

P J FIRE LIMITED
1 MELTHAM LANE
CHESTERFIELD
DERBYSHIRE
S41 7LG

FIRE PREVENTION PLAN

Site Information & Key Contacts List

Site Address:	1. Meltham Lane Chesterfield, Derbyshire S41 7LG		
Site Operator:	P J Fire Limited	National Grid Ref:	SO9821189864
CONTACT	DESCRIPTION	OFFICE HOURS	OUT OF HOURS
Peter Johnston	Operations Manager	01246 245500	
Joshua Pawlak	Operations Manager	01246 245500	07545 951012
<u>Chesterfield Royal Hospital</u> Chesterfield Road, Calow Chesterfield, S44 5BL	General Enquiries	01246 277271	999
	Accident & Emergency (A&E)	111 / 999	999
	NHS Direct	0845 4647	
<u>Chesterfield Police Station</u> Beetwell Street Chesterfield, S40 1QP	Local Police Station	N/A	999 or 101

1 Introduction

1.1 Fire Prevention Objectives

1.1.1 This Fire Prevention Plan has been designed to meet the following 3 objectives:

To minimise the likelihood of a fire happening;

To aim for a fire to be extinguished within 4 hours; and,

To minimise the spread of a fire within the site and to surrounding neighbouring sites.

1.1.2 All site staff and contractors must be aware and understand the contents of the Fire Prevention Plan (FPP) and what they must do during a fire.

1.1.3 This FPP document will be kept in the site office at all times

1.2 General Site Information

The site is situated at 1. Meltham Lane, Chesterfield LS41 7LG. The site is operated as a mixed metals recycling site, with transfer. Wastes received, stored and processed are end of life, hand-held, fire extinguishers only, of various sizes. The units arrive intact and contain either AFFF powder, foam, water or CO₂. No Halon containing units are received or processed. **Only CO₂ extinguishers are discharged or dismantled on site.** Non CO₂ extinguishers are not discharged on site, but are stored intact in closed, 40yds³, Ro Ro containers and transferred out to a specialist contractor for processing. In summary, the operations on site are;

- i) Hand/picking and sorting units by type
(content) discharge of CO₂ units to outside
atmosphere, temporary storage and
transfer of non-CO₂ units to specialist
recycling site.
- ii) iii) Dismantling of empty CO₂ shells into.
component parts and storage of rejected

- metal and plastic/rubber parts for recycling
- by others (rejected AL₂ cases, brass valves
- aluminium and plastic dip tubes,
- rubber/plastic hoses
- iii) Selected, discharged, CO₂ extinguisher
- cases are stored on pallets as end of waste
- items and transferred to re-
- manufacture/refurbishment processing on
- site, within the main building.

With the exception of discharge to atmosphere of the gaseous content of CO₂ extinguishers, all storage and processing of these units and component parts, takes place within the site building. Non-CO₂ filled extinguishers are stored intact in the main yard, not in the building, in 2# closed RoRo containers, pending transfer off site.

- 1.2.2 Associated packaging, plastic, cardboard, pallets are stored on the outside yard; plastic packaging/general wastes in a closed container, in the yard Area 2, plastic and metal components for recycling in bulk bags in the yard Area 12. Pallets are stored in open stack in Area 12. Empty rejected Aluminium extinguisher bodies are stored in a 40yds³ Ro Ro in the yard Area 1. Grit Steel Shot Blast residue LG40, in a closed container in the yard, Area 3.
- 1.2.3 The site receives waste from The Company's own operations/vehicles and provides a deposit and processing facility for third party fire equipment servicing customers.
- 1.2.4 In addition to this document the site is managed and operated in accordance with its own Environmental Management System (EMS). The Company also holds accreditation to ISO9001, and is accredited by the British Standard Institute for Remanufacture of CO₂ Fire Extinguishers. BSI Kitemark KM 523776, Pressure Equipment Directive CE 0038 and MED Ships Wheel 0086/yy.

1.2.5. The layout of the site is shown on Drawing P J Fire-Site Layout-DW04 Final 16 04 2025

1.2.6 Sensitive Receptors.

The site is situated at 1 Meltham Lane Chesterfield, National Grid Ref SK 38777 72569, at the eastern end of a small industrial estate, bounded to the east by a mature tree line beyond which are the River Rother, which runs north to south and, the Chesterfield Canal, which also forms the Trans Pennine Trail, runs parallel to and, approx.' 10metres the east of, the River. To the immediate north and south are other commercial premises and, to the west is the Rother Way trunk road. Chesterfield City Centre is approx.' 1500 metres to the SSW, with a mix of dense commercial and residential properties in between.

Beyond the River and Canal, is a development of residential properties (Tapton Lock Hill), with a 4 track N/S railway (Trans Pennine) adjacent to the east and largely open land beyond. To the West side of Rother Way is dense residential and commercial development, with City Centre beyond

Table 1a. Sensitive Receptors

Sensitive Receptors No.	Receptor	Category	Distance (m)	Direction from Site	Frequency Prevailing Wind Direction (%)
1	River Rother	Surface water/Recreational	Adjacent (30m)	E	5.00
2	Chesterfield Canal	Recreational	Adjacent (40m)	E	5.00
3	Brandon Hire Station	Commercial	40m	W	1.00
4	Arnold Clark Car Sales	Commercial	30m	N	15.0
5	Housing (Muirfield Close)	Residential	30m	NW	5.0

6	Housing (Sandale ave, Stuart Cl et al)	Residential	210m+	W	1.00
6	Euro Business Park	Commercial / Industrial	180m	NNW	25.0
7	Trans Pennine Railway	Transport	75m	E	5.00
8	Rother Way Trunk Road	Transport	140m	W	2.00
9	Premier Inn	Commercial/res idential	275m	NNE	15.00
10	Industrial Units	Workplaces	240m	W	1.00
11	Housing (Sawmill Mews et al)	Residential	250m	SW	2.5
12	Extensive Housing	Residential	580m	W	1.0
13	Topton Park Golf Club	Leisure	1075m	SE	2.00
14	Chesterfield City Centre	Residential/ Comercial Leisure	1500m	WSW	2.00

Management

- 1.3.1 The table below details the staff structure of the site when operating at full capacity. Positions in bold italic print below are the minimum staff requirements when the site is open for the reception of waste and, therefore, shows the minimum number of staff available to tackle a fire on site during operational hours. Only the site manager, machine/plant operators and general operatives will be permitted to tackle fires on-site, if considered by a manager to be safe to do so.

Position	Employees	Responsibilities
Operations Manager	2 <i>(1)</i>	Overseeing and coordinating all activities which take place at the site (WAMITAB registered)
Machine / plant operator	9 <i>(2)</i>	Operating loading plant / site supervision
Administration/Site manager	<i>2(1)</i>	Managing site administration
General operatives	29 <i>(5)</i>	Sorting waste, degassing, stripping CO ₂ units, remanufacture and refurbishment processs.

Health and Safety	1	All H&S matters. IOSH registered
Maintenance Engineer	1	Site/process maintenance
Workshop coordinators	3	Supervisory workshop activities

1.4 Plant and Equipment

- 1.4.1 Table 1b below details the plant/equipment on site in relation to the waste operations on site on the date of this FPP production. Only trained operators will be permitted to drive/operate the plant/equipment listed below.

Table 1b

Item	Number	Function
Counterbalance Forklifts	2	Movement of wastes/materials/products within and outside the building
Reach Truck	1	Narrow access and high reach forklift
Cardboard Baler	1	Baling used cardboard packaging
Vans	5	Delivery of end of life units to site and new goods to customers

Note: The plant/equipment on site may vary and additional equipment may be hired-in to cope with busy periods, larger jobs or jobs with specific requirements.

- 1.4.2 All mobile plant will be stored in the building overnight and when not otherwise in use, at least 6 metres distance from any waste storage and will only be operated by trained personnel.

1.5 Hours of operation

- 1.5.1 The site is operated according to the hours specified below:

Monday to Thursday 06:00 – 22.45 (over 3 shifts)

Friday 06:00 - 16:00

Saturdays Sundays, Bank/Public holidays Closed

1.6 Correspondence with Water Supplier

- 1.6.1 Severn Trent Water was contacted in the preparation of the FPP to obtain details of existing manholes and drains that serve the premises.
- 1.6.2 P J Fire Ltd will seek the views of the Environment Agency (EA) and Derbyshire Fire and Rescue Service (DFRS) should a fire incident occur or any major site, infrastructure or operational changes with regards to their FPP and associated operations on site. This regular correspondence will ensure all measures to prevent, mitigate and contain fires on site are up to date and deemed sufficient by the FRS.

2 Managing common causes of fire

2.1 Details

- 2.1.1 TABLE 1c outlines common causes of fire and outlines specific examples of these sources, the associated risks and any mitigation measures necessary to manage them:

TABLE 1c

Source	Risk	Specific mitigation
Arson or vandalism	Deliberate ignition of wastes by intruder(s) and/or vandalism of site infrastructure, plant and/or machinery which may give rise to malfunction or compromise the integrity of waste storage/containment measures	Site security measures are detailed in Section 2.7.
Mobile plant/ equipment	e.g. spillages of fuel, sparks from machinery or malfunction caused by ineffective maintenance	Mobile plant are all gas LPG fuelled. Mobile plant will be stored in the building, out of hours, a minimum distance of 6m from combustible waste. Each item will be visually inspected prior to and after use for the presence of leaks, dust, heat sources and its suitability. All plant / equipment undergoes a preventative maintenance checklist as shown in Sections 2.5-2.6.
Electrical appliances and cabling	Faulty appliances or damaged/ exposed electrical cables may spark as a result of a power surge	All electrics on site are fully certified by a qualified electrician and with written procedures in place that set out the regular maintenance. Any potential ignition sources from suspected electrical faults will be isolated and an electrician deployed to rectify any faults. Where possible, any stored wastes will be removed from the vicinity of the fault area, if safe to do so.
Discarded smoking materials	Risk of ignition of stored wastes from smoking materials which have not been fully extinguished	The main operational site has a strict no smoking policy.
Gas canisters	10# 18Kg Propane cylinders. Fuel for forklift trucks.	Stored in locked, purpose metal cage, in yard next to bulk CO ₂ storage tank.

Open burning on site or on adjacent sites	Risk of ignition from radiative heat or flaming from open burning on site or on adjacent sites	Open burning is strictly prohibited at the site.
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Source	Risk	Specific mitigation
Overheating of stored waste	Sources of heat may include heating pipes, hot exhausts, light bulbs, space heaters and internal temperature increase in stored wastes	See Section 4 herein which details storage and processing procedures for all wastes on site. No fine particulate or organic wastes are stored on site
Sparks from loading buckets/shovels	Scraping of loading buckets/shovels causing sparks which may ignite stored wastes	No loading shovels on site.
Hot works	No hot works on site	
Industrial heating	Industrial heaters and/or pipework used to heat internal and external areas on site which may, in turn, supply heat to stored wastes increasing the risk of combustion	There are no industrial heaters situated at the site.
Hot exhausts	Potential source of ignition from both primary and residual heat to stored wastes	Mobile plant likely to exhibit hot exhausts will, after shutdown, be kept/parked a minimum of 6m from combustible waste during out-of-hours. Staff will be trained in the shutdown procedures and be made aware of associated risks. The site manager will monitor operational staff/plant; to ensure a 6m distance is maintained.
Loose material build-up around plant/machinery and exhausts	Light waste and ambient particulates with high combustibility settling and building up in key areas in and around plant/machinery and around exhausts	Plant/equipment is monitored daily as per the checklist and areas around plant and equipment are cleared of debris. Shift teams, at end of each shift, clean the area around the equipment they have been working on and ensure the equipment is clear all debris and material. This is shown on Section 2.5.5.

Hot loads	Imported wastes which may contain materials which are above ambient temperature	All loads are inspected in accordance with strict waste acceptance procedures. Wastes accepted are not inherently subject to overheating or self-combustion or contain such materials when in load. If such loads should arrive at site they will be intercepted by site operatives who will refuse the acceptance of the waste. If found following deposit, they will be consigned to the quarantine area to ensure the material does not pose a concern/fire risk to the site. The material will if required be treated to ensure the risk of fire is completely negated.
Overhead power lines	Any overhead power lines on or around the site may ignite in the event of a fire and worsen the effects	There are no overhead powerlines located in close proximity to the site.
Naked flames, space heaters, furnaces, incinerators	Potential source of ignition for both primary and residual heat to stored wastes	No operations on site requiring the use of, or exposure to naked flames. No space heaters, furnaces, incinerators, or sources of naked flames held/used at the site.

2.2 Fuel storage

2.2.1 No petrol or diesel fuel are store on site

i) Compressor oil = 5 litres

2.3 Hot works procedure

2.3.1 There are no hot works on site.

2.4 Smoking policy

2.4 The Company has a no smoking policy across the site

2.5 Plant and equipment maintenance

2.5.1 Any spillages will be cleared immediately by depositing sand or absorbents on the

affected area and removed to the quarantine area or to a dedicated skip to await removal to a suitably permitted facility.

- 2.5.2 External separation distances of at least 6m will be observed between plant and stored material when the site is not staffed. In the building, all plant will be powered-down and completely shut off prior to cessation of operations on any given day.
- 2.5.3 Forklifts and the Reach Truck and other operational vehicles will contain firefighting equipment i.e. fire extinguishers in the cabs.
- 2.5.4. Mufflers will be fitted onto hot exhausts to ensure the source of ignition from plant/equipment is reduced to a minimum.
- 2.5.5 Dust from processing/treatment operations on site can settle at the end of the shift / working day onto hot exhausts and engine parts so a fire-watch will be implemented after cessation of works. Any build-up of dust/fluff will be removed from the equipment by using manual techniques i.e. hose/brush at the end of the working day and, more frequently if required. The checklist will be completed and comments noted in the inspection sheet shown in Appendix II or the operator's own in-house inspection procedural checklists.
- 2.5.6 Site management will undertake or delegate additional preventative maintenance checks on a daily basis to ensure it is mechanically sound and no obvious leaks are present.

2.6 Preventative Maintenance

- 2.6.1 All items of plant and equipment listed in Section 1.4 are subject to preventative maintenance checks to ensure their safe operation and to prevent situations which may give rise to faults or malfunction. A preventative maintenance and fire checklist are shown in Appendix II of this FPP.
- 2.6.2. Plant and equipment on site and all vehicles are subject to manufacturer's recommended

maintenance schedules, to ensure consistency of operation. Site managers will undertake or instruct any additional preventative maintenance checks, for example after breakdown, found to be required, to ensure, plant/equipment is mechanically sound. All actions taken/checks made will be recorded on an inspection sheet.

2.7 Site security

- 2.7.1 The boundary of the site is secured by a mixture of 2m steel, Palisade fencing and mature trees and dense shrubs and River channel, preventing unauthorised access by members of the public
- The site's boundary treatment measures (including type and height of the boundary treatments) are shown on Drawing DW0-4. The site access gates are of steel construction and are lockable to prevent unauthorised vehicular or pedestrian access out-of-hours.
- 2.7.2 The site has a 24 hour, CCTV system and benefits from an intruder alarm system.
- The fire and intruder alarm system alerts out-of-hours staff who initiate appropriate further action to take i.e. visit the site or call the Police / FRS. The CCTV system is to be upgraded to provide 24 hour accessibility by senior staff.
- 2.7.3 The site security measures will be inspected on a daily basis and any defects which impair the effectiveness of the security will be repaired by the end of the working day. If this is not possible, temporary measures will be put in place to ensure no unauthorised access to the site can be gained until the permanent repairs can be carried out.
- 2.7.4. If unauthorised access becomes apparent as a problem at the site the security measures will be reviewed and improvements implemented.

2.8 Electrical faults or damaged/exposed electrical cables

- 2.8.1 All electrics on site are fully certified by a qualified electrician annually and with written procedures in place that set out the regular maintenance. PAT tests are kept in the site office for inspection by the EA / HSE.
- 2.8.2 Potential ignition sources from suspected electrical faults will be isolated and made safe and

qualified electrician will be contacted as soon as possible, to rectify the fault(s). Where possible, staff will, immediately, remove any stored wastes from the vicinity of the fault area or cable traverse if safe to do so.

3 Waste acceptance procedures

- 3.1 Strict waste acceptance procedures are in place at the site and the following details will be recorded for every load deposited at the site which has been extracted from the site's EMS:
- a) The date and time of delivery.
 - b) The name and address of the waste producer.
 - c) The detailed and accurate description of the waste including type, quantity (in tonnes and/or cubic metres) and EWC codes.
 - d) How the waste is contained e.g. loose, container type.
 - e) The carrier's name and address.
 - f) Driver's name, signature and vehicle registration No.
 - g) Signature or initials of person(s) producing/ accepting/ inspecting/ carrying the waste.
 - h) Additional handling details/notes made by the driver after inspection of the load.
 - i) SIC code of the premises which produced the waste (where relevant).
 - j) Waste hierarchy declaration.
 - k) Information on previous treatment of the waste e.g. manual or mechanical.
- 3.2 Any wastes identified, during the incoming waste inspections, which do not conform to site acceptance criteria will either not be accepted or removed and quarantined immediately to await safe removal from site and the EA will be contacted (where necessary), if the non-conforming waste discovered is likely to lead to a breach of permit conditions or a potential risk of combustion.

4 Managing waste storage to prevent self-combustion and spread of fire.

4.1 General

- 4.1.1 All waste stored on site will comply with Section 9.1 of the EA's FPP guidance. The majority of wastes stored on site are, according to EA FPP Guidance Section 4, non-combustible. The majority consists of mixed metals, (steel brass and aluminium not contaminated with oils).

Plastic horns are stored in the building (Area 5), or in the isolation area in the yard (Area 12), in bulk fabric bags, which are not self-combustible in use, but may be combustible, when exposed to a flame source.

General waste including plastic packaging paper and wood and steel shot blast residues are stored in closed skips in the yard (Areas 2,3 and 12).

Rejected, stripped, aluminium, CO₂ extinguisher bodies are stored in a 40 yds³ Ro Ro in the yard (Area 1).

Baled cardboard is stored in the yard (Area 12)

- 4.1.2 Extinguishers which are filled with foam agents have been found to contain PFAS, a Persistent Organic Pollutant (POPS). No foam or water filled extinguishers are discharged or otherwise dismantled on site. They are received and stored on site, before transfer to a specialist recycler for dismantling and destruction of the foam contents by high temperature incineration.

- 4.1.2 Other than scrap pallets, no wastes are stored in open piles.

- 4.1.3 Instructions for site operatives require a 'first in, first out' principle. Incoming waste is sorted on arrival and directed to the appropriate storage, to ensure its processing and removal of residues from site as soon as practicably possible.

TABLE 2 Combustible Wastes/Non-Combustible Wastes Stored.

Waste Type	EW C	How Stored & Storage Duration	Max Quantity Stored	Combustible/N on- Combustible
1. Water, Foam, & Dry Powder filled, pressurised Fire Extinguishers	16 05 05	Stored intact on pallets in 2# 40 yds ³ Ro Ro, closed containers in yard	62m ³	Non-Combustible
2. CO ₂ Extinguishers	16 05 05	Intact CO ₂ extinguishers stored on caged pallets, in yard. Non stored in building	16,500(78tonnes)	Non Combustible
3. Empty rejected aluminium CO ₂ cases	19 12 02	Stored in 1# 40 yds ³ Ro Ro in yard	32m ³	
4. Empty Aluminium cases for potential remanufacture/refurbishment on site.	19 12 02	Stored in 2# shipping containers in yard. Also stored in caged pallets in the building	136m ³ . In yard containers and ca20m ³ in the building	

5. Paper and plastic packaging/general waste	15 01 01	Stored in yard in 1# 8yds ³ closed metal skips with general office waste. Collected for recycling every 7 days. All skips/containers are fully accessible from at least one side and stored at least 6m from other combustible wastes	8yds ³ (6m ³)	Combustible
6. Wooden Pallets	15 01 03	Stored in stockpile in the yard (Area 12). Accessible from at least one side	40 mixed size plus 140 collar boards 18m ³	Combustible
7. Steel shot blast residue	12 01 17	Stored in 1# 8yds ³ skip in external yard	8yds ³ (6m ³)	Non Combustible

8. Cardboard	19 12 01	Stored in bales in yard Area 12	2m ³	Combustible
9. Plastic horns and delivery tubes	19 12 04	In Yard Area 12	5m ³ bulk bags	Combustible
10. Metal & Plastic components for recycling removed from extinguishers	19 12 03 19 12 04	Stored in building in individual (according to content), Euro bins and/or bulk bags against rear wall and in outside yard	Max 2 yds ³ (4.5m ³)	Part Combustible

4.2 Combustible waste pile storage

- 4.2.1 There are no combustible wastes stored in piles on site. All combustible wastes are stored, as set out and, in the maximum quantities given in Table 2 above.
- 4.2.2. Combustible wastes which are not stored in metal containers, are stored in the yard at least 6 metres distant from other combustible materials. The largest individual pile of uncontained combustible is wooden pallets at maximum of 18m³.

4.3 Fire walls and bays

- 4.3.1 All concrete fire walls which are used on site have been designed to A1 Class and will provide a permanent thermal barrier. The firewalls on site will:
- a) resist fire (both radiated heat and naked flame) and,
 - b) have a fire resistance period of at least 120 minutes to allow waste to be isolated and to enable a fire to be extinguished within 4 hours.
- 4.3.2. The walls are constructed in way to ensure they are adequately sealed to prevent the spread of fire.
- 4.3.3 For combustible wastes stored in the open yard, where a firewall is not used between waste, the site boundary or buildings, no combustible or flammable material will be stored within 6m of the waste and, combustible wastes will be stored in sealed, metal, containers and/or stored in the walled isolation bay in the yard (Area 12).

4.4 Site inspection programme

- 4.4.1 A daily fire watch, using the Fire Checklist, will be used to monitor the site at set intervals during the working day, to detect signs of a fire from hot exhausts or engines and cleaning up of loose combustible waste. The combustible wastes stored on site are not in fine particulate form and the risk of internal heating is negligible, but checks will be performed as part of the daily fire watch checks. The intervals may vary due to site operations but there will be at least one at the start and end of each working shift. Operational staff may be given a dedicated section of the Fire Checklist to ensure they can monitor at all times throughout the working day. It is estimated the fire watch will take a minimum of 15 minutes but start and end times will be completed using the fire checklist.
- 4.4.2. The above daily checks, will keep the levels of dust, fibre, paper and other loose combustible materials, which could aid in the acceleration of a fire, on site surfaces to a minimum and ensure all containment of wastes on site are functioning effectively.

4.5 Staff training

- 4.5.1 The site managers and TCM will be familiarised with the procedures within their responsibilities under, this plan. They will undertake training of all operational staff and be responsible for signing off staff training records.

- 4.5.2. Each relevant staff member will undergo training from a site manager/TCM, using the forms shown in Appendix II of this FPP. New members of operational staff will receive induction training at the commencement of employment which will include the fire prevention measures herein.

As a minimum, each relevant member of staff will be assessed from the date of approval of this FPP and then every 3-6 months afterwards.

If found necessary, a third party fire risk assessor will be contracted to provide reinforcement training of operational staff..

- 4.5.3. Refresher training by the TCM/site manager, using tool-box talks, will also be provided, to ensure site staff are informed of any changes to any of the site procedures and/or management documentation, which will be subject to regular review.

- 4.5.4. A full test (drill) of the procedures in this document and deployment of the fire water containment boom(s), will be carried out with all staff present, at a minimum frequency of twice per year to field test the plan procedures.

All staff will be instructed in the correct deployment of the containment boom(s) and drain protection covers during the formal drills.

The first formal staff drill, using these procedures, will take place within one month of the permit issue and agreement of this document with the EA. The outcome and any follow up training for staff will be documented in the site diary and relevant forms in the EMS. The Fire Checklist will also be used during the drill. Details of an in-house inspection sheet for a fire drill are shown in Appendix II.

The fire drill will form, inter alia, the core training for deployment of the retention boom(s) in the containment bay area and activation of the Penstock valve. The boom and drainage mats are stored at the SE end of the second building adjacent to Area 12. All employees will be made

aware of and shown their position and given details of their purpose and use. The boom drainage mats and Penstock Valve will be deployed as a demonstration reinforced by individual employees being required to locate and deploy the equipment themselves. The aim will be for each employee including senior staff, to complete this exercise in <5minutes. This training, as all other matters will be reinforced by regular toolbox talks. This exercise will be repeated at each fire drill and, by new employees, at induction.

5 Quarantine area

5.1 General

- 5.1.1 Waste piles stored in the quarantine area are a mixture of non-combustible and combustible
- 5.1.2. The quarantine area shown on Drawing No. DW04 measures 63m² and has a volume of 113.4m³ within its 3 sides. The open side will be protected by a minimum 150mm land boom in the event of fire.
- 5.1.3. Wastes will only be moved to the quarantine area if safe to do so following recommendation of the DFRS.

6 Detecting fires & response procedures

6.1 Fire detection procedure (manual)

- 6.1.1 If a fire is detected or suspected by a member of staff, during operational hours, it must be immediately reported to the site manager, TCM or fire marshal. The relevant person will then conduct the following procedure:
- a) Raise the fire alarm (if not already done by another staff member).
 - b) Initiate evacuation of staff and visitors on site to the meeting point and instruct delegated person(s) to conduct a roll-call to ensure all site users are accounted for.
 - c) Alert emergency services.
 - d) Assess the intensity and scale of the fire and make a judgment as to whether the fire can be tackled by site staff using the hose and/or or fire extinguishers.
 - e) If viable and safe, instruct necessary site staff to commence fire control.

6.2 Out of hours fire detection (automated)

6.2.1 **Site Security and CCTV system:**

Details of the site's security infrastructure and 24 hour CCTV and intruder alarm system are outlined in Section 2.7 which are considered ample to prevent arson and adequate to inform the operator of an incident.

- 6.2.2. During times when the site is not operational between the hours of 15:30 - 07:00, there are 7 CCTV cameras, situated throughout the site, which are to be fitted with 24 hr access by managers, an overnight security watchman will not be required.
- 6.2.3. The fire and intruder alarms have 24hr external monitoring. Senior managers/directors are alerted in the event of an alarm trigger and are;
- Trained in using of basic fire-fighting equipment i.e. hose reels, extinguishers and,
 - In fire water containment procedures,
 - Have all contacts for the Derbyshire Fire and Rescue Service (DFRS), out-of-hours staff and adjacent sites who would be contacted in the event of a fire.

6.3 Fire response procedures

6.3.1 Further to the above measures, the following procedure will apply in all incidents of fire, detected during operational or out-of-hours:

- a) Call the Fire Response Service (FRS) immediately using 999.
- b) If not previously informed, senior management of the company will be informed at this point. Of the details, nature and extent of the fire and whether assistance from other staff is required
- b) Ensure access routes are clear.
- c) As soon as possible, inform all neighbouring premises likely to be affected.
- d) Ensure operators of appropriate machinery are standing by in a safe location to help create fire breaks, under the direction of the FRS when they arrive. Implement pollution control measures only when safe to do so.
- e) Ensure relevant site staff are standing by in a safe location to deploy surface water protection equipment under the direction of the FRS when they arrive.
- f) If safe to do so, the TCM or a senior member of staff will inspect the location of the fire, to identify immediate risks to surrounding premises and the FRS.
- g) As soon as possible, inform all neighbouring premises likely to be affected
- h) Call the EA's Emergency Contact Number..
- i) The site manager / TCM will identify themselves to the fire service as soon as they arrive on site and will provide them with a copy of this document and update them with relevant information that will assist them in dealing with a fire more effectively.

6.3.2. In the event of the site manager or TCM being absent from the site, a Director will ensure a suitable person is deployed who is familiar with the site and the procedures herein.

6.4 Notifying nearby properties

6.4.1 The nearest receptors within 100m of the site i.e. other users of the Industrial Estate will

be informed of the fire by employees of the operator and the DFRS, Local Council and EA will be contacted to ensure further properties are informed should the fire become problematic i.e. local business, houses.

7 Suppressing fires & firefighting techniques

7.1 Site-wide suppression (including covered area)

7.1.1 There are 22 fire extinguishers located around the site which can be deployed in the event of an incident to tackle the fire or for fire suppression in the intervening time between discovery of the fire and the arrival of the DFRS.

7.1. There is a 120mm fire hydrant located in the site yard, in front of the building shown as 2 Meltham Lane, on the drawing DW04 and indicated by a Yellow H, within the fenced area of the site and the permit boundary. The hydrant is serviced by DFRS.

7.2 Access for emergency services

5

7.2.1 The nearest fire station is Chesterfield Fire Station, situated 3.5Km to the SSW of the site and the Derbyshire Fire and Rescue Service (DFRS) could be at the site and begin fighting a fire within 8 minutes of a call.

7.2.2. The site has direct access from into the site from Meltham Lane and the width of the surrounding roads and the gateway provide sufficient access onto the site for the DFRS.

7.2.3 Access routes for emergency services around the site for firefighting are clearly shown in on Drawing No. DW-04

8 Water supplies

8.1 On-site water supply

8.1.1 The site has access to 1 no. hose reels which connect to the mains water supply which can be used for dousing any hot loads or for any small fires which could break out. The Reel is disconnected at all times unless it is required for use.

8.2 Off-site water supply / fire hydrants

8.2.1. A 120mm mains Fire Hydrant is situated in the site yard and is serviced by DFRS (last observed service visit ca Oct 2024). There is also the branch of the Chesterfield Canal situated < 40m from

the site along the eastern boundary of the site and is accessible as an unlimited fire-fighting supply via fire service hoses and pumps. The Canal runs, in an elevated channel, N – S, along the eastern boundary of the site. The canal is at an elevated level at a higher level (ca 0.5m-1m) higher than the site yard level and which secures the canal against fire water run-off.

8.2.2. The largest individual volumes of combustible waste stored on site are;

- General waste stored, in a single container, in the yard, at a volume of 5m³ and,
- Pallets stacked in the open in the outside yard (Area 12) at a maximum volume of 18m³ along with a maximum 7m³ of plastic wastes.

8.2.3 According to EA Guidance Section 16, 300m³ of combustible waste requires a water supply of 2000 litres per minute for a minimum of 3 hours, to extinguish it .

25m³ will therefore, require a minimum of 167 litres per minute to extinguish in the same time and,

A 5m³ container, because it is a closed container will require 5m³ of water (the volume of the container, to extinguish it in a time of c33 minutes a 167 litres per minute.

FRS fire engines are capable of delivering 230-250 litres per minute from a standard 42mm hose and, 1300- 2000 litres per minute from a standard 70mm hose.

On that basis the average 240 litres per minute from a FRS 42mm hose would extinguish

the 25m³ of combustible waste in Area 12 in 18-20minutes and the 5m³ general waste container, in <5 minutes, but the general waste is a closed container and the remaining free airspace, around the combustible materials, would be filled with water in less than 10 minutes, from the same hose. Fire water would be contained within that container.

8.2.4. The largest volume of combustible waste in the building is the plastic components removed from the extinguishers, for recycling. These are stored in either a plastic crate/Euro Bin of approx' 1m³ capacity or, woven bags of similar capacity, against the LH side &/or rear wall of the building. A maximum of two containers are stored in the building with a combined maximum capacity of 2m³ (2000 litres). The time required to extinguish this fire source, delivered by a 42mm FRS hose would be ca8 minutes which, at a delivery rate of 240 litres/min, would produce a maximum of 2000 litres of fire water. The building has a total floor area of 1485m² with a waste handling floor area of 594m². The 2000 litres of fire water will be retained in the waste area of the building, producing water to a depth of <3.5mm and, over the whole floor area of 1485m², a depth of <1.5mm. Any risk of fire water leaving the building, in such a case, is insignificant.

The building has a total floor area of 1485m². A retention boom across the door will have a minimum depth of 100mm, which will give a water retention capability, in the building of 148.7m³ or 148,700 litres, estimated at 100,000 litres after deduction for obstructed floor space, by building content.

- 8.2.5 Area 12, at maximum capacity of combustible wastes, has 18m³ of wooden pallets, 5# bags of plastic horns and pipes (5m³) and, 2m³ of cardboard bales = 25m³ maximum. Maximum storage time in the bay is 1 week. The bay measures 7mx5mx1.8m and is three sided concrete panels sited on 125mm concrete curbs.

The 25m³ of combustible waste in the bay, at maximum capacity would be extinguished in ca 104 minutes, by a FRS 42mm hose, at a rate of 240litres/min generating 25,000 litres of water. Retention of this volume using a 120mm deep land boom, would require a retention area of 210m² to be formed with booms, as an extension to the front of the bay.

8.3 Additional / alternative suppression measures

- 8.3.1 There are 17 fire extinguishers and 1# hose reel located on the site which can be deployed in the event of a smaller fire incident for fire suppression.

9 Managing fire water

9.1 Drainage

- 9.1.1 Dammit® emergency clay drain mats to be provided over drains in the event of a fire. Site drainage is shown on Drawing Ref DW-03

- 9.1.2 Taking the figures from para 8.2.5 above, for the open yard area, to extinguish the 25m³ of open combustible waste, in Area 12, using a standard FRS 42mm hose, would generate 25000 litres of water. In practice, the time taken to extinguish such a fire would, in all likelihood, take somewhat less time. However, taking worst case of 25000 litres of fire water generated in the open yard in the immediate vicinity of AREA 12, with a total area of 560m² would leave water to an average depth of 45mms. However, an area of 210m², using 120mm land booms, is sufficient to contain the 25000 litres.

9.2 Removal of fire water

- 9.2.1 Upon successfully extinguishing a fire, all standing fire water would be pumped using a hired-in vacuum tanker and deposited to a suitably permitted site for treatment. No firewater would be discharged into sewers or watercourses.
- 9.2.2 Land booms to be provided to contain fire water on the floor surface of the building, prevent spillage past roller shutters and fire escape doors and to Area 12 to contain firewater in the yard area and bay.

10 After an incident

10.1 Contingency Planning

- 10.1.1 In the event of a fire the site will cease accepting waste. All customers who wish to deliver

wastes during a fire will be notified by site admin staff and any who arrive without prior notification will be turned away. If urgent, deliveries will be directed to an alternative waste facility.

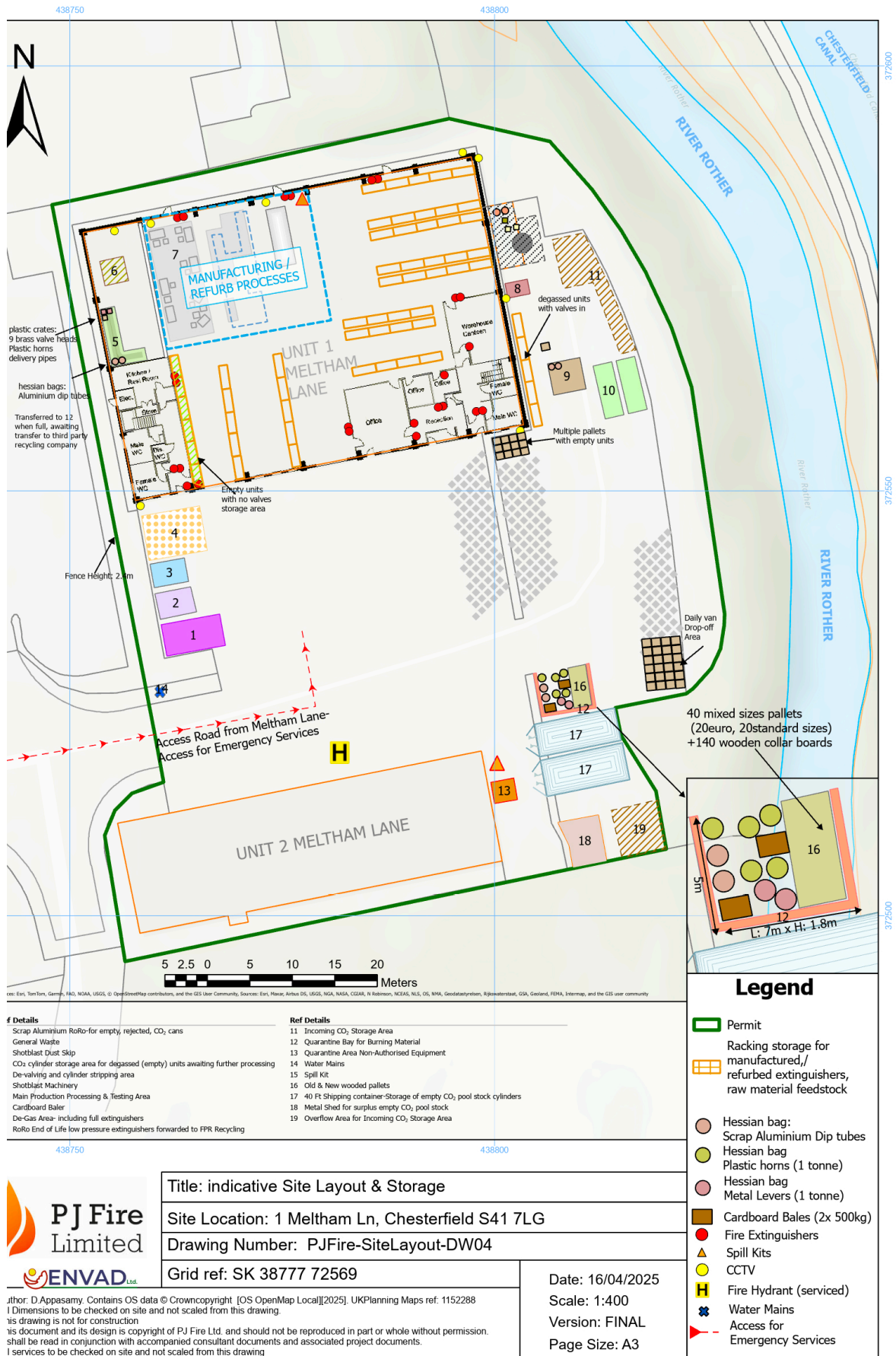
- 10.1.2. No waste will be accepted on site until the post-fire site recovery procedures outlined in the section below have been fully implemented and the site is authorised to re-open for trade and waste acceptance.

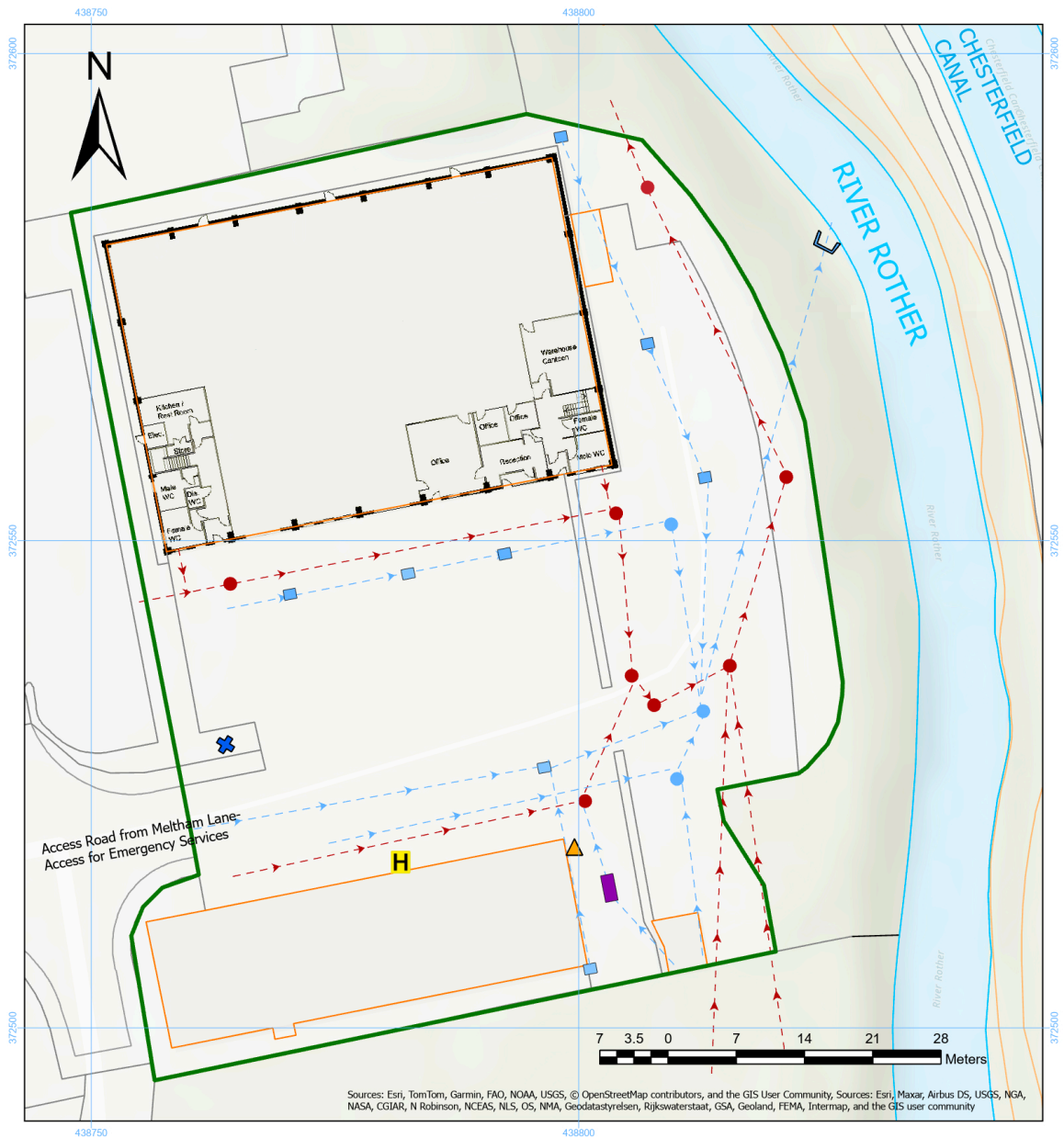
10.2 Post fire site recovery

- 10.2.1 If a recovery procedure is required, the operator will instigate the following;
- a) Remove damaged material to a suitable permitted facility.
 - b) Instruct engineers to carry out repairs on any plant, vehicles and/or infrastructure.
 - c) Assist the DFRS with the fire investigation and where necessary engage the advice from a professional fire consultant.
 - d) Review the FPP and EMS procedures and amend to address outcomes of the reviews,
 - e) Review training requirements for staff.
 - f) Assess whether further preventative measure could be implemented.
 - g) Ensure all fire equipment, where used, is replenished.
 - h) Contain fire water until removed to a permitted facility for disposal.
 - i) Maintain drainage protection measures until risk of emission to the environment is mitigated and/or the water is safely removed.

Appendix I

Drawings





Title: Site Drainage	
Site Location: 1 Meltham Ln, Chesterfield S41 7LG	
Scale: 1:400	Page Size: A3
Date: 16/04/2025	Version: FINAL
Drawing Number: PJFire-Site Drainage-DW03	
Grid ref: SK 38777 72569	



Author: D.Appasamy. Contains OS data © Crowncopyright [OS OpenMap Local][2024]. UKPlanning Maps ref: 1152288
All Dimensions to be checked on site and not scaled from this drawing.
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It shall be read in conjunction with accompanied consultant documents and associated project documents.
All services to be checked on site and not scaled from this drawing

Legend

- Permit Boundary
- Interceptor
- Drain Grate- surface runoff
- Surface runoff Manhole
- Foul Manhole
- Fire Hydrant (serviced)
- Water Mains
- Surface water drainage
- Foul drainage
- Spill Kit: Booms, Drain covers & absorbent pads
- Culvert- surface runoff



Appendix II

Record Keeping

Forms

Appendix II

P J FIRE LTD - PREVENTATIVE MAINTENANCE

CHECKED BY		POSITION				
DATE		DATE OF LAST CHECKLIST				
	EQUIPMENT ITEM					
OFFICIAL MAINTENANCE CHECK REQUIRED (Y/N)						
IF NO, DATE OF LAST CHECK						
IF YES, DATE OF NEXT CHECK						
IS ITEM IN CORRECT WORKING ORDER						
LEAKAGES ON MOBILE PLANT / VEHICLES						
IF NO, WHAT REPAIRS ARE REQUIRED (USE SEPARATE SHEET IF REQUIRED)						
WERE REPAIRS DETAILED ON THE LAST CHECKLIST						

P J FIRE LTD - EMPLOYEE TRAINING NEEDS ASSESSMENT / REVIEW

[illegible]