pumps / dehumidifiers / dryers and washing machines with heat pumps / ice cream makers. Though fridges will account for almost all of the wastes stored there (95 - 100%).
14. You must clearly mark and label storage areas, containers and storage vessels – for example, with the relevant LoW (List of	Storage areas will be labelled with relevant information on wastes stored there (EWC codes and hazardous properties).

Waste) or EWC (European Waste Catalogue) codes and any hazardous properties – and store hazardous wastes in accordance with their hazardous properties.	
15. You must store and manage any food waste, biodegradable waste, or waste with potential for releasing fugitive emissions (including dust or odour) in a way that prevents and minimises such emissions. For example, by storing them within a building or closed container and prioritising them for treatment or transfer.	All fridges and freezers will be checked for food, drink and other residual contents before unloading and final acceptance at the site. This check will form part of the waste acceptance procedure and will be recorded where required. Where food or drink waste remains within an appliance, the load or affected appliances may be rejected and will not be accepted into storage until the issue has been appropriately resolved. Rejected loads will be managed in accordance with the site rejection procedure, with the reason for rejection recorded and communicated to the customer or haulier as appropriate.
16. You must regularly inspect storage containers, vessels and drums and keep them in sound condition.	Regular (weekly) visual inspection of storage infrastructure will take place.
17. You must conform to Health and Safety Executive (HSE) safety standards where relevant, specifically: • <u>HSG51: The storage of flammable liquids in containers</u> • <u>HSG103: Safe handling of combustible dusts: Precautions against explosions</u> • <u>HSG140: Safe use and handling of flammable liquids</u> • <u>HSG176: The storage of flammable liquids in tanks</u> • <u>L117: Rider-operated lift trucks: Operator training and safe use</u> • <u>INDG139 Using electric storage batteries safely</u>	It is agreed that these relevant Health and Safety Executive (HSE) safety standards will be complied with.

18. You must make sure that plant and equipment in which compressed gas (including, for example, nitrogen gas) is stored or used, are designed, operated and maintained in line with relevant industry standards and guidance. You can find further information on the [British Compressed Gases Association](#) and [HSE](#) websites.

Any on-site equipment with compressed gas will be appropriately maintained.