



# Fire Prevention Plan

Hensel Recycling (UK) Ltd



*Helping clients prosper through compliance*

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## SITE DETAILS

North Storage Depot

Chiddingfold Road

Dunsfold

GU8 4PB

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## OPERATOR DETAILS

Hensel Recycling (UK) Ltd

12 Maydwell Avenue

Slinfold

West Sussex

RH13 0AS

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## DOCUMENT REFERENCE

K245.2~09~007

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## TECHNICAL DRAWINGS

REFERENCE	REV	DATE	TITLE
K245.2~20~001	1	21/12/2023	Permit Boundary
K245.2~20~002	1	21/12/2023	Site Setting Plan (2 km buffer)
K245.2~20~003	2	24/05/2024	Site Layout Plan
K245.2~20~004	1	20/05/2024	FRS Route Plan

## FIGURES

FIGURE	TITLE
Figure 1	Process Flow
Figure 2	Wind Rose Indicating Prevailing Wind Directions

## 1. SCOPE

This Fire Prevention Plan (FPP) is intended as a working procedure document to prevent and limit the causes of fire and to mitigate the impacts of fire should one occur. It applies to everyone on site:

- Site Management; [site manager name]
- Technically Competent Manager (WAMITAB); [TCM name]
- Trained Site Operatives
- Visiting Contractors
- Emergency Services

This document has been prepared using the guidance and template provided by the Environment Agency (EA).

This Fire Prevention Plan relates accompanies the application for a Bespoke Environmental Permit for an Installation in accordance with the Industrial Emissions Directive for the storage and treatment of hazardous waste.

The site is operated by Hensel Recycling (UK) Ltd and is located at the North Storage Depot, Chiddingfold Road, Dunsfold, GU8 4PB.

The site location is shown on the Permit Boundary Plan (K245.2~20~001).

Site is to operate under an installation bespoke permit to cover the treatment of hazardous waste, consisting of manual sorting, separation, mechanical shearing, storage of hazardous catalytic convertors and RCF matting and of surplus uncontaminated ceramic monolith.

Site will also undertake the storage of Printed Circuit Boards (PCBs), for bulking to an economic load before dispatch for onward recovery.

The operations are currently permitted for a facility located in Slinfold under the Environmental Permit EPR/EP3439DW; this bespoke permit application seeks to move operations to a new site, the subject of this application. Operations are not to change in scale or intensity merely move location.

The application has been prepared by WISER Environment Limited on behalf of Hensel Recycling (UK) Limited.

A hard copy of this FPP will be displayed in the office on site and all staff shall be made aware of the measures outlined in the FPP. Required training of the related procedures shall take place and in the case of an emergency the FPP shall be presented to the Fire Rescue Service upon arrival to site.



Sensitive Receptors Plan whilst the permitted boundary is shown on the plan (K245.2~20~002). The site layout plan shows how key areas and processes are arranged (K245.2~20~003).

The waste activities undertaken are undertaken in an area approximately 0.4 ha.

The site lies within a small, commercialised area between the villages of Dunsfold and Chiddingfold, located approx 1.7 km and 2.9 km respectively. The dominant land use is a mixture of agricultural and residential.

Site is accessed via Chiddingfold Road through the gated access.

## 2. TYPES OF COMBUSTIBLE MATERIALS

### 2.1. COMBUSTIBLE WASTE

**Table 1: Combustible Waste**

Waste Stream	EWC
Printed Circuit Boards	16 02 15* / 16 02 16

### 2.2. OTHER COMBUSTIBLE MATERIALS (NON-WASTE)

- Office/Welfare and Lab

No other combustible materials are stored within the operational area or in proximity to storage bays.

### 3. USING THIS FIRE PREVENTION PLAN

#### 3.1. LOCATION

The plan is held in hard copy, and readily available at the site office during operational hours and is available on request to any visitors or contractors.

#### 3.1. WHERE THE PLAN IS KEPT AND HOW STAFF KNOW HOW TO USE IT

A hard copy of the plan shall be readily available at the site office during operational hours and is available on request to visitors and contractors. All staff are to read the FPP as part of their induction and sign a training log.

Any changes to the plan shall be communicated to staff via training.

Visitors and visiting contractors are given a brief overview key fire related measures such as the evacuation muster point and any fire extinguishers in their work area. If their visits extend over considerable length of time or on a regular basis, then they will be encouraged to read the plan in full and sign a training log.

Emergency services will be allowed immediate access to the plan and further hard or digital copies can be made available if required.

#### 3.2. TESTING THE PLAN AND STAFF TRAINING

All employees as part of their site induction are instructed to review this FPP to understand measures to prevent fire occurring, measures to undertake during a fire event and actions following an event. A signed record will be kept of this. Feedback will be sought following this to understand if any further training and guidance is required.

Visitors to site will be accompanied on site but will, during their induction to site, have the relevant measures described within this FPP described to them.

Evacuation drills are conducted annually, unannounced and at a time at the discretion of the Site Management, in accordance with the Fire and Emergency Evacuation Procedure. Drills are timed to ensure that site staff reach the assembly point in targeted timescales. Nominated site personnel will ensure that all areas of site are cleared and all personnel on site accounted for.

As described within this FPP, firefighting will only take place if safe to do so, in very low scale incidents. Any larger scale incidents will result in the FRS being contacted, any scheduled deliveries diverted, and evacuation procedures carried out.

Following the drill any issues with infrastructure, training or adhering to the drill procedure are recorded and corrective actions recorded. Any issues are addressed through site meetings and further training if/when necessary.

### **3.3. ACTIVITIES AT THE SITE**

All site treatment processes are undertaken in accordance with appropriate sector guidance, and are described in detail below and with the flow diagram presented in Figure 1.

#### **3.1. SHEARING OF CATALYTIC CONVERTORS**

The catalytic converters are removed from the rest of the exhaust system by hydraulic shearing (so-called 'top and tailing' a recognised industry standard treatment method), where not already removed by the waste producer. Catalytic converters are subject to the same hydraulic shearing process to open up the metal casing and extract the ceramic monolith (containing the precious metal catalyst) and the metal or RCF matting which provides thermal insulation and physical support to the ceramic monolith. The equipment is allied to a LEV system to extract and collect any dust/fibres released.

Metal casings, ceramic monolith and RCF matting are segregated and stored on the concrete floor in appropriate containers (lined with 400-gauge polyethylene bag) in designated areas within the enclosed building. Only clean, uncontaminated scrap metal is stored outside in a sheeted 40 yard skip.

#### **3.2. MILLING OF CERAMIC MONOLITH**

Ceramic monolith is accepted with and without RCF matting attached. RCF matting is removed by hand and mechanically milled in a ball mill (a recognised industry standard treatment method) within the enclosed building allied to a certified LEV system. Any remaining fragments of RCF are again removed by hand before being bagged (using 400-gauge polyethylene) and stored in the adjacent designated storage area prior to recovery. Dust extracted and collected from LEV systems allied to the shearing and milling processes is added to the bulk bags for each batch/consignment.

#### **3.3. REMOVAL OF REFRACTORY CERAMIC FIBRE (RCF) MATTING**

RCF is now classified as a Category 1B carcinogen and has properties akin to asbestos, this is the primary reason why mixed or unsorted catalytic converters are now classed as hazardous waste.

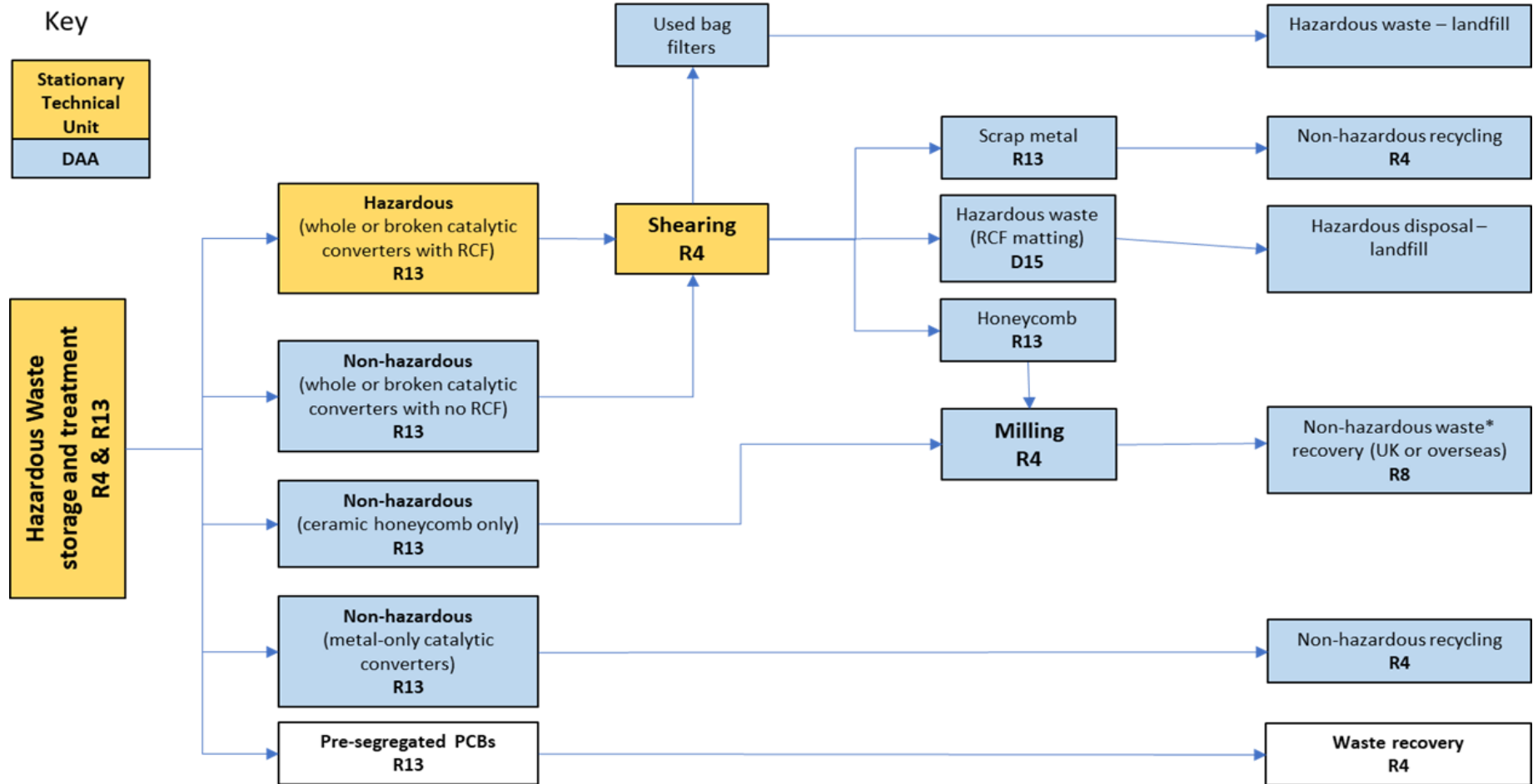
The RCF matting is removed by hand during the shearing and milling processes and stored in labelled, sealed rigid containers (e.g. plastic barrels lined with 400-gauge polyethylene bag) in a designated area adjacent to the ball mill (see Site Layout Plan K245.2~20~003), prior to

disposal to a suitably licensed landfill. All employees potentially exposed to this material are suitably trained and wear the required RPE and/or operate under a LEV system fitted with a HEPA filter.

#### **3.4. PRINTED CIRCUIT BOARDS**

There is no treatment of PCBs on site. PCBs are received already separated and pre-segregated by the waste producer and are stored on site 'as received' prior to dispatch for recycling at suitably permitted facilities.

Figure 1 : Process Flow

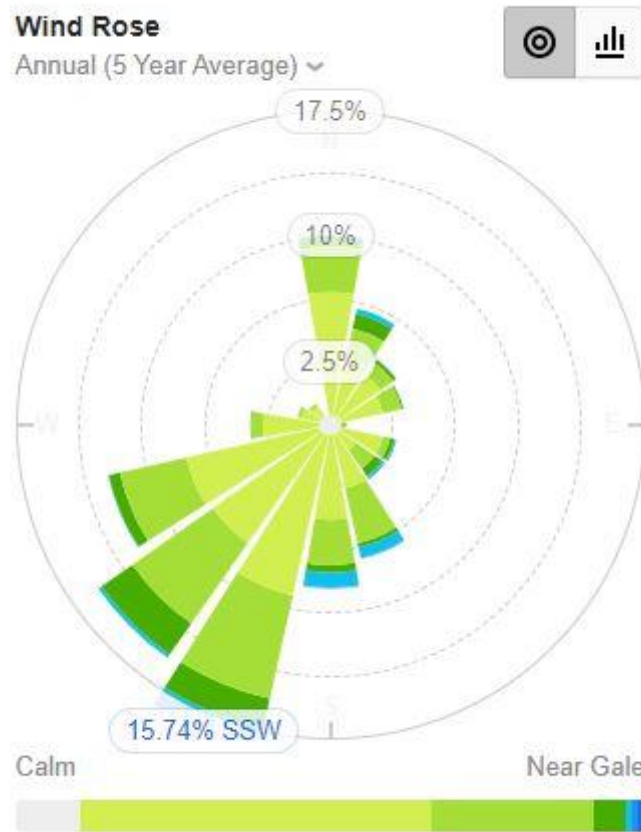


\* Dust collected from LEV and HEPA filters during the process will be subject to a WM3 Assessment by the waste producer

### 4. PLAN OF SENSITIVE RECEPTORS NEAR THE SITE

Sensitive Receptors are shown on the Site Setting Plan [K245.2~20~002]. The Sensitive Receptors displayed are in all directions. The closest observing station where weather data is available is Charlwood. Figure 1 below shows the wind rose for which indicates the prevailing wind is transporting emissions NNE.

**Figure 2. Wind Rose Indicating Prevailing Wind Directions**



## **5. MANAGE COMMON CAUSES OF FIRE**

### **5.1. ARSON**

The threat of arson is limited given the rural location and the neighbouring industrial units, but any risks are controlled by the security measures in place on site. Site benefits from CCTV operating 24/7, 365 days a year which is linked to an alarm system. Palisade fencing and a gated entrance prevent access to the site. All security measures are maintained in accordance with manufacturer's guidance.

### **5.2. PLANT AND EQUIPMENT**

The site is equipped with three shears, a ball mill, folk-lift truck, pallet truck, dust extraction system and a small on site laboratory for initial precious metal classification and quantification.

All equipment is periodically inspected in accordance with manufacturers' guidelines and manuals to ensure the plant and equipment is available for work, when required.

The site manager also maintains a register of all calibrations of measuring and monitoring devices. All calibrations are undertaken by an approved subcontractor.

### **5.3. ELECTRICAL FAULTS INCLUDING DAMAGED OR EXPOSED ELECTRICAL CABLES**

Any electrical faults noticed on site during normal inspections or throughout the working day are isolated. A qualified electrician will be called to resolve the problem. If required, the electric shall be switched off at the fuse box to prevent an ignition risk.

### **5.4. ELECTRICS CERTIFICATION**

All electrics are certified every five years.

### **5.5. ELECTRICAL EQUIPMENT MAINTENANCE ARRANGEMENTS**

Electrics are fully certified by a competent person, every 5 years. All electrical equipment is PAT tested once a year. HSS maintain all hired equipment as part of the contract with the site.

### **5.6. DISCARDED SMOKING MATERIALS**

If any waste is smoking it shall be extinguished using a fire extinguisher or moved to the quarantine area. The site operates a strict no smoking policy in all areas other than the designated zones.

### **5.7. SMOKING ON SITE POLICIES**

Smoking does not take place in operational or storage areas.



### **5.8. HOT WORKS SAFE WORKING PRACTICES**

All hot works is undertaken under a hot works permits and away from storage areas/combustible material.

### **5.9. INDUSTRIAL HEATERS AND USE**

Industrial heaters are not used.

### **5.10. HOT EXHAUSTS AND ENGINE PARTS**

Staff shall remain vigilant when mobile plant and equipment for any signs of combustion and will carry out checks at the start and end of the working day to ensure there is no ignition risk.

When not in use, the mobile plant is stored away from any combustible material and equipped with fire extinguishers.

## 6. FIRE WATCH PROCEDURES

The yard supervisor will conduct start and end of the day checks to the site, fleet and the security of the site. Site staff are trained to remain vigilant and carry out ad-hoc checks throughout the operational day on storage piles. CCTV oversees processing and storage areas.

Site shall operate from:

*08:00 – 17:00 Monday to Friday*

*09:00 – 13:00 Saturday*

*CLOSED Sundays & Bank Holidays*

Site shall be staffed during these periods and remotely monitored via CCTV 24/7, 365 days a year. Integrity of security measures shall be inspected as part of the daily site inspection whilst CCTV, alarm systems and other machinery shall be maintained in accordance with manufacturers specifications.

## 7. IGNITION SOURCES

### 7.1. BATTERIES

Batteries are not accepted within any waste streams.

### 7.2. LEAKS AND SPILLAGES OF OILS AND FUELS

Hydraulic and lubricating oils, will be stored in appropriate containers or removed by the service engineer. The container is provided with a spillage containment tray, to prevent the leakage from the container of any materials that might leak from any of the drums contained within it.

Spill kits will be located strategically to contain any spill.

### 7.3. BUILD-UP OF LOOSE COMBUSTIBLE WASTE, DUST AND FLUFF

All processes on site (treatment and storage of wastes) are carried out within a building under active dust and particulate extraction fitted with HEPA filters. The process equipment is cleaned within batches to remove excess particulates not captured by the extraction system.

Any dust following these operations is extremely unlikely and would be captured via daily inspections by site manager/site staff.

### 7.4. REACTIONS BETWEEN WASTES

Wastes are containerised and therefore reactions between wastes are extremely unlikely. Short storage times and limited quantities stored further control any risk of reaction between wastes.

## 8. WASTE ACCEPTANCE AND DEPOSITED HOT LOADS

### 8.1. PRE-ACCEPTANCE PROCEDURE

Hensel Recycling (UK) Ltd accepts hazardous and non-hazardous wastes from within the UK and other European countries at their site, consisting of waste exhaust systems, catalytic converters (both with and without RCF matting) and surplus uncontaminated ceramic monolith direct from the producer.

Printed Circuit Boards (PCBs) are received already separated and pre-segregated by the waste producer prior to arrival on site.

A pre-acceptance procedure is followed in accordance with S5.06 section 2.1.1.

When a new enquiry is received by Hensel Recycling the waste producer is asked to confirm the type of process where the waste is produced, the expected quantity of waste, and hazards associated with the waste (e.g. HP07 for RCF matting). The enquiry information is allocated a unique reference (contract) code and retained as a record for a minimum of 3 years.

Waste is delivered and stored pending treatment (shearing and milling) in either intermediate bulk bags, metal cages, IBCs, drums, or barrels. These are usually supplied by the Operator.

Upon arrival at Hensel Recycling's site the incoming load is directed to the site office. The containers are visually inspected to confirm the type and quantity of waste is correct to that agreed and specified by the waste producer, and to remove any contaminants, prior to acceptance at the site.

The waste transfer note/consignment note is then completed by Hensel Recycling, dependent on the nature of the waste, stating the date and time of the delivery of the container, details of the delivery vehicle, a description of the waste by type and quantity, EWC, SIC and all other 'duty of care' requirements.

The delivery drivers are then directed to the waste reception unloading area (see Site Layout Plan K245.2~20~003) by a site foreman. The unloading of delivery vehicles is undertaken using a forklift or pallet truck, operated by a suitably qualified person.

**Table 2: Waste Acceptance Procedure**

<b>WASTE ACCEPTANCE PROCEDURE</b>	<b>SPECIFIC STANDARDS</b>
<b>Waste Inspection</b>	<p>Waste upon entrance to site is visually checked to ensure it complies with the permit, is of suitable quality and matches the description provided by the waste producer.</p> <p>If conforming the waste is directed to the reception area to be unloaded. If non-conforming the load is refused, and details noted.</p>
<b>Quarantine Storage and Waste Which are Reject</b>	<p>Quarantined waste will be removed from site as soon as is suitably practicable. Appropriate signage is used to identify quarantined waste. Records on non-conforming waste shall be retained.</p>
<b>Identification of Wastes</b>	<p>All wastes must conform to those EWC codes on the Permit and to the written description provided by the waste producer.</p>

## 9. HOT AND DRY WEATHER

Wastes are processed and stored in small quantities (see Section 11). Wastes are internalised and therefore the impact of hot and dry weather is limited. Wastes stored within skips outside of the building are covered to limit the impact of hot and dry weather. Only clean, uncontaminated scrap metal is kept outside within 40-yard skips; the possibility of combustion is extremely low. Limited storage periods and quantities further control the risk posed by hot and dry weather. CCTV monitors waste storage areas and is supplemented by visual inspections in the form of start and end of day checks as well as ad-hoc monitoring by site staff through the operational day.

### 9.1. PREVENT SELF-COMBUSTION

The core strategy is the FIFO procedure which is operated. Wastes are received, processed, stored and dispatched in a first-in-first-out policy.

## 10. GENERAL SELF-COMBUSTION MEASURES

Self-combustion of wastes is very unlikely owing to the quantities stored, methods of storage and the type of wastes accepted.

The core strategy is First-In-First-Out (FIFO) procedure, waste first accepted is waste first dispatched from site.

Printed Circuit Boards are stored on site until an economic load is developed but no longer than the maximum storage period outlined within the FPP guidance (3 months).

All operational staff will be required to remain vigilant and implement an informal fire watch throughout the day.

Site inspections are carried out routinely each day with a formal 'End of Day' carried out to check for fire risks and signs of self-heating will be immediately reported and dealt with.

Storage of wastes are all undertaken within containers of some form; intermediate bulk bags, metal cages, IBCs, or drums and barrels. A 40-yard skip is utilised for the storage of scrap metals from the process.

In the event of a fire from self-combustion the firefighting techniques detailed in Sections 16 and 18 will be implemented.

## 11. MANAGE STORAGE TIME

Storage piles on site are listed below although not all combustible (only PCBs). The storage of ceramic honeycomb and non-hazardous metal only convertors have a capacity of 40 tonnes in total, not separately. The ratio of this may change but the total capacity will not increase above 40 tonnes. Currently, ceramic honeycomb is an infrequent waste stream and when stored on site will be done so in small quantities.

Both are stored immediately within the processed waste area upon receipt, within racking for dispatch (see Site Layout Plan, K245.2~20~003).

Limits below are intended as maximum quantities at the current demand and processing levels. In reality, day to day loads are likely to be fewer and tonnages decreased.

**Table 3: Storage Times**

WASTE STREAM	EWC	MAX. STORAGE TIME ON SITE	MAX. STORAGE LIMIT ON SITE	COMBUSTIBLE
Hazardous Catalytic Convertors	16 01 21*	15 working days	30 tonnes	X
Printed Circuit Boards (PCBs)	16 02 15*	15 working days	25 tonnes	✓
Non-Hazardous Catalytic Convertors	16 01 22	15 working days	40 tonnes	X
Ceramic Honeycomb	16 01 21*	15 working days	40 tonnes	X
RCF Matting	16 01 21*	15 working days	5 tonnes	X
Scrap Metal	16 01 17	15 working days	30 tonnes	X

### 11.1. METHOD USED TO RECORD AND MANAGE THE STORAGE OF ALL WASTE ON SITE

Storage of waste on site is managed through maintenance of paperwork and supplemented with a spreadsheet using data from receipt of wastes and quarterly returns from the Environment Agency.



## **11.2. STOCK ROTATION POLICY**

Waste will be managed on a First In, First Out (FIFO) procedure, waste first accepted is the waste first removed from site. Given waste is processed and stored in limited quantities the instance that stock will need to be rotated is unlikely.

## **12. MONITOR AND CONTROL TEMPERATURE**

### **12.1. MONITORING TEMPERATURE**

Visual inspections of the waste occur at the start and end of the operational day as well as ad-hoc throughout the day.

### **12.2. CONTROLLING TEMPERATURE**

The FIFO policy is the fundamental procedure in controlling the temperature of wastes stored. Wastes are also stored in limited quantities, within containers with the majority stored internally. CCTV monitors waste storage areas for any signs of combustion.

### **12.3. DEALING WITH HOT WEATHER AND HEATING FROM SUNLIGHT**

FIFO procedure is operated on site, with limited quantities of waste stored and within containers. The only wastes stored externally and therefore at risk of hot weather are scrap metals stored externally within the 40-yard skip. The skip is covered to limit any impact posed by external heating; limited storage durations further limit the risk.

## 13. MANAGE WASTE PILES

### 13.1. STORING WASTE MATERIALS IN THEIR LARGEST FORM

All combustible wastes are stored in their largest form.

### 13.2. MAXIMUM PILE SIZES FOR THE WASTE ON YOUR SITE

**Table 4: Pile Sizes**

WASTE STREAM	HOW IT IS STORED	MAX. LENGTH / M	MAX. WIDTH / M	MAX. HEIGHT / M	VOLUME / M <sup>3</sup>	MAX. TIME IT WILL BE STORED
Hazardous Catalytic Convertors	IBCs/Cages	6.6	6	1	40 m <sup>3</sup>	15 working days
Printed Circuit Boards (PCBs)	IBCs Cages	6	5.5	1	33 m <sup>3</sup>	15 working days
Non-Hazardous Catalytic Convertors	IBCs Cages Boxes Bags	15.4	3.6	1	55.4 m <sup>3</sup>	15 working days
Ceramic Honeycomb	Bulk bags/boxes	11.7	2.7	1	31.6 m <sup>3</sup>	15 working days
RCF Matting	Bags within barrels on pallets	3.2	4.8	1	15.4 m <sup>3</sup>	15 working days
Scrap Metal	40 yard skips	6.1	2.4	2.1	30.8 m <sup>3</sup>	15 working days

Total storage capacity combined for ceramic honeycomb and metal non-hazardous catalytic convertors is unlikely to exceed 40 tonnes although the ratio between the storage may fluctuate. To cater for both waste streams at that maximum figure, this has been designed in Table 4 to reflect a maximum of 40 tonnes for each waste stream, as a worse case scenario.

In all likelihood, the total storage will not reach this maximum during day-to-day operations and therefore dimensions will be significantly decreased from those specified in Table 4. Storage of metal only convertors and ceramic honeycomb may vary between direct storage on impermeable surface within bulk bags/boxes or within the racking positioned on the wall.

### **13.3. WASTE STORED IN CONTAINERS AND TYPES OF CONTAINERS**

All wastes are stored within intermediate bulk bags, metal cages, IBCs, boxes or drums and barrels. A 40-yard skip is utilised for the storage of scrap metals from the process.

### **13.4. ACCESSIBILITY OF CONTAINERS**

All containers are accessible on at least one side.

### **13.5. MOVING CONTAINERS IN A FIRE**

In the event of a fire containers can be manoeuvred using mobile plant on site.

## 14. PREVENT FIRE SPREADING

### 14.1. SEPARATION DISTANCES

The only combustible wastes stored on site are PCBs. There is no requirement to separate from other waste streams. PCBs are also stored within IBCs or cages limiting the requirement for separation distances.

## 15. STORING WASTE IN BAYS

No wastes are stored in bays.

## 16. QUARANTINE AREA

### 16.1.1. QUARANTINE AREA LOCATION AND SIZE

Quarantine area and the associated 6 m separation distance is shown on the Site Layout Plan (K245.2~20~003). In accordance with the guidelines set out by the Environment Agency, the quarantine area can hold up to 50% of the largest waste pile.

Quarantine area covers 28 m<sup>3</sup> which covers more than the required 27.2 m<sup>3</sup> as dictated by the largest waste pile (55.4 m<sup>3</sup>).

### 16.2. HOW TO USE THE QUARANTINE AREA IF THERE IS A FIRE

Quarantine area to be used for both burning and non-burning waste; may also be used as an area for non-conforming, possibly hazardous waste. Given the small quantities of waste processed and stored and the sealed drainage system within the building, it is likely any fire would be extinguished in situ and not utilise the quarantine area for burning waste.

## **17. DETECTING FIRES**

### **17.1. DETECTION SYSTEMS IN USE**

Staff are trained to undertake two scheduled fire checks throughout the operational day (start and end of day).

The primary method of detection is CCTV cameras which remotely monitor both processing and storage areas as well as the external yards. In the event of an intruder a fire the alarm will be raised with the relevant emergency services and nominated site personnel. The CCTV monitors 24/7 and can notify site managers in the event of any fire. During out of hours the first instance will be to contact the FRS to respond to the fire.

All staff will remain vigilant to monitor for the outbreak of any fires within storage piles and raise the alarm if necessary. Given the nature of the wastes handled and the limited quantities this is unlikely.

### **17.2. CERTIFICATION FOR THE SYSTEMS**

CCTV systems are installed and maintained by an approved contractor and conforming with the relevant industry standards.

## 18. SUPPRESSING FIRES

### 18.1. SUPPRESSION SYSTEMS IN USE

Fire extinguishers are placed strategically on site as well as on all mobile plant. These are the primary suppression method on site. Given the limited quantities of waste stored at any one time and the quick turnaround times from receipt, processing and dispatch, extinguishers shall be viable as an initial measure to tackle a fire. All fire extinguishers are maintained in accordance with manufacturers guidance and checked as part of site inspections. If used an extinguisher is replaced following the fire event.

All site personnel involved with the handling and processing of waste are trained in the use of fire extinguishers.

In the event of larger scale fire, the fire hydrants located along Chiddingfold Road would be utilised and would be viable for a longer-term strategy.

### 18.2. CERTIFICATION FOR THE SYSTEMS

All fire extinguishers are maintained in accordance with manufacturer's guidance and conform to the appropriate British Standard. Fire Hydrants are maintained by the local FRS in accordance with manufacturer's guidance and industry good practice.

## 19. FIREFIGHTING TECHNIQUES

### 19.1. INITIAL RESPONSE

The aim of the initial response is to extinguish a fire in its earliest stage before it can take hold, using the in-situ fire extinguishers on site. These are placed in strategic locations throughout the processing and storage areas. Site staff will only undertake this initial response if safe to do so.

### 19.2. TRANSFER AND STORAGE AREA

Upon detection, only if safe, the burning or smouldering material will be extinguished in-situ, by trained staff members using the extinguishers.

If it is not safe to fight the fire in-situ, waste will be isolated from the rest of the pile and moved to the quarantine area for extinguishing.

If it is not safe to tackle the fire, the Fire Service will be called, and material left within the storage areas.

### 19.3. FRS STRATEGIES

In the event of a fire, the Fire Service has one access point to the site (see Site Layout and Plan K18.19~20~004, and the FRS Access Route Plan K18.19~20~005) and may consider the following strategies.

#### Early Intervention

- Apply water or use extinguishers to specific burning areas of small, localised fires.
- Isolate and transfer material to the quarantine area for spreading out and cooling with water.

Fire extinguishers are accessible across the site.

### 19.4. OUT OF HOURS

Should a fire be discovered out of hours via CCTV monitoring the Fire Service shall be notified as well as nominated site personnel. Remote access of cameras is available for site managers, and they will also be notified through this system.



## 20. WATER SUPPLIES

### 20.1. AVAILABLE WATER SUPPLY

Site has access to two public fire hydrants located on Chiddingfold Road (see Site Layout Plan, K245.2~20~003) which would be viable for a long-term firefighting strategy. They are maintained by the local fire service and water company, and in accordance with all relevant standards (BS 750 or equivalent).

### 20.2. SHOW THE CALCULATION FOR YOUR REQUIRED WATER SUPPLY

**Table 5: Water Supply Calculation**

A	B	C	D	
<b>MAXIMUM PILE VOLUME (m<sup>3</sup>)</b>	<b>WATER SUPPLY NEEDED (L/min)</b>	<b>WATER SUPPLY NEEDED OVER 3 HOURS (L)</b>	<b>TOTAL WATER AVAILABLE ON SITE (L)</b>	<b>SUFFICIENT SUPPLY?</b>
See Table 4	Based on 1200l/m <sup>3</sup> - Pile volume (A) x 6.67L	(B x 180 minutes)	From hydrant (See Table 6 below)	Is D greater than C
56	373.52	67,233	720,000	<b>YES</b>

<b>REQUIRED</b>	<b>VOLUME OF WATER REQUIRED</b>	<b>67. m<sup>3</sup></b>
	MAXIMUM PILE SIZE 95 m <sup>3</sup>	<p><b>FROM EA FPP GUIDANCE</b></p> <ul style="list-style-type: none"> <li>• 2000 litres x 180 minutes = 360,000 litres per 300m<sup>3</sup></li> <li>• 360,000 litres/300m<sup>3</sup> = 1,200 litres / m<sup>3</sup> of waste</li> <li>• 1200 litres / 180 minutes = 6.67 litres / m<sup>3</sup> / minute</li> </ul> <p><b>SITE SPECIFIC REQUIREMENT</b></p> <p>Based on largest pile size.</p> <p>56 m<sup>3</sup> x 1200 litres = 67,200 litres / 1000 = 67.2 m<sup>3</sup></p>
	Fire Hydrant	<p><i>Predicted supply (given 100 mm diameter).</i></p> <ul style="list-style-type: none"> <li>• 2000 l/min x 180 minutes = 360,000 litres</li> <li>• 360,000 x 2 (two hydrants) = 720,000 litres</li> <li>• 720,000 litres / 1000 = 720 m<sup>3</sup></li> </ul>
<b>TOTAL AVAILABLE</b>		<b>720 m<sup>3</sup></b>

## 21. MANAGING FIRE WATER

### 21.1. CONTAINING THE RUN-OFF FROM FIRE WATER

The site benefits from a sealed drainage system and an impermeable surface. In the event of a fire the majority of firewater would be contained within the building itself, but in the event, it moved into the yard external to the building, the fall of site would ensure it would be captured by a drainage channel. This channel leads into an interceptor equipped with a shutoff valve which would hold any contaminated water.

Based on the calculations provided in Section 20 to determine firewater requirements, the anticipated volume of water required in accordance with EA FPP guidance is 67,233 litres. Whilst it is likely that a significant proportion of water used to fight the fire will evaporate, containment calculations are presented to account for containment of the total volume.

**Table 6: Fire Water Containment Capacities**

FIRE WATER CONTAINMENT	
Maximum volume of fire water run-off (based on pile sizes)	67.2 m <sup>3</sup>
Surface area available for fire water storage	941 m <sup>2</sup> – just within the building
Total Catchment volume	941 m <sup>2</sup> x 0.2 m = 188.2 m <sup>3</sup>

## **22. DURING AND AFTER AN INCIDENT**

### **22.1. DEALING WITH ISSUES DURING A FIRE**

During a fire, operations shall cease, and all incoming waste is diverted from the site. Site staff will only engage in active firefighting if safe to do so. The Fire Rescue Service shall be contacted and presented with FPP on arrival.

### **22.2. NOTIFYING RESIDENTS AND BUSINESSES**

In the event of smoke emissions becoming an issue the site inform neighbouring residents and businesses through the city council website and their social media channels.

### **22.3. CLEARING AND DECONTAMINATION AFTER A FIRE**

After an incident a contractor shall be contacted to empty the drainage and take any waste off site.

### **22.4. MAKING THE SITE OPERATIONAL AFTER A FIRE**

After an incident the site shall be inspected fully for any signs of damage to infrastructure and where appropriate fixes made. Site will not reopen until this has taken place.



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