

Haye Down Waste Transfer Station

784- B033235

Fire Prevention Plan

Environmental Permit Application

West Devon Borough Council

November 2025

Document prepared on behalf of Tetra Tech Limited. Registered in England number 01959704



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Appendix A - Waste Storage Details

1.0 Introduction

1.1 Report Context

- 1.1.1 This Fire Prevention Plan (FPP) has been prepared by Tetra Tech on behalf of the Operator, West Devon Borough Council (The Council). The application relates to The Council's site at Haye Down Industrial Estate (the site), Haye Down, Tavistock, Devon, PL19 0NN, at approximate National Grid Reference SX 44645 79630. The site location and permit boundary are presented on Drawing Number WDB/B033235/PER/01.
- 1.1.2 The site is currently operated by FCC Recycling (UK) Ltd on behalf of The Council. At present the site is being operated under a number of exemptions (S1 Storing wastes in secure containers, S2 Storing wastes in a secure place, T10 Sorting mixed wastes and T4 preparatory treatments (baling, sorting, shredding, etc) but there is no environmental permit.
- 1.1.3 However, following changes to the methodology for collection whereby cans and plastics are co-mingled rather than collected as separate streams the site is no longer eligible to operate under the exemptions. As such, The Council have identified that the exemptions which the site currently operates under are no longer suitable and a full Environmental Permit should be obtained.
- 1.1.4 Consequentially, The Council are seeking to apply for a new bespoke permit for the operation of a Household, Commercial and Industrial Waste Transfer Station that will process a maximum of 25,000 tonnes per annum of non-hazardous waste.
- 1.1.5 This report identifies the potential causes and effects of a fire and describes the measures that will be in place to prevent the occurrence of a fire at the site. In addition, the report provides details on the planned response to a fire incident and explain how fire water would be contained.

1.2 Using This Fire Prevention Plan

- 1.2.1 The FPP is located within the site office where the site management team are based.
- 1.2.2 The implementation and dissemination of this FPP will be the responsibility of the Operations Manager and Site Manager, supported by other staff. The Site Manager can delegate certain tasks as required, although ultimate responsibility will remain with them.
- 1.2.3 A nominated deputy will be appointed for all times when the Site Manager is not on site. In such circumstances, it will be the nominated deputy's responsibility to ensure that the requirements of the FPP are adhered to.
- 1.2.4 In addition, the requirements of the Fire Prevention Plan will be communicated to site operational staff on at least an annual basis via toolbox talks. Yearly refresher toolbox talks will ensure that the requirements of the Fire Prevention Plan are reinforced.

- 1.2.5 This FPP is a working document, intended to be used as a reference document for anyone whose work directly impacts the permitted waste activities such as operational staff, contractors and regulatory authorities. This document is also intended for the Fire Rescue Service (FRS) in the event of a fire. A copy of the FPP is available as a hard copy outside of the permitted area in the office within the larger site and electronically for remote access.
- 1.2.6 The Site Manager will review this FPP at regular intervals and on at least an annual basis, following any of the events below: -
- Testing of the plan to ensure the plan works and staff understand the procedures to be undertaken to prevent a fire occurring and the procedure to be undertaken in the event of a fire;
 - An incident;
 - Change in legislation or formal guidance; and,
 - Prior to a change in activity on site.

1.3 Testing The Plan and Staff Training

- 1.3.1 A fire drill exercise covering all the incident response requirements of the FPP will be carried out at least annually.
- 1.3.2 Records of the fire drill exercise shall be kept including the time, date, and summary of the drill.
- 1.3.3 Records of the fire drill exercise should outline any requirements of the FPP that were not satisfactorily completed.
- 1.3.4 Additional training will be undertaken on any requirements of the FPP that the review identifies were not satisfactorily completed during the exercise and on any amendments to the FPP carried out in response.
- 1.3.5 Employees are trained in fire safety awareness and in the use of the site fire-fighting equipment.

2.0 Site Context

2.1 Site Location

- 2.1.1 The site is situated within Hayedown Industrial Estate located approximately 650m south of Haye Down and 1km east of Longcross in Devon. The site is centred at approximate National Grid Reference SX 44659 79625. The site location and the permit boundary are shown on Drawing Number WDB/B033235/PER/01.
- 2.1.2 The site is located in the southern portion of Hayedown Industrial Estate. The entrance to the Industrial Estate is located to the north of the site which can be accessed via an unnamed road located between Longcross and Haye Down.
- 2.1.3 The immediate surroundings of the site are other waste operations and industrial activities to the north, west and southwest, with agricultural land to the south. There are also residential properties located within the vicinity of the site to the east with the nearest located 60m east.

2.2 Receptors

- 2.2.1 Sensitive receptors within 1km of the site that may potentially be at risk from a fire have been listed in Table 1 and are shown in Drawing Number WDB/B033235/REC/01. The receptors identified within the Nature and Heritage Conservation Screen (EPR/NP3327SH/P001) have also been listed in Table 1.

Table 1: Location of Potential Receptors Within 1km of the Site

ID	Receptor	Direction from Operational Area	Minimum Distance from the site (approx. m)
Domestic Dwellings			
1	Haye Down Industrial Estate Dwellings	E	55
2	Haye Down Farm Residencies	E	360
3	Beech Farm Residencies	S	640
4	Higher Haye Residencies	S	970
5	Haye Comb Farm Residencies	SW	520
6	Longcross Properties	SW	840
7	Quither Down Farm Residencies	NW	680
8	Residency (Near A&M Pallets)	W	70
Commercial and Industrial Premises			
9	J A McLaughlin	E	290
10	Haye Down Industrial Estate	-	Adjacent
11	A&M Pallets	W	125
12	Industrial Property	N	610
13	Industrial Property (Haye Down Farm)	SE	240
14	Industry (Beech Farm)	S	755

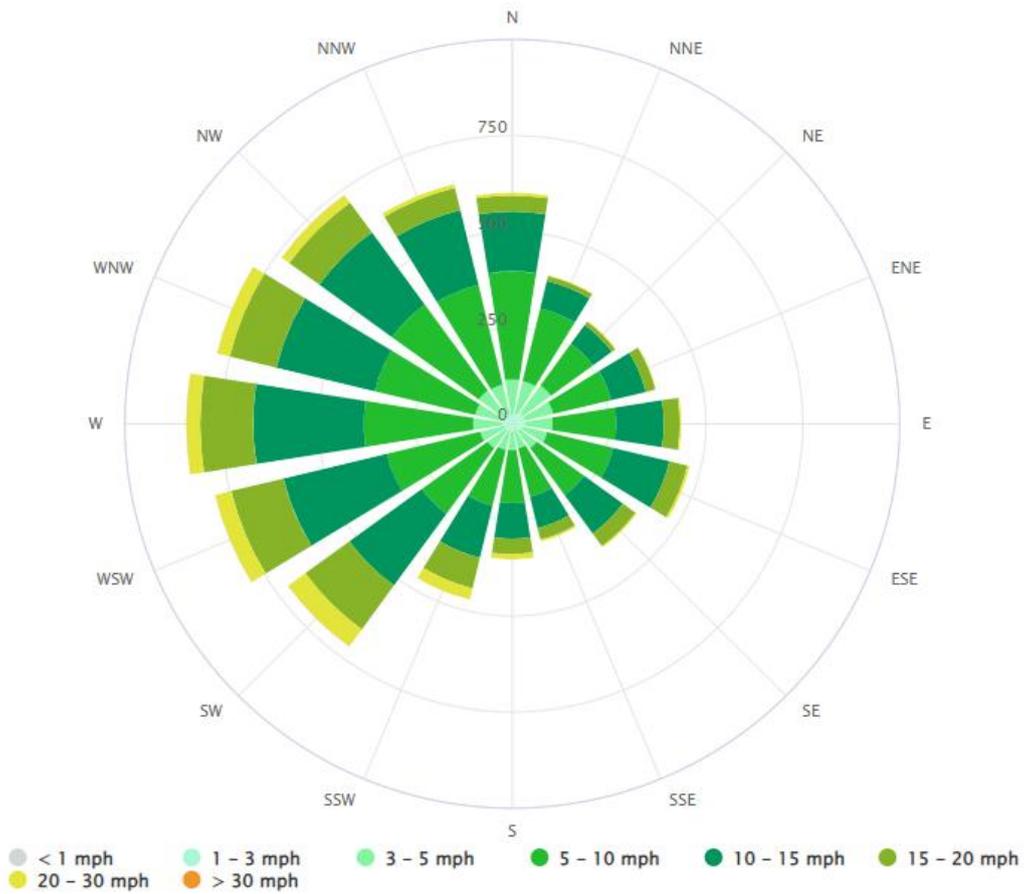
15	Industry – Higher Haye	SW	970
16	Longcross Industry	SW	875
17	Industry	NW	745
18	Commercial Lamp Supplies	NE	410
19	Week Cottages Road Industry	NE	980
Highways or Minor Roads			
20	Week Cottages	NE	995
Sensitive Land Uses			
21	Haye Down Farm	E	365
22	Beech Farm	E	665
23	Quither Down Farm	NE	515
24	Haye Combe Farm	SW	515
25	Longcross Farm	SW	825
Priority Habitats			
26	Haye Down Industrial Estate Deciduous Woodland	-	Adjacent
27	A&M Pallets Deciduous Woodland	W	95
28	Quither Down Farm Deciduous Woodland	NE	620
29	Beech Farm Deciduous Woodland	S	470
30	Haye Combe Farm Deciduous Woodland	SW	355
31	Longcross Deciduous Woodland	W	900
32	River Lumburn Deciduous Woodland	SE	990
Listed Buildings and Scheduled Monuments			
33	Bowl barrow	E	735
34	Bowl barrow 2	E	960
Surface Water e.g. rivers and streams			
35	Small Pond	N	395
36	Quither Common Stream	NE	420
37	River Lumburn Tributary	SW	295
38	River Lumburn	SE	750
Groundwater (sensitivity)			
According to the Multi-Agency Geographic Information for the Countryside's (MAGIC) website, the site is not situated within a Source Protection Zone). With regards to aquifers, the MAGIC website shows that the majority of the site overlies Secondary A Bedrock aquifer. The Superficial Drift Aquifer also comprises a Secondary A Aquifer.			

2.3 Wind Direction

- 2.3.1 The prevailing wind direction will determine which receptors will be affected and at what frequency. Meteorological data has been used from Tavistock from www.meteoblue.com which is considered to be representative of conditions within the vicinity of the application site. According to the wind rose data for the area, the prevailing wind direction in the local area is from the West (W) as shown in Figure 1 below.

2.3.2 In accordance with Section 6.2 of the EA's FPP guidance, the prevailing wind direction has been identified on Drawing Number WDB/B033235/PER/01.

Figure 1: Tavistock Prevailing Wind Direction



3.0 Activities at the Site

3.1 Assessing the Risk of Fire

- 3.1.1 The risk assessment to identify potential events or failures that may lead to an environmental impact as a result of a waste related fire is included in the Environmental Risk Assessment. The risk assessment provides details of the following: the hazard, the pathways and receptors, the probability of occurrence, the consequences or impacts and the measures that will be taken to manage the risk, and an evaluation of the mitigated risk.
- 3.1.2 Further detail on the hazard, in terms of the materials that will be received stored and/or treated on the site, the volumes of materials received, and the potential causes of fires are discussed further in this section of the FPP. The sensitive receptors and the consequence of a fire on those receptors are also discussed below.

3.2 Overview of Site Activities

- 3.2.1 The layout of the facility is shown in Drawing Number BDY3.
- 3.2.2 The site will operate a non-hazardous household, commercial and industrial waste transfer station.
- 3.2.3 The operation of the waste transfer station will fall under the following Recovery and Disposal codes (R and D codes) shown in Table 1, provided for in Annex II to Directive 2008/98/EC of the European Parliament and The Council of 19th November 2008 Waste.

Table 2: Permitted R&D Codes

R/D Code	Activity Description
D14	Repackaging prior to submission to any of the operations numbered D1 to 13
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage, pending collection, on the site where it is produced)
R4	Recycling/reclamation of metals and metal compounds
R5	Recycling/reclamation of other inorganic materials
R13	Storage of waste consisting of materials for submission to any operation numbered R1 to R12 but excluding temporary storage pending collection on the site where it is produced.

3.3 Operating Hours

- 3.3.1 The operating hours of the Facility will be as follows: -
- 06:00-19:00 Monday – Friday; and,
 - 06:00 – 19:00 Saturday.
- 3.3.2 No works will be undertaken on Sundays or Bank Holidays other than emergency cover.

3.4 Combustible Waste Types

3.4.1 In accordance with the combustible waste types listed in Section 4 of the EA's FPP guidance, the site will store the following wastes that are considered to be combustible in nature:-

- Paper and packaging;
- Cardboard/card;
- Comingled plastic and metal cans; and,
- Textiles.

3.5 Other Combustible Waste Types

3.5.1 In addition to waste materials, the Operator proposes to store red diesel (non-waste) at the site. The diesel will be stored within a bunded tank that will be situated within the WTS building (as shown on Drawing Number BDY3).

3.6 Persistent Organic Pollutants

3.6.1 According to the EA's 'Identify and dispose of waste containing persistent organic pollutants (POPs)' guidance, POPs are typically found in waste electrical and electronic equipment (WEEE). The Operator does not propose to accept any WEEE at the site and therefore the risk of POPs to be present at the site is expected to be low.

3.7 Site Plan

3.7.1 In accordance with Section 6.2 of the EA's FPP guidance, a site plan, Drawing Number BDY3 has been prepared to cover the following: -

- The layout of buildings;
- Any areas where hazardous and flammable materials are stored on site (location of gas cylinders, process areas, chemicals, piles of combustible wastes, oil and fuel tanks);
- All permanent ignition sources on your site and show they are a minimum of 6m away from combustible and flammable waste;
- Any areas where you are treating or storing combustible waste or combustible non-waste material;
- All separation distances;
- Main access routes for fire engines and any alternative access;
- Access points around the site perimeter to assist firefighting;
- Water supplies;

- Areas of natural and unmade ground;
- Drainage runs, pollution control features such as drain closure valves, and fire water containment systems such as bunded or kerbed areas (this may be easier to show on a separate drainage plan);
- Storage areas with pile dimensions and fire walls (where applicable) – this includes wastes stored in a building, bunker, or containers – include indicative pile layouts and ensure it is geographically representative;
- The location of fixed plant or where you store mobile plant when not in use;
- The location of spill kits; and,
- The quarantine area.

4.0 Managing Common Causes of a Fire

4.1 Haye Down Waste Transfer Station Policies and Procedures

- 4.1.1 The Environmental Management System (EMS) will incorporate this Fire Prevention Plan within the Emergency Preparedness and Response and will be followed in the event of a fire or explosion.
- 4.1.2 One of the principal objectives of the EMS is to ensure the efficient and safe operation of the site through the implementation of procedures that ensure defined staff roles and responsibilities supported by provision of appropriate training.
- 4.1.3 Key procedures that apply include training all staff, contractors and visitors in correct health and safety and fire prevention procedures and the implementation of a regular maintenance and inspection programme for all areas of site and equipment to ensure good housekeeping and effective operation of machinery.

4.2 Document Control and Records

- 4.2.1 The Fire Prevention Plan will be reviewed and updated: -
- Following any relevant change in legislation or formal guidance;
 - When changes are made to site operations or equipment that affect the activities covered by the permit;
 - When applying to change ('vary') the permit;
 - After any incident, complaint or breach of the permit;
 - If new control measures are implemented; and,
 - Following any exercise to test the effectiveness of the plan and staff understanding.
- 4.2.2 A record will be kept of any changes to the fire prevention plan, particularly major changes including but not limited to: -
- A change in the combustible wastes or other combustible materials stored on site.
 - A change to the maximum amount of combustible wastes or other combustible materials stored on site;
 - A change to the storage arrangements of combustible wastes or other combustible materials stored on site; and,
 - Implementation of new fire prevention control measures.

- 4.2.3 Any review of the Fire Prevention Plan will be undertaken as a minimum by the Site Manager and appropriate staff and business support services.

4.3 Managing Common Causes of a Fire

- 4.3.1 The following sections detail how the operator will manage the common causes of a fire that are outlined in Section 7 of the EA's FPP guidance.

Arson or vandalism

- 4.3.2 Site security will be in operation during the working day to prevent unauthorised access to the site.
- 4.3.3 The site will benefit from a CCTV system which will be monitored by on site staff during working hours and monitored by an external security company hired by The Council outside working hours. In the event that a fire is detected outside operating hours, the security company will liaise with the fire service and ensure that any fires are dealt with in a timely manner.
- 4.3.4 In the event that a fire occurs outside operating hours, the emergency services and the secure key holder will have the access and ability to retract the security gates.
- 4.3.5 All visitors will also be required to sign in and will be accompanied at all times unless authorised otherwise. Any unauthorised visitors found on site will be challenged and asked to justify their presence and sign in or leave. All visitors will be informed about the site fire safety precautions as part of the site induction procedure.

Plant and equipment failure

- 4.3.6 Only personnel who are trained and licensed to operate and carry out maintenance will do so.
- 4.3.7 All machinery/equipment is subject to routine cleaning, servicing in line with manufacturers guidance and daily checks/defect reporting. The daily check includes identification of leaks.
- 4.3.8 All site vehicles are fitted with fire extinguishers and dust filters. Vehicles will have high level exhausts fitted.
- 4.3.9 All vehicles and items of plant are stored at a safe distance (minimum 6m) from waste stockpiles when not in use. When not in use, plant will be stored within the building overnight.
- 4.3.10 Mobile plant will be subjected to daily vehicle pre-use inspection checks, and regular clearing of detritus from around the machine. All defects will be reported to site management. The machines will be subject to regular service inspections in accordance with manufacturer's recommendations which will include maintenance of the exhaust and cleaning if required. Daily inspections of the exhaust will check for blockages or excess build-up of material/

Electrical Faults

- 4.3.11 All portable items of electrical equipment are listed in a register and tested by a competent person at least annually. Items must not be connected to the electrical supply that cannot be shown to have been tested within the previous 12 months.
- 4.3.12 Electrical sockets must not be overloaded. Adapter plugs are prohibited on site.
- 4.3.13 No industrial heaters will be used on site.
- 4.3.14 Fixed electrical installations are installed, inspected, tested, and maintained by suitably trained and qualified persons. Contractors undertaking the work must be enrolled on the National Inspection Council for Electrical Installation Contracting (NICEIC) register of Approved Contractors or similar. Inspection and testing shall be carried out at minimum periods of three years, or following: -
- Any substantial alteration to the electrical installation;
 - Any incident that might cause damage to the electrical installation such as fire; or,
 - At periods stipulated by an approved contractor issuing a test report.
- 4.3.15 Following every inspection and testing, defects will be rectified as soon as reasonably practicable.
- 4.3.16 In addition, fixed electrical equipment will only be installed if it is fit for purpose and compatible with the electrical installation and its capacity. All fixed electrical equipment will be used, inspected, tested, and serviced in line with manufacturers' recommendations.

Discarded Smoking Materials

- 4.3.17 Smoking on site is only permitted in the site designated smoking area that's located within the depot car park.

Hot Works

- 4.3.18 No hot works are carried out as part of routine activities on site.
- 4.3.19 Contractors required to undertake hot works will be required to provide risk assessments and follow approved safe working procedures. Any hot works will be subject to the Permit to Work procedure and will be adequately supervised and located away from waste stockpiles. In the event of hot works on site the initial fire watch will be undertaken two hours after hot works have been completed.

Industrial Heaters

- 4.3.20 No industrial heaters will be used on site.

Hot Exhausts

4.3.21 Employees are constantly present across all waste storage areas during operational hours, so a fire watch is constantly ongoing. Employees are instructed to carry out visual checks to detect any sign of fire, including dust settling on hot exhausts and engine/machinery parts.

4.3.22 This will include checking of mobile plant within an hour of the end of each working day.

Ignition Sources

4.3.23 Any sources of ignition including for example heating pipes, naked flames, light bulbs, spaces heaters etc. will be kept at least six metres away, or will be separated by a fire wall, from any combustible and flammable waste on site.

Batteries in ELVs

4.3.24 The Operator does not propose to accept ELVs or batteries from ELVs as part of the WTS. In addition, there are strict waste acceptance procedures in place to minimise the risk of non-compliant wastes being accepted at the site. As such, it is considered that there is no risk concerning batteries in ELVs.

Leaks and Spillages

4.3.25 The most likely source of leaks and spillages from the permitted waste activities will be from plant and equipment that used on site. All plant and equipment will be subject to regular maintenance to minimise the risk of mechanical failure which could result in leaks.

4.3.26 Faults within a vehicle or item of plant have potential to cause fire so a regular plant and machinery maintenance program is in place to identify and remedy potential issues at an early stage.

4.3.27 There will be no waste oil on site.

4.3.28 All machinery/equipment is subject to routine cleaning, servicing in line with manufacturers guidance and daily checks/defect reporting. The daily check includes identification of leaks, and where identified, these will be rectified according to the spillage procedure as detailed in the The Council EMS.

4.3.29 Fully stocked spill kits shall be located at key locations within the site to allow for quick response to any spillages

4.3.30 A documented spill response procedure will be incorporated into the site's EMS which details the required actions to be undertaken in the event of a spill or leak on site. In summary, the procedure will comprise the following actions: -

- Minor spillages will be cleaned up immediately, using a proprietary absorbent. The resultant materials will be placed in a container for off-site disposal to a suitable facility as appropriate; and

- In the event of a major spillage, which is causing or is likely to cause polluting emissions to the environment immediate action will be taken to contain the spillage and prevent liquid from entering surface water drains and un-surfaced ground. The spillage will be cleared immediately and placed in containers for off-site disposal, and the EA will be informed. Records of spillages and incidents will be kept on site together with a summary of the remedial action taken.

Build-up of loose combustible waste, dust and fluff

- 4.3.31 Good housekeeping practices are in place to minimise the accumulation of dust, litter, fibre or paper on the site, which could pose a fire risk.
- 4.3.32 Daily check sheets include a requirement for site staff to undertake visual qualitative monitoring; if dust and litter on site are perceived to be excessive the action causing the emission will be halted and remedial measures implemented.

Reactions Between Waste

- 4.3.33 Waste acceptance procedures will comply with the site permit and associated environmental legislation. Only waste types detailed in the permit will be accepted at the site.
- 4.3.34 The documentation accompanying the load shall be checked, and shall include, but not be limited to the Carriers Certificate of Registration and Duty of Care Waste Transfer Note.
- 4.3.35 The information recorded in respect of each load as provided by the Waste Transfer Note will be: -
- Ticket Number;
 - Vehicle Registration Number and Type;
 - Time and date (or date range) of transfer;
 - Waste description and quantities including all EWC codes;
 - Container type;
 - Where the transfer(s) took place;
 - Category of Transferor and Transferee (i.e. producer, WDA, registered carrier, permit holder, EPR etc);
 - Names and addresses of all parties involved in the transfer and their roles (i.e. producer, carrier, disposer);
 - Details of relevant permit/exemptions; and,
 - Signatures of all parties involved.

- 4.3.36 Staff will carry out ongoing visual inspections of the wastes. All loads will be visually inspected on site as the waste is discharged or unloaded from the delivering vehicle.
- 4.3.37 Should any load, either upon entry to the site, or upon tipping, be discovered to contain waste types not permitted at the site or contain incompatible wastes the load will be rejected and removed from site.
- 4.3.38 If wastes not permitted by the site permit are discovered amongst a load after deposit, the waste will be isolated to prevent the processing of this waste

Deposited Hot Loads

- 4.3.39 A quarantine area is available in the event that a hot or burning load is received on site. This area may also be used in the event of a fire on site.
- 4.3.40 If a hot load is discovered during delivery or deposit of the load, the waste will be isolated and placed in the quarantine area. The waste will be dealt with accordingly (i.e. dampened etc.). The incident and time of discovery will be recorded in the site diary. The waste will be placed in a quarantine area until the fire is extinguished and then loaded into a suitable container. Arrangements will be made for the disposal of such wastes at a suitably permitted disposal facility as soon as practicably possible.

Hot and Dry Weather

- 4.3.41 Waste that's accepted as part of the WTS will either be stored within the waste transfer building. The exception to this will be mixed glass and food waste which are to be stored outside in external bays. or within covered bays and will therefore be shaded from direct sunlight.

4.4 Controls To Prevent Self-Combustion of Waste

Manage Waste Storage Times

- 4.4.1 Maximum storage times for combustible wastes are outlined within Appendix A waste storage details.
- 4.4.2 Materials will be removed from site in order of receipt so as to reduce the storage duration and therefore the risk of self-combustion.
- 4.4.3 Storage of waste will be managed to minimise the volume of waste stored and limit the storage time as far as practicably possible.

4.4.4 Regular working practice includes arranging haulage for material to be removed from site in advance. The planned number of vehicle movements out are based upon contracted and predicted inputs to the site and is reviewed on a daily basis.

4.4.5 All waste entering the Waste Transfer Station will be logged in at the site office, records will include weight, EWC codes, date, and time of receipt. The Site Manager will be able to review the waste acceptance forms to understand the materials that have been imported and exported from site.

Method Used to Record and Manage the Storage of All Waste on Site

4.4.6 All incoming and outgoing wastes are recorded at the weighbridge located outside of the permitted area with weights for each load recorded on the The Council's internal software system.

4.4.7 This software is used to calculate volumes of waste which are being held on site and to calculate average daily tonnages of waste previously received at the facility.

Stock Rotation Policy

4.4.8 Where practicable waste stockpiles will be loaded into one side of the stockpile. Once that half of the stockpile area is at capacity the waste will be loaded into the second half of the stockpile area.

4.4.9 Wastes will continue to be loaded into the second half of the stockpile area whilst wastes are exported from the first half until it has been cleared.

4.4.10 Once the first half is cleared, wastes can be loaded into the first half again whilst waste is exported from the second half so that it is cleared.

4.4.11 This process is continued on a loop rotating between the two halves of the stockpile area to ensure stocks are rotated.

4.4.12 Other waste stockpile areas are cleared regularly and emptied once a full load of material has been accumulated.

Monitoring and Control of Temperature

4.4.13 According to Section 8.2 of the EA's FPP guidance, operators are required to demonstrate how they will prevent self-combustion for any waste stored for more than three months. This includes the following: -

- Reduce the exposed metal content or proportion of 'fines' within the waste (exposed metals can oxidise which will generate heat, while fine particles are more prone to self-combustion);
- Allow any heat generated during treatment such as shredding, chipping or producing crumb to be released so that the waste is cool before you form it into piles for storage; and,
- Monitor the temperature of the pile using a probe or other device as appropriate.

- 4.4.14 Based on the waste storage arrangements in Appendix A, the Operator does not propose to store any combustible waste for more than 3 months. As such, it's considered that the Operator is not required to monitor the temperature of waste stockpiles due to the proposed turnaround periods. In addition, there will be no physical treatment of waste at the site which minimises the risk of combustion that's typically associated from treatment activities. Subsequently, this minimises the risk of fines to be present within the waste.
- 4.4.15 Despite this, site personnel will check during routine operations for visual signs of hot spots on the outside surface of waste piles. If personnel identify visual signs of hot spots on the outside surface of waste piles consideration will be given to techniques to address the issue including if applicable turning the waste with a loading shovel to dissipate the heat or transferring the waste to the fire quarantine area and spreading it out to dissipate the heat.

Waste Bale Storage

- 4.4.16 Section 8.3 of the EA's FPP guidance requires details regarding the monitoring and storage for waste bales.
- 4.4.17 The Operator does not propose to accept any waste bales. In addition, the Operator does not propose to undertake any physical treatment of waste at the site (including baling). As such, it's considered that this section of the EA's FPP guidance is not applicable.

Manage Waste Piles

- 4.4.18 In terms of waste piles, Section 9 of the EA's FPP guidance notes that the risk of self-combustion can be achieved by the following:-
- Minimise pile sizes; and,
 - Store waste materials in their largest form.
- 4.4.19 Based on the waste storage arrangements in Appendix A, all combustible waste piles will have a maximum height of 3m which is below the 4m limit specified in the EA's FPP guidance. In addition, the maximum pile length will be less than the maximum pile length of 20m specified in the guidance.
- 4.4.20 The stockpiles will be continually monitored in accordance with these guidelines by site operatives through a visual assessment of the pile heights against markers shown on the push walls. In addition, compliance checks will be undertaken by the Site Manager on a daily basis to ensure that all waste piles comply with the dimensions provided in Appendix A.
- 4.4.21 In the event that the site reaches the maximum storage capacity, the Operator will ensure that no more waste is brought to the site until sufficient capacity becomes available. If necessary, the Operator will make arrangements for additional collections to be undertaken to ensure the storage limit is not exceeded.

4.4.22 In addition to pile sizes, there will be no physical treatment of waste at the site and therefore all combustible waste will be stored in the form in which there are received at the site (i.e. stored in their largest form).

Wastes Stored in Containers

4.4.23 According to Section 10.2 of the EA's FPP guidance, if waste is stored in a container, it must be accessible from at least one side so a fire can be extinguished. The guidance provides examples of appropriate containers which include skips, RoRo skips, or shipping containers.

4.4.24 As shown on Drawing Number BDY3, all wastes to be stored in containers on site are accessible from at least one side.

Measure to Prevent Fire Spread

4.4.25 Section 11 of the EA's FPP guidance indicates that the following methods can prevent the spread of a fire: -

- Separation distances
- Fire Walls and Bays

4.4.26 Combustible waste stockpiles will be stored a minimum of 6 metres away from other sources of ignition unless they are separated by either Legio Block or precast in situ concrete separation walls. Bay walls will be made of reinforced concrete of over 120mm thickness. These are constructed in line with BS EN 1992-1-2:2004. Part 5.4 of BS EN 1992-1-2:2002 which states that for a non-load bearing compartment wall to provide a 2 hours fire resistance the wall must be 120mm thick. The bays will be fully sealed to act as a thermal barrier. The fire rated concrete/concrete Legio blocks are designed to resist both radiative heat and flaming.

4.4.27 All combustible waste and materials are indicated on the site plan in Drawing BDY3 along with locations of plant & equipment and ignition sources.

4.4.28 Stockpiles are rotated as set out in Section 4.4.9 stock rotation policy.

4.4.29 Storage timescales of stockpiles are less than the three months recommended for commencing formal temperature monitoring.

4.4.30 Hotspots, smoldering, or burning wastes from stockpiles may be moved to the quarantine area to ensure adequate segregation of wastes.

Quarantine Areas

4.4.31 A Quarantine area will be located in the centre of the WTS building and will have a storage capacity of 30m³.

- 4.4.32 The quarantine area is retained at all times to allow burning material to be moved into this area (provided it is safe to do so) to extinguish and control fire spread. It is also used to move piles of nonburning material (adjacent to a fire) to prevent spread.
- 4.4.33 The location and size of the quarantine area is provided on Drawing Number BDY3.
- 4.4.34 As set out in Section 12 of the EA's FPP guidance, the size of the quarantine area should be sufficient to accommodate 50% of the volume of the largest waste pile and provide a minimum separation distance of 6m on all sides to the nearest pile, building or site boundary.
- 4.4.35 With reference to the pile size dimensions in Appendix A, it is considered that 65m³ will comprise the largest potentially flammable stockpile at the site and therefore the quarantine area size is deemed suitable to accommodate 50% of this (32.5m³).
- 4.4.36 In the event of a fire being detected on site, the material would be dealt with in the most appropriate manner, including either segregation of burning material into the quarantine area or the remaining non burning waste will be segregated to ensure the separation distance from the burning waste. The site has capability to move loose materials and containers quickly, with a number of the mobile plants operational at the site.
- 4.4.37 In the event of a fire any wastes stored in the quarantine area will be relocated to another part of the site which will be determined at the time by site management taking into account the location of any incidents.
- 4.4.38 Other parts of the site which could be used include an area to the rear of the building where vehicle parking for RCV's is proposed.

5.0 Fire Detection and Suppression Systems

5.1 Fire Detection

- 5.1.1 It is proposed that a fire detection system will be installed at the site as part of site improvement. The exact details are still to be confirmed but it is envisaged that the fire detection system would be designed in general accordance with BS 5839:2017.
- 5.1.2 It is proposed that the Transfer station building will be fitted with thermal imaging cameras. The cameras will be positioned towards the combustible waste storage areas and set to trigger at 50°C, allowing for identification of hot spots and early response. This system provides a visual indication of a potential fire condition by a dedicated monitor which will be located within the transfer station site office which is located within the main depot building.
- 5.1.3 The new proposed fire detection and suppression system will be designed and installed by suitably competent parties who will be suitable certified for the installation of detection and suppression systems. The final design will be confirmed at detailed design stage to ensure that the density of sprinklers, cameras coverage and detection etc are correct to meet the requirements.
- 5.1.4 In addition, the use of a handheld thermographic camera will be used to monitor all combustible waste stockpiles. As noted in Section 3.3, temperature monitoring will be undertaken during operational hours by the Technically Competent Manager (or other designated person) and by the site staff.
- 5.1.5 In accordance with the Mobile Plant procedures, the handheld thermographic camera will be inspected prior to use to identify any signs of defects that may affect the integrity and operational efficiency of the camera. The camera will be inspected by an appointed person who has received appropriate training to use the camera. The condition of the camera will be recorded in the site diary.
- 5.1.6 In the event that a defect is identified on the handheld thermographic camera, its use will be suspended until the necessary remedial works have been undertaken.
- 5.1.7 The site benefits from an alarm control panel system which consists of manual call points and audible/visual alarm devices.

5.2 Fire Suppression

- 5.2.1 There will be a number of portable extinguishers placed at key strategic locations around the site. The number of portable extinguishers needed at the site and their locations will be assessed by a competent contractor prior operation starting. A check of the fire extinguishers (discharged/full, service in date etc) will be undertaken as part of the site weekly checks. All fire extinguishers are subject to annual testing by an approved accredited supplier.
- 5.2.2 Should a fire break out on site outside of operational hours, the protocol is outlined in Section 5.

- 5.2.3 All fire extinguishers conform to British Standard EN 3 and are located on wall brackets with the base of the extinguisher at a suitable height, or they are sited in permanent fire points. The extinguishers are of a suitable size and weight for use by site staff.

5.3 Fire Fighting Techniques

- 5.3.1 Any person identifying a fire incident must immediately activate the fire alarm and inform line management.
- 5.3.2 It is considered very unlikely that a fire will occur but if this should happen then any outbreak of fire will be regarded as an emergency and immediate action will be taken to extinguish the fire. No one should attempt to fight a fire unless they have received training in the use of fire extinguishers and then only if this can be done without risk.
- 5.3.3 If it is safe to do so, attempts should be made to extinguish a fire. This can be done by using site machinery to move any non-burnt material away from the smoulder or source of fire, working from the edge of the fire inwards. Plant and machinery must never be driven into the centre of any fire, this will place both the driver and the machine in danger. If possible, extinguish the fire with a portable extinguisher or water.
- 5.3.4 Should the fire be successfully extinguished by this action, a check should be kept of the area to ensure that the fire does not re-ignite. The area should be vacated until it is obvious that there is no further danger of the fire restarting.
- 5.3.5 If the above action FAILS to extinguish the fire, prohibit all entry to the area, then summon emergency services immediately. Any persons already on the site should leave. The Fire Service will be contacted as a matter of priority to deal with major fire incidents. Site staff will not be deployed to deal with major fires. The Fire Brigade must be called immediately by dialling 999 and all instructions given by the telephone operator must be followed.
- 5.3.6 Before the Fire and Rescue Service arrives, site staff will use pollution control equipment to block drains and/or divert fire water to a containment area and /or operate any pollution control facilities, such as drain closure valves/or penstocks where safe to do so.
- 5.3.7 The designated assembly point is adjacent to the main site access gate, as shown on Drawing BDY3. All persons must wait at the assembly point for further instructions. A Fire Warden will ensure that unauthorised persons do not enter the premises and that no one re-enters the site until given permission.
- 5.3.8 The emergency access routes to waste storage and quarantine areas in the event of a fire are shown on drawing BDY3.
- 5.3.9 Mobile Plant will be made available to support the fire service by moving wastes to manage separation distances. Trained operatives are on site permanently during operational hours and can be called upon at short notice to attend site in the event of an incident.

- 5.3.10 Any non-burnt materials or burning waste should only be removed from stockpiles under the instruction and supervision of the Fire Service.
- 5.3.11 The site will have a grab pack stored in a secure, safe, and visible location for use by Emergency Services.
- 5.3.12 The grab pack contents should include as a minimum the following: -
- Clear signage highlighting the grab pack;
 - Emergency and out of hours contacts;
 - Hazard plan showing the following:
 - Waste storage locations;
 - Fuel storage locations;
 - Chemical storage locations;
 - Oils and lubricant storage locations;
 - Gas storage locations;
 - Electrical supply details and location; and,
 - Anything else hazardous that could affect how they choose to fight a fire.
 - Drainage plan showing the following:
 - Pollution control valves;
 - Interceptor and discharge point locations;
 - Fire hydrants; and,
 - Site boundary and any water receptors.

5.4 Water Supply

- 5.4.1 The largest maximum potential stockpile size is calculated at 65m³ as outlined within Appendix A waste storage details.
- 5.4.2 The Environment Agency Fire Prevention Plan guidance indicates that 300m³ of combustible material will require a water supply of at least 2000 litres a minute for a minimum of 3 hours.
- 5.4.3 The largest flammable stockpile within the site is 65m³. Therefore, a flow rate of 400l/m (2000l/m / 300m³ x 65m³) and a total supply of 72,000l (1,300 l/m x 3 hours) would be required to extinguish a fire.
- 5.4.4 In the event of a fire, in order to reduce the requirement for the calculated large volumes of both water supply and resultant fire water management required, alternative measures are proposed.

These measures include a priority action (where safe to do so) to cut additional fire breaks in the main stockpile using mobile plant, to reduce the potential size of the fire and therefore the water volume required.

- 5.4.5 The site does not depend on an automatic fire suppression system for firefighting.
- 5.4.6 In the event of a fire occurring outside of operational hours the remote camera monitoring centre will contact site staff to attend site. Site staff will contact the fire service immediately before making their way to the site.

5.5 Fire Water Management

- 5.5.1 All waste storage areas benefit from impermeable surfacing and sealed drainage.. This mechanism is in place to prevent discharge off-site in the event of a fire.
- 5.5.2 The maximum volume of water required to extinguish a fire in the largest flammable stockpile (65m³) is calculated to be 72,000l (400 l/m x 3 hours). This equates to 72m³ of water.

Fire Water Containment Calculations:

Volume of firewater = 72m³

Area of Building = 880m²

Height of containment required = 0.08m (72m³ / 880m²)

- 5.5.3 All fire waters will be retained within the confines of the building through the concrete kerbing and inflatable booms which are to be kept on site at all times.
- 5.5.4 The total capacity for fire water storage as calculated above is 72m³ or 72,000L.

6.0 During and After a Fire

6.1 Dealing With Issues During a Fire

- 6.1.1 In the event of a fire, the emergency procedures will be followed which includes notifying the Fire Service and Environment Agency.
- 6.1.2 All vehicles waiting to deliver waste to the facility will be moved off site.
- 6.1.3 All ships booked to export waste from the facility will be notified immediately.
- 6.1.4 The site will be closed until further instruction from the authorities and fire service.
- 6.1.5 The Fire Warden will ensure the exit gates are closed and will leave by a transfer station entrance in order to prevent any persons (who may be unaware of the fire) entering from that direction.
- 6.1.6 The receipt of waste at the site is to be suspended and not resumed until authorised by the Site Manager.
- 6.1.7 The haulage teams will be notified, and all waste deliveries and commercial customers will be diverted to alternative suitable facilities as deemed appropriate at the time until the site re-opens.

6.2 Notifying Residents and Businesses

- 6.2.1 Nearby residents and businesses will be informed as appropriate depending on the scale of the fire and the circumstance including the weather conditions and impact on receptors. This will be organised through the site management team in association with the Fire Service.

6.3 Clearing and Decontamination After a Fire

- 6.3.1 Any burnt waste or material will be segregated and contained on site, either within the transfer building or within containers. This will then be assessed and disposed of to a suitably permitted facility.
- 6.3.2 Any firewater produced as a result of fighting a fire would be contained on site. This would then be removed from site via tanker for subsequent processing at a suitably permitted facility. An agreement has been made with a local tanker to remove wastewater offsite at short notice.

6.4 Making The Site Operational After a Fire

- 6.4.1 Site operations will not be recommenced until deemed safe to do so by the Local Fire Authority.
- 6.4.2 The site will be cleaned prior to operations recommencing.
- 6.4.3 Internal plant checks will be required prior to recommencement of operations.
- 6.4.4 Environment Agency will be notified of the restart of operations.

- 6.4.5 All incidents must be recorded in the site diary and on The Council's internal management system. The site Manager should be informed so that in turn, full details of the event can be reported to the Environment Agency

Drawings

Permit Boundary Plan – WDB/B033235/PER/01

Environmental Receptor Plan – WDB/B033235/REC/01

Site Drainage Plan – WDB/B033235/DRA/01

Appendices

Appendix A - Waste Storage Details

Haye Down Waste Transfer Station

Fire Prevention Plan

Waste Type	Location	How it is stored	Bay/Container Dimensions and Volume of Waste Stored (m)	Maximum Storage Time on Site	
Plastics & Metals	WTS Building	Bays	Plastics and Metal Bay 1	2 weeks	
			Max waste storage height		3
			Width of waste bay		6.5
			Length of waste bay		6.3
			Waste storage capacity (volume)		65
			Plastics and Metal Bay 2		4.8
			Max waste storage height		4
			Width of waste bay		6.5
			Waste Storage Capacity		65
Paper/Tetra	WTS Building	Bays	Paper/Tetra Bay 1 & Bay 2	2 weeks	
			Max waste storage height		3
			Width of waste bay		6.5
			Length of waste bay		6.3
			Waste storage capacity (volume)		65
Card	WTS Building	Bays	Card Bay 1	1 week	
			Max waste storage height		3
			Width of waste bay		6.5
			Length of waste bay		6.3
			Waste storage capacity (volume)		65
			Card Bay 2		
			Max waste storage height		3
			Width of waste bay		6.5
			Length of waste bay		6.3
			Waste storage capacity (volume)		65
Glass	External Storage Area	Glass Bay	Length of bay	10	
			Width of bay	12	
			Height of bay	3	
			Waste storage capacity (volume)	180	
Food Waste	External Storage Container	External Container	Length of container	12	
			Width of container	2.5	
			Height of container	2.5	
			Waste storage capacity (volume)	20	
Textiles	Storage Container	Textile Bank	Length of container	12	
			Width of container	2.5	
			Height of container	2.5	
			Waste storage capacity (volume)	20	
Batteries	Storage Container	Battery Storage Container within building or external storage bay with sealed drainage	Length of container	12	
			Width of container	2.5	
			Height of container	2.5	
			Waste storage capacity (tonne)	10	

Haye Down Waste Transfer Station

Fire Prevention Plan
