Freighter House

Chelmsford City Council

Environmental Permit Application

Supporting Information

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Prepared By

aardvark
environment matters

Project Quality Control Sheet

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Contents

Figures

Tables

1 Site details

1.1 Site Location

The site is located within the Springfield Business Park, located on the outskirts of Chelmsford, approximately 3.5km to the north-east of the town centre. The site is located adjacent to the Council Recycling Centre and a Premier Inn. The A138 runs parallel to the north-western boundary, just beyond the fence line. The A12 runs in a northerly and southerly direction, around 150m beyond the eastern site boundary. The site is accessed via Drovers Way. Please see the Site Location Plan provided (2513-D002 Site Location Plan).

1.2 Site layout

Please see the Site Layout Plan attached as 2513-D001. The site is accessed via Drovers way, to the south of the site, via a gated entrance controlled by an automatic number plate recognition (ANPR) barrier system, so only permitted vehicles may enter. Entrance to site is recorded.

There is a vehicle wash by the site entrance, and vehicles are cleaned, if necessary. Waste is weighed on its entrance and exit to the site, through use of the site weighbridge. Waste will then be sorted and transferred into the appropriate containment area ready to be processed and dispatched.

The large building to the north of the site contains the Material Sorting Facility (MSF) where metal cans/tins and plastics can be compacted to form commercial bales. Materials pre and post compaction can also be stored in the building. This building also contains the vehicle workshop where all vehicles are inspected every 8 weeks, to maintain safety standards and ensure accordance with the Vehicle Operators License. Site storage in addition to the site offices and staff common areas are also housed in this building. Within the MSF area is a bunded oil storage area for waste oil from the facility. To the north-west and north-east of this building is parking areas for Chelmsford City Council vehicles, vehicles often park to the south-west of the site building.

The site houses waste containment areas including; lockable cages, open bays, roofed bays etc. Please see the sites containment plan, within the site layout plan (D001). These are primarily housed to the west of the site. The storage area to the south-west of the main building is an area of temporary storage, the area is usually empty however can be utilised to house excess waste. Alongside the main site building are multiple storage bays including the MSF infeed bay and baled waste bay for waste pre and post treatment in the MSF.

Storage bays for gas cylinders are positioned around the site. These include bays for orphan gas bottles, non-LPG and LPG bottles which are housed in separate locked cages at the top western corner of the site. Locked storage cages housing oxygen bottles and acetylene bottles are stored along the north-western perimeter of the site.

The entire site is underlain by an impermeable surface. The main site area acts as a form of containment, the perimeter of the site being slightly raised in comparison to the main site area in the form of a perimeter kerb. The surface water drainage system forms part of the containment, collecting in drains throughout the site before running towards the eastern corner of the site, on the boundary with the car park. Wastewater passes through a 3- stage interceptor before reaching the discharge point.

Steel palisade fencing marks the boundary of the site, allowing any fugitive waste to remain within the site boundaries. Such litter can then be collected during site spot checks. The site is secured by a

gated entrance off Drover's Way. CCTV covers the site entrance, perimeter and key points around the site. The steel fencing, CCTV and gated entrance is designed to deter trespassers.

Figure 1: Key site features.

1.3 Site Access Routes

The main road access to the site is via the A130, A138 and A12. All routes convene at the Boreham interchange prior to access onto Drovers Way, the sole access road into the site. Access to the site for fire-fighting purposes may be possible from the A138, which runs parallel to the northern boundary of the site, although the feasibility and necessity of such access would be determined by the Fire Service.

Figure 2. Site Access

1.4 Site Drainage

The storage bays for storing street cleansing and fly-tipped waste and WEEE have a hard standing of 300mm of concreate, contain a polythene membrane and are built upon sand blinded hardcore. The

remaining site area is also hardstanding with a 130mm type 1 sub-base, covered by 80mm blacktop. The bay walls are at minimum 3m high, supported by railway sleepers or Rolled Steel Joists (RSJs) to contain waste within the bay.

Storage bays 1, 2, 4 and 5 are each fitted with a roof. This prevents rainwater ingress to waste pile, and associated runoff. Roof water is designated as “clean” and is discharged from the site via the surface water drainage network, which outfalls into the surface water sewer. Before reaching the surface water sewer it passes through a petrol/oil interceptor (class 1 bypass separator with silt storage).

Foul and surface connect separately to the mains drainage network operated by Anglian Water Ltd. The foulwater main transfers wastewater to the Anglian Water Treatment Works located at Brook End Road. A revised drainage plan is to be provided following the completion of the onsite improvements to the site drainage.

Surface water is discharged into the surface water drainage network (operated by Anglian Water). This flows to south-east from the site to the A130 and A12 to towards the River Chelmer (existing outfall OU7 (Outfall to Ordinary Watercourse 2)).

Drainage channels, interceptors, gullies, foul and surface water drains will be cleaned, emptied and inspected monthly, with the vehicle wash interceptor being cleaned out weekly. The on-site tanker/jetter can be used to assist with these tasks. Areas of hardstanding will also be monitored/inspected. Defects in hardstanding may have the potential to leak to the ground, if this is the case remedial action will need to be taken. If any defects are identified during the inspection they will noted and repaired within 7 days of the defect being flagged. If a repair is likely to take longer than the allotted 7 days, contingency plans are put in place such as:

- Bunding the affected drains.
- Taking an affected bay or wash area out of use until a repair is completed.
- Blocking off the drain run and tankering the water off site to a treatment centre.

Defects in covered area for dry waste (such as recyclables), do not present a problem in terms of a potential leak to the ground but the issue will be reported and rectified within an appropriate timeframe.

Improvements to the sites wider surface water drainage network are in the process of being finalised. The proposed improvements to the site which will include the addition of a catchment pit in the area outside of the street sweeping bay along with a drainage channel that will channel run off from the glass bay to the catchment pit. A further channel will be installed in front of the paper and plastic bays that will channel runoff to a separate catchment pit in front of the MSF loading bays. The introduction of the catchment pits will greatly reduce suspend solids from entering the surface water system. The drainage from the site will flow to a penstock valve, which will be located in front of the MSF building. The introduction of the penstock valve with allow the site to stop any surface water (including fire water) from entering the external drainage network.

1.5 Sensitive Receptors

The following can be found located within a 1km buffer, from the site:

- Residential property around 150m east.
- To the south and north-east bordering the site are industrial areas.
- To the east of the site are two leisure areas; a hotel 400m east and at 700m is a house which seems to hold events.
- 450m to the north Quarry.
- There also seems to be agricultural land and greenspace in the vicinity of the site.

Nearby sensitive receptors are listed with the Environmental Risk Assessment (Report ref R007).

1.6 Wastes on site

The majority of the wastes stored on site are generated by Chelmsford City Council municipal waste collections and brought to site. Some of the wastes taken to the site are generated through street sweeping or through the clearance of fly-tip locations. Additionally, some of the wastes are generated on the site itself, within the vehicle workshop or the MSF, however these wastes do not form part of the permit application. The MSF treats dry recyclates and forms them into bales for easy transportation to the council recycling centres. A list of the wastes accepted at the site is available below:

Waste type	Description	Origin	Next step
Street sweeping, street cleansing and fly-tipped materials	Materials from street sweeping and materials from clearances of fly tipped waste	Off site	Recycling merchants and re-processors
WEEE	WEEE and unwanted household white goods	Off site	Recycling merchants and re-processors
Tyres	Fly tipped tyres and waste tyres from site	On and off site	Recycling merchants and re-processors
Paper recyclates	Municipal paper and cardboard	Off site	Recycling merchants and re-processors
Plastic recyclates	Municipal plastics and end of life waste collection bins	Off site	Site MSF
Plastic bales	Plastic post process within the MSF	Site MSF	Recycling merchants and re-processors
Glass recyclates	Municipal glass	Off site	Recycling merchants and re-processors
Metal recyclates	Municipal metals, tins and cans	Off site	Site MSF
Metal recyclate bales	Metal post process within the MSF	Site MSF	Recycling merchants and re-processors

Waste type	Description	Origin	Next step
Scrap Metal	Scrap metal	Off site	Collected on request by an approved metal contractor
Textiles	Bagged clothes and textiles	Off site	Recycling merchants and re-processors
Gas bottles	Partially filled and empty gas bottled generated from clearances of fly-tipped waste	On and off site	Collected on request by authorised WDA contractor

Table 1: Site Wastes

2 Site Operations

The site is an existing operational site and the current operations at the site have been running under permit exemptions; however the site has now been requested to apply for a permit. The activity does not fit within a Standard Rules permit, and therefore a bespoke permit is applied for.

As discussed above the site accepts street sweepings, fly tipped waste and materials generated through household waste collections. Some of the recyclable fraction of the collected waste is processed on-site at the Materials Sorting Facility (MSF). The remainder of the material is temporarily stored in dedicated bays until it is collected by Essex County Council for the next stage of its recycling and/or disposal.

2.1.1 Responsibilities on Site

The site is operated by Chelmsford City Council, responsible for the daily running and upkeep of the site. All site managers and staff must ensure they are following the correct procedure, ensuring all materials are stored, handled and treated in line with the working plan, created to comply with the terms of the waste management license.

The site log must be available for inspection or checks upon request and must be always kept up to date. The site manager and appointed persons will be responsible for keeping the site log up to date. The following should be recorded in the site log:

- Any machinery breakdown,
- Any staff shortages and details of attendance,
- Records of site attendance by the technically competent manager,
- Any incident, accident or injury on site,
- Any problems or issues encountered on site,
- Weather conditions,
- Any remedial action taken in response to a site incident.

A weighbridge is provided on site and all waste entering or exiting the site is weighed and recorded by the site manager for their records. Records of waste quantities are sent to the Environment Agency on a quarterly basis.

All site staff are required to attend and complete regular training to ensure they are up to date with the latest information regarding site health and safety.

2.1.2 TCM

The current TCM for the site is Chay Barthaud who holds the following WAMITAB qualification TSNH – Non-Hazardous Waste Treatment and Transfer. The current continuing competency certificate has been provided, this is valid until 09/08/2026.

As the site also accepts hazardous wastes in the form of the fluorescence tubes, gas cylinders and WEEE. A further certificate for the transfer of hazardous wastes is required. As the application for the site is considered to be 'new' it is requested that the 12 month grace period is implemented in order for both the current TCM and an additional member of staff to obtain the necessary qualification.

The CIWM (WAMITAB) Level 4 High Risk Operator Competence for Managing Transfer of Hazardous Waste – HROC4 course has been booked via an approved WAMITAB supplier (Albion Environmental) and is estimated to be completed within 11 months of the start date.

2.1.3 Waste Reception

All vehicles entering the site are logged via an Automatic Number Plate Recognition (ANPR) system. Only authorised Vehicles (Chelmsford City Council vehicles) will be able to gain automatic entry to the site. All other vehicles, including approved contractors collecting waste will have to confirm entry via the intercom. They will then be directed to the appropriate supervisor where they will be given further instruction.

2.1.4 Waste Inspection

All waste dropped at the site will be inspected by a member of the site team. Waste types accepted are controlled as to avoid any breaches of the Waste Management Licence.

Any waste arriving on the site outside of the agreed waste categorisations will be reported to the site manager and a record kept of the incident. The rejected waste will either be returned to the party who supplied the waste or sent to a suitable site.

Access to site is via the automatic barriers, Automatic Number Plate Recognition (ANPR) software is used and so only permitted vehicles may enter. Only waste collected by Chelmsford City Council personnel or their authorised agents will be allowed onto the site. Staff are under strict instructions not to bring any unauthorised waste onto site.

If the load contains a dangerous waste the appropriate party will be informed, for example if asbestos was found, the incident would be reported to the Environment Agency.

2.1.5 Accepted Waste Types and Attributes

The following table (Table 2) lists the accepted waste types, waste codes and descriptions of any accepted waste, along with details of any exclusions to assist site operatives in identifying any non-conforming waste. Hazardous wastes are denoted with an * as per the EWC catalogue.

Waste Type	Waste Codes	Description	Hazardous waste properties	Physical form	Nature / attributes of waste	Exclusions
Street sweepings	20 03 03	Material from street sweeping activities	N/A (absolute non-haz waste code)	Sweepings	Grit, Plastic, Leaves etc. Picked up by road sweepers.	Damp gutter material is not accepted
Fly-tipped / street cleansing	20 03 01	Waste arising from clearances of fly tipped material from households and similar only	N/A (absolute non-haz waste code)	Solid mixed wastes	General mixed waste	N/A
WEEE	20 01 23 20 01 35* 20 01 36	WEEE and unwanted household white goods	Possibly hazardous properties	Solid WEEE waste materials	Large and small WEEE items	Any food and putrescible matter is removed
Fluorescent tubes	20 01 21* 20 01 35	Discarded fluorescent tubes	Possibly hazardous properties	Solid fluorescent tubes	Fluorescent tubes	
Tyres	16 01 03	Fly-tipped tyres	N/A (absolute non-haz waste code)	Solid rubber tyres	Whole or part tyre	N/A
Gas cylinders	16 05 04* 16 05 05	Fly-tipped gas cylinders	Possibly hazardous properties	Metal gas cylinders, possible gas remnants inside	Discarded gas cylinders	N/A

Waste Type	Waste Codes	Description	Hazardous waste properties	Physical form	Nature / attributes of waste	Exclusions
Plastic packaging	15 01 02	Municipal plastics	N/A (absolute non-haz waste code)	Plastic packaging	General recyclable plastic materials	N/A
Plastic	20 01 39	End of life plastic bins		Solid plastic waste		
Paper and Cardboard	20 01 01	Municipal paper and cardboard	N/A (absolute non-haz waste code)	Cardboard and paper	General recyclable paper and cardboard	N/A
Glass packaging	15 01 07	Municipal glass	N/A (absolute non-haz waste code)	Solid glass items	Mixture of coloured and clear glass	N/A
Metal cans for recycling	20 01 40	Municipal metals, cans for recycling	N/A (absolute non-haz waste code)	Solid metal items	General recyclable metal cans	N/A
Scrap metal	20 01 40	Scrap metal	N/A (absolute non-haz waste code)	Solid	Scrap metal	N/A
Textiles	20 01 10 20 01 11	Bagged textiles	N/A (absolute non-haz waste code)	Solid	Clothing	N/a

Table 2: Accepted waste Types and Attributes

2.1.6 Waste Exclusions

No liquid waste is brought onto site and all operatives are instructed not to bring liquids in. Operatives undertake visual inspections of the waste during the kerbside collections to ensure that only permitted wastes are collected and bought back to the site. Staff collecting waste are also instructed not to collect any asbestos, asbestos containing materials, chemicals or hazardous waste.

Although no liquid waste is brought to the site by operatives, waste oil is, however, produced by the on-site workshop. This is stored in bunded tanks and monitored weekly until it is collected for its reprocessing. This is not included within the permitted wastes as it is not part of the permitted waste transfer activities.

2.1.7 Waste Process

Please view alongside the site layout plan (Drawing - D001)

Waste type	Process
Street cleaning and fly-tipped waste	Waste is collected by CCC staff and vehicles, it is then transported to site where it is loaded into storage bay 1.
WEEE	Waste is collected by CCC staff and vehicles (only if any food or putrescible matter has been removed) and transported to the site. They are loaded into bay 2, large items stored on the floor of the bay and smaller items placed in cages supplied by the contractor. Collections are completed on a regular schedule with additional collections if cage capacity is reached.
Tyres	Waste is collected by CCC staff and vehicles. Once they reach site they are transported directly to the 20m³ container. Collections are completed on a regular schedule with additional collections if the container exceeds 75% full.
Gas Cylinders	Gas cylinder are taken to site and sorted into the appropriate storage area (C1, C2, C3, C4, C5). The site supervisor will arrange collection when required. This is requested when the storage areas are approximately 75% full. It is important each gas cylinder is sorted so it can be placed in the correct storage area and collected by a suitable contractor.
Paper Recyclates	Waste is collected by CCC staff and vehicles and transported to the site where it is placed into storage bay 4 (covered). Paper is collected for recycling daily.
Plastic Recyclates	Waste is collected by CCC staff and vehicles and transported to the site where it is placed into bay 5 (covered). The plastic is then transferred straight to the MSF inlet bay (Bay 9) where it is sorted and then bailed. Once bailed the bales are moved back to Bay 9 where they are stored awaiting onward collection.
Glass Recyclates	Waste is collected by CCC staff and vehicles and transported to the site where it is placed into bays 6 and 7. Collections are completed on a regular

Waste type	Process
	schedule with additional collections if waste measures over the 100m³ maximum storage capacity.
Metal Cans/Tins Recyclates	Waste is collected by CCC staff and vehicles and transported to the site where it is placed into bay 8 where they await processing within the MSF. The resulting bales are stored with Storage area 10. Any overflow of metal can/tin recycling can be stored in storage bay 11. The metal cans are then transferred to bay 9 to await infeed into the MSF. Post MSF the bales are stored within Storage bay 10.
Textiles	Waste is collected by CCC staff and vehicles and transported to the site where it is placed within the textiles container.
Scrap Metal	Any scrap metal is placed into the scrap metal skip, this is removed once 75% full at the site supervisors request.

Table 3: Waste process summary table

2.1.8 Waste Storage

The Freighter House Waste transfer site enforces strict limits on;

- How much of each waste can be stored on site,
- What waste is accepted on site,
- How long waste can stay on site, and
- How long the waste can be stored onsite.

The limits set out below comfortably sit within the limits stated by the EA's FPP Guidance.

No waste is left loose in piles. Instead, all waste is handled according to its nature and stored in the appropriate location.

The Freighter House site has limited space, which makes it difficult for 6m to be maintained between all waste piles, buildings and the site perimeter. However, the maximum possible distances are maintained between piles, buildings and the site perimeter. Where 6m distances cannot be maintained between the waste piles, buildings and the site perimeter, suitable fire/containment walls have been built to prevent spread of fire and waste between storage bays.

All waste storage bays are inspected during the day by the site supervisor undertaking the daily walk around check. This is to ensure all waste is housed within it's assigned bay, waste within the bays have not been mixed and waste has not escaped the bays. Waste bays are marked with a maximum height marker of 3m, this allows for a sufficient freeboard of 1m. In addition, waste is not stored within 1m of the leading edge of each bay to limit risk of the spread of fire to adjacent bays. Bay 11 is marked as a spare bay to be used in busy times to store segregated unprocessed or processed wastes.

There is a dedicated area next to Bay 11 which is to be used as a quarantine area. This area is only to be used for material that is at risk of causing or spreading fire. In addition there is sufficient space within the yard area that could also be used. The number of vehicles on site varies, but the site staff have the facilities to move these quickly if necessary to free up space to be used for quarantine purposes.

Waste type	Storage location	Container type	Max storage time	Max storage quantity
Street sweeping, street cleansing and fly-tipped materials	Storage Bay 1	Open bay	5 days including weekends	70m³ / 100 tonnes
WEEE	Storage bay 2	Open bay	1 month	100m³ / 5 tonnes
Fluorescent tubes	Storage bay 2	Secure metal container	12 months	NA
Tyres	Tyre container	20m³ container	2 months	20m³ / 5 tonnes
Paper recyclates	Storage bay 4	Covered bay	7 days	100m³
Plastic recyclates	Storage bay 5	Covered bay	14 days	100m³
Plastic bales	Storage bay 5	Covered bay	14 days	60m³
Glass recyclates	Storage bay 6 & 7	Open bay	7 days	100m³ each
Metal recyclates	Storage bay 8	Open bay	14 days	100m³
Metal recyclate bales	Storage bay 10	Open bay	1 month	100m³
Spare Bay	Storage bay 11	Open bay	1 month	100m³
Scrap Metal	Metal Skip	Skip	2 months	40m³
Textiles	Textiles container	Container	2 months	14m³
Orphan Gas Bottles	C1 Storage	Locked enclosure	2 months	70m³/ 100 units
Non-LPG bottles	C2 Storage	Locked enclosure	2 months	
LPG Bottles	C3 Storage	Locked enclosure	2 months	
Oxygen Bottles	C4 storage	Locked enclosure	2 months	
Acetylene Bottles	C5 Storage	Locked enclosure	2 months	

Table 4. Waste storage location and maximum storage times