



Fire Prevention Plan



Helping clients prosper through compliance

SITE DETAILS

Murfitts Industries Limited,
One Portbury,
Bradley Road,
Portbury,
BS20 7NZ

OPERATOR DETAILS

Murfitts Industries Limited,
Avenue One,
Letchworth Garden City,
SG6 2HU

PERMIT REFERENCE

EPR/QP3424ST/P001

DOCUMENT REFERENCE

K18.17~09~004

ISSUE DATE

22/12/2023



Wiser Environment Ltd, Suite 11 Manor Mews, Bridge Street, St Ives, PE27 5UW
94 Xuan Thuy, Thao Dien Ward, District 2, Ho Chi Minh City, 713385
+44 1480 462 232 | www.wiserenvironment.co.uk | info@wisergroup.co.uk

DOCUMENT CONTROL

DOCUMENT TITLE:	Fire Prevention Plan
REFERENCE:	K18.17~09~004
CLIENT:	Murfitts Industries Limited
REPORTED BY:	Wiser Environment Limited
STATUS:	FINAL
ISSUE:	1
ISSUE DATE:	22/12/2023
AUTHOR:	Wiser Environment Limited
APPROVED BY:	Magda Jackson (MIL)

REVISION HISTORY

REFERENCE	DATE	ISSUE:	REVISION SUMMARY
K18.17~09~004	18/10/2023	D1	For internal review.
K18.17~09~004	22/12/2023	1	For submission

QUALITY CONTROL

ACTION	DATE	NAME
Prepared	12/10/2023	Kurtis Kenny
Checked	21/12/2023	Charles Thomas
Approved	22/12/2023	Charles Thomas

CONTENTS

1. SCOPE	8
2. TYPES OF COMBUSTIBLE MATERIALS	11
2.1. Combustible waste.....	11
2.2. Other combustible materials (non-waste).....	11
3. USING THIS FIRE PREVENTION PLAN	12
3.1. Where the plan is kept and how staff know how to use it	12
3.2. Testing the plan and staff training	12
3.3. Activities at the site	12
4. PLAN OF SENSITIVE RECEPTORS NEAR THE SITE	13
4.1. Prevailing wind direction	13
5. MANAGE COMMON CAUSES OF FIRE	14
5.1. Arson	14
5.2. Plant and equipment	14
5.3. Electrical faults including damaged or exposed electrical cables.....	14
5.4. No smoking on site	15
5.5. Hot works safe working practices.....	15
5.6. Industrial heaters and use.....	15
5.7. Hot exhausts and engine parts.....	15
6. FIRE WATCH PROCEDURES	16
7. IGNITION SOURCES	17
7.1. Batteries	17
7.2. Leaks and spillages of oils and fuels.....	17
7.3. Build-up of loose combustible waste, dust and fluff.....	17
7.4. Reactions between wastes	17
8. WASTE ACCEPTANCE AND DEPOSITED HOT LOADS	18
9. HOT AND DRY WEATHER	19
10. GENERAL SELF-COMBUSTION MEASURES	19
11. MANAGE STORAGE TIME	20
11.1. Method used to record and manage the storage of all waste on site	20
11.2. Stock rotation policy	20
12. MONITOR AND CONTROL TEMPERATURE	21

12.1.	Monitoring & controlling temperature	21
12.2.	Dealing with hot weather and heating from sunlight.....	21
13.	MANAGE WASTE PILES	22
13.1.	Storing waste materials in their largest form	22
13.2.	Maximum pile sizes for the waste on your site.....	22
13.3.	Waste stored in containers and types of containers.....	22
13.4.	Accessibility of containers	22
13.5.	Moving Containers in a Fire.....	22
14.	PREVENT FIRE SPREADING	23
14.1.	Separation distances	23
14.2.	Fire walls construction standards	23
15.	STORING WASTE IN BAYS.....	24
16.	QUARANTINE AREA	24
16.1.	Quarantine area location and size	24
16.2.	How to use the quarantine area if there is a fire.....	24
17.	DETECTING FIRES	25
17.1.	Detection systems in use.....	25
18.	SUPPRESSING FIRES	25
18.1.	Suppression systems in use	25
19.	FIREFIGHTING TECHNIQUES	26
19.1.	Initial response	26
19.2.	Transfer and storage area	26
19.3.	Fire and Rescue Service Strategies	26
20.	WATER SUPPLIES.....	27
20.1.	Available Water Supply	27
20.2.	Water supply calculation.....	27
21.	MANAGING FIRE WATER	29
21.1.	Containing the Run-Off from Fire Water	29
22.	DURING AND AFTER AN INCIDENT	30
22.1.	Dealing with issues during a fire	30
22.2.	Notifying residents and businesses	30
22.3.	Clearing and decontamination after a fire	30
22.4.	Making the site operational after a fire.....	30

APPENDICIES

APPENDIX	TITLE	DATE
Appendix A	Weekly Safety Checklist	
Appendix B	Fire and Emergency Evacuation Procedure	
Appendix C	Hot Work Permit	
Appendix D	Site Event Log	

DRAWINGS

REFERENCE	REV	DATE	TITLE
K18.17~20~001	F	22/12/2023	Permit Boundary
K18.17~20~002	F	22/12/2023	Sensitive Receptors Plan (1km buffer)
K18.17~20~003	F	22/12/2023	Site Setting Plan
K18.17~20~004	F	22/12/2023	Site Layout Plan
K18.17~20~005	F	22/12/2023	FRS Access Route Plan
K18.17~20~006	F	22/12/2023	Drainage Plan

TABLES

TABLE	TITLE
Table 1	Combustible Waste
Table 2	Waste Acceptance Procedure
Table 3	Storage Times
Table 4	Pile Sizes
Table 5	Water Supply Calculations
Table 6	Fire Water Containment Calculations

FIGURES

FIGURE	TITLE
Figure 1	Sheepway Windrose

1. SCOPE

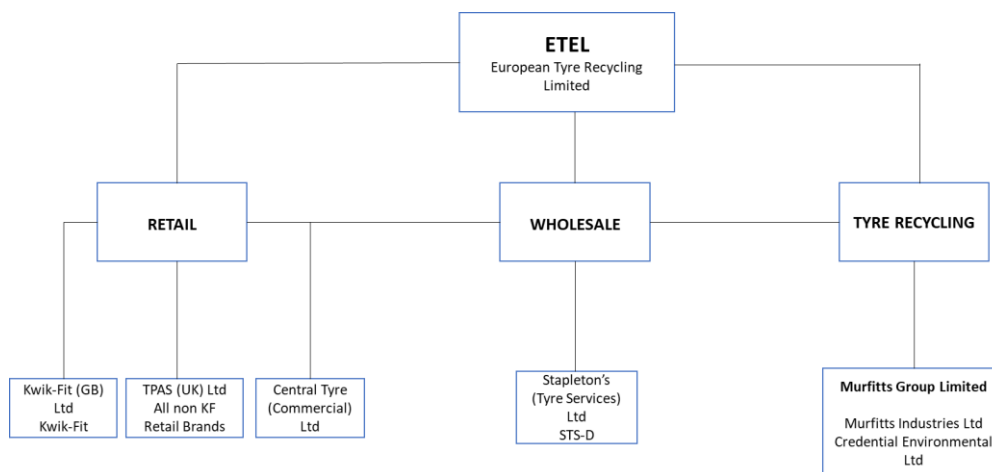
This Fire Prevention Plan (FPP) is intended as a working procedure document to prevent and limit the causes of fire, and to mitigate the impacts of fire should one occur. It applies to everyone on site:

- Site Management;
- Technically Competent Manager;
- Trained Site Operatives
- Visiting Contractors
- Emergency Services

This document has been prepared using the guidance and template provided by the Environment Agency (EA)¹ (as updated 11th January 2021).

This Fire Prevention Plan (FPP) relates to a bespoke Environmental Permit application for Murfitts Industries Limited (MIL) site in Portbury.

The Operator, Murfitts Industries Limited (MIL), is part of the European Tyre Enterprise Ltd (ETEL) Group who are an international tyre and automotive service, maintenance and repair business group that operate multiple retail brands including Kwik-Fit and Stapleton's Tyre Services (STS).



¹ <https://www.gov.uk/government/publications/fire-prevention-plans-environmental-permits/fire-prevention-plans-environmental-permits#fire-prevention-objectives>

This FPP supports the environmental permit issued to MIL which covers the physical treatment of non-hazardous waste (end of life tyres). A hard copy of this FPP will be available 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.

This site is to operate as part of a nationwide network of hubs accepting EoLT for storage and/or treatment (baling) before onward transfer to other permitted facilities where EoLT are processed and shredded. This strategic operation is ancillary to the main activity of distribution of new tyres to the retail sector in the UK, and allows for a close-loop system for the tyre industry.

The Environmental Permit covers the management of EoL tyres which are collected on takeback following delivery of new tyres to retail outlets that are not part of the ETEL Group.

EoL tyres are also collected from Group retail outlets, these are handled through the same secure supply chain, and on-site process but are done so under a Non Waste Framework Directive exemption.

Other hubs within the network, as they meet the appropriate location criteria, are to be operated in accordance with Standard Rules Environmental Permit (SREP) *SR2021 No 13: storage and mechanical treatment of end-of-life tyres for recovery*. The activities at the hubs are limited to either storage and onward transfer, or storage and baling prior to onward transfer, so are inherently low risk. Volumes of EoL tyres stored on site are less than 100 tonnes, and given the secure supply chain and logistics control, typically remain on site no longer than 48 hours under normal operational conditions.

The Portbury site undertakes the same activities (storage, manual sorting, and baling) as the other hubs but can't benefit from a SREP due to the fact that a Local Wildlife Sites (LWS) (*Drove Rhyne and adjacent fields*) is within 50m of the site.

The processes that will be carried out at the Portbury facility are the following:

- The EoLT are delivered to the site, some to the tyre bund and walking floor trailer for **storage** and onward dispatch to processing sites within the ETEL group.
- Some EoLT will be **baled** before transfer to processing facilities.

- the baled EoLT are loaded into a waiting traction trailer, for onward dispatch to a permitted MIL processing facility.

The proposed annual throughput of the site is 15,000 tonnes, with no more than 100 tonnes held on site at any one time.

All deliveries to the site are planned:

- Under normal operating conditions all EoLT received will be processed directly into the waiting trailer and dispatched by the end of the working day.
- Under abnormal conditions, e.g., plant breakdown or organised shutdown, deliveries will be diverted to the Murfitts Industries Limited national network of permitted facilities.

The EoLT received at the site are contained either within the delivery vehicle, in the tyre bund or walking floor trailer (loose tyres), held within the processing equipment, or a designated storage bay (baled tyres).

The facility is co-located with a strategic Stapleton's tyre distribution centre and provides a closed loop, taking back EoLT received on vehicles that have delivered new tyres, from the distribution centre to retail centres across the region.

The site is located at One Portbury, Bradley Road, Portbury, BS20 7NZ with the site location shown on drawing K18.17~20~002 Sensitive Receptor Plan (1km Buffer). The National Grid Reference for the site is ST 50545 76070. The site is approximately 0.5 km N of the M5; accessible via Bradley Road

The permitted boundary covers approximately 0.35 ha, with the storage and baling process occurring on a limited part of this area. The site layout plans show how key areas and processes are arranged (Site Layout Plan K18.17~20~004).

The site lies in the Royal Portbury Dock Industrial Area north of Portbury. For more detail on the surrounding land use please see the Sensitive Receptors Plan and Site Setting Plan (K18.17~20~002 & K18.17~20~003).

2. TYPES OF COMBUSTIBLE MATERIALS

2.1. Combustible waste

The site receives a single stream of source segregated, non-hazardous waste i.e. end of life tyres.

Table 1: Combustible Waste

Waste Stream	EWC
End of Life (EoL) tyres	16 01 03

2.2. Other combustible materials (non-waste)

No other combustible material will be stored within the operational area, or in proximity to the storage bays.

3. USING THIS FIRE PREVENTION PLAN

3.1. Where the plan is kept and how staff know how to use it

The plan is held in hard copy (as well as electronically), and readily available on site during operational hours and is available on request to any visitors or 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 (details can be found in Appendix B). 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

Evacuation drills are conducted six monthly at the discretion of the Site Management in accordance with the Fire and Emergency Evacuation Procedure (Appendix B). Any issues are addressed through site meetings and further training if/when necessary.

3.3. Activities at the site

This site is to operate as part of a nationwide network of 'hubs', an ancillary operation, accepting EoLT's for storage and/or treatment (baling) before onward transfer to other permitted facilities where EoLT's are further processed. The hubs will be operated by ETEL Group staff.

MIL operate a number of EoLT tyre recycling facilities across the UK, processing tyre into various size grades for reuse as sports pitch infill, artificial turf infill, playground rubber mulch, carpet underlay, road surfaces, and other uses.

4. PLAN OF SENSITIVE RECEPTORS NEAR THE SITE

Sensitive Receptors are shown on the Sensitive Receptors Plan & Site Setting Plan (K18.17~20~002; 003) and in the Sensitive Receptors Table in the Environmental Risk Assessment (K18.17~09~003, ERA2).

The Sensitive Receptors identified are in all directions from the site.

4.1. Prevailing wind direction

The closest observing station where weather data is available is in Sheepway, located approximately 1 km W from site.

Figure 1 below illustrates the prevailing wind direction of WSW which would transport any windblown emissions ENE from site.

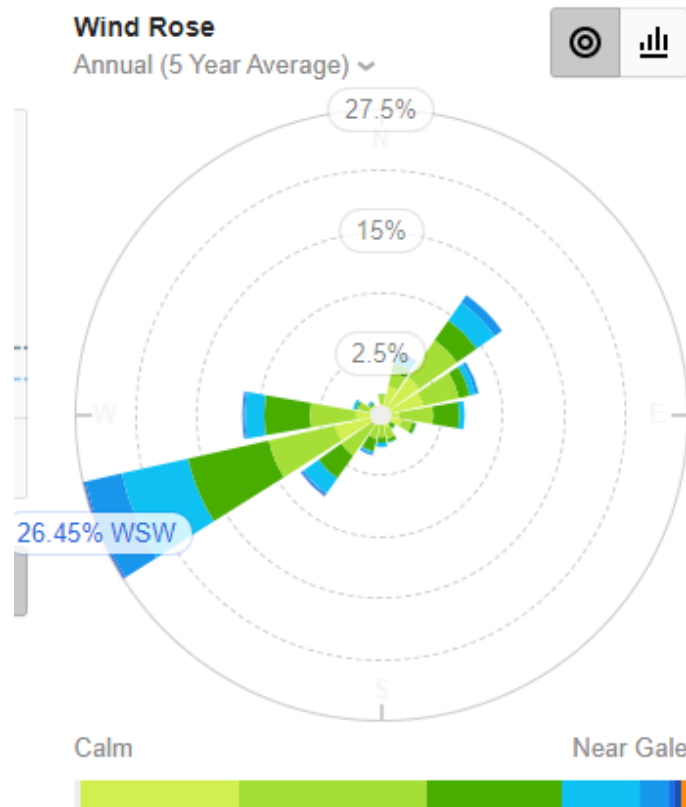


Figure 1: Sheepway Windrose (willyweather.co.uk)

5. MANAGE COMMON CAUSES OF FIRE

5.1. Arson

The site is secured by palisade fencing, and benefits from a gated entrance. It is located within a large industrial area with multiple neighbouring businesses. Any unsolicited activities would be detected by the site's CCTV cameras which are monitored by an external security company 24/7/365. Additionally, STS (Part of the ETEL Group) occupy the wider site and operate 24/7.

The site is also secured and locked outside of operational hours.

5.2. Plant and equipment

Site is equipped with specialist tyre processing plant and machinery, namely balers.

All site equipment will be maintained in line with the manufacturer's guidance.

All mobile plant will be equipped with fire extinguishers.

When not in use mobile plant will be parked away from the operational area and EoLT storage areas.

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 (see Appendix A).

A qualified electrician will be called to resolve the problem. If required, the electricity supply will be isolated at the fuse box to prevent an ignition risk.

5.3.1. Electrics certification

All electrics are certified every five years.

5.3.2. Electrical equipment maintenance arrangements

Electrics are fully certified by a competent person, every 5 years.

All electrical equipment is tested in accordance with equipment specific requirements, and portable appliances tested at a frequency dependant on type of appliance, age, and frequency of use.

5.4. No smoking on site

The site operates a strict no smoking policy in all areas other than designated smoking areas which will be located outside of the permitted area.

5.5. Hot works safe working practices

The works onsite do not require the introduction of a source of ignition to the working area and therefore do not require a related risk assessment. In the unlikely occurrence that hot works are required on site, a hot works permit will be implemented (Appendix C).

5.6. Industrial heaters and use

No industrial heaters are used on site.

5.7. 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 site supervisor will conduct start and end of the day checks to the site, storage and operational areas, mobile plant, and the security of the site.

This will occur every day operations are undertaken, and when material is held on the site surface.

Outside these times the staff of the wider site will be passing through the area and undertake informal checks.

This is complemented by the presence of CCTV which is monitored 24/7/365 by an external security company who have direct access to duty staff at all times.

7. IGNITION SOURCES

The most likely causes of fire at the site have been identified and described below, with a summary of the management controls for restricting the possibility of a fire outbreak.

7.1. Batteries

Batteries are not accepted on site and are unlikely to arrive on site as all EoLT's are source segregated.

7.2. Leaks and spillages of oils and fuels

No liquid wastes are accepted onto site. Liquids (fuels etc.) will be held in sealed containers away from vehicular movements. Where present, containers will be provided with secondary containment and have a spill kit available for deployment in close proximity should a spillage occur.

Any leaks or spills will be recorded in the daily site diary and event log (see Appendix D). Incident Response procedure will be followed.

The site will utilise a simple 'Stop-Contain-Divert' model for containing spillages and have spill kits or granules available on site to protect the surface water system and to prevent pollutants from entering the site drains.

Site staff are trained and familiar with their use in an emergency through the use of spill drills.

7.3. Build-up of loose combustible waste, dust and fluff

Regular housekeeping and inspection of the site will occur at the end of the working day and weekly as minimum (see Appendix A).

All equipment is checked prior to use and inspected as part of a daily site inspection routine.

Annually the tyre bund will be emptied for a deep clean. This process will also be conducted as and when required.

7.4. Reactions between wastes

Non-permitted wastes are rejected during inspection and acceptance. Site staff are trained in waste acceptance procedure and will carry out site inspections daily.

Given that the site receives a single stream of waste, adverse reaction is extremely unlikely.

If wastes are seen to react, then they are either isolated in situ if possible or moved to the quarantine area (see Site Layout Plan K18.17~20~004).

8. WASTE ACCEPTANCE AND DEPOSITED HOT LOADS

EoL tyres will enter the Portbury Hub via ETEL Group vehicles. Upon entering site, a load is inspected against the relevant waste transfer documentation to ensure that descriptions are correct.

Deliveries are pre-booked to ensure control and to reinforce the site's acceptance procedure.

Once a visual inspection has been conducted and the load accepted, they are unloaded into cages to be taken directly to the baling area or stored while they await to be baled.

In the rare occasion that non-conforming waste may be found within loads, it shall be segregated and stored within the designated quarantine area or in a suitable container. Where there is risk of serious pollution, the Environment Agency shall be informed immediately.

Quarantined waste shall be removed from site within seven days and appropriate signage shall be used to identify quarantined waste. Records of rejection of non-conforming waste shall be made and retained.

Table 2: Waste Acceptance Procedure

WASTE ACCEPTANCE PROCEDURE	SPECIFIC STANDARDS
Waste inspection	All waste is visually inspected for non-permitted wastes, quality, and conformance with Environmental Permit requirements. Non-conforming loads are refused entry and details are recorded.
Quarantine storage and waste which are reject	Dependant on the level of risk posed, quarantined waste shall be removed from site as soon as practicable, and within seven days. Appropriate signage shall be used to identify quarantined waste. Records of any non-conforming waste shall be recorded in the site diary.
Identification of wastes	Arriving waste must meet the standard of the relevant EWC code.

9. HOT AND DRY WEATHER

EoLT's are not accepted or stored in large quantities (see Section 11 & 13). The risk of hot and dry weather increasing levels of combustion is offset by quick turnaround times from delivery to processing to dispatch. Loose tyres are stored within a tyre bund. Baled tyres are stored in small quantities on the impermeable site surface.

To further reduce risk a stock, rotation policy is in place on site; where practical, oldest waste is cleared first while waste pile sizes are kept to a minimum. In reality, stock rotation will not be necessary as tyres received will be processed and dispatched the same day.

10. GENERAL SELF-COMBUSTION MEASURES

Self-combustion is unlikely to be an issue at the site given the limited time that material is held on site and the quantities dealt with. The core strategy is the implementation of the First In, First Out (FIFO) principle.

Daily checks are made on the site as part of the fire watch procedure.

Due to the limited period of time that waste is to be stored, the nature of permitted waste types and being stored in their largest form, the risk of self-combustion from a high temperature exothermic reaction is very low.

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.

On site there are only two storage locations; one for loose tyres within the tyre bund and on the impermeable site surface where baled tyres are stored. The associated dimensions and/or tonnages are listed in the Section below.

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

Table 3: Storage Times

WASTE STREAM	EWC	MAX. STORAGE TIME ON SITE	MAX. STORAGE LIMIT ON SITE
End-of-life tyres (loose)	16 01 03	48 hours	173 m ³ (approx. 29T)
End-of-life tyres (baled)	16 01 03	48 hours	106 m ³ (approx. 50T)

11.1. Method used to record and manage the storage of all waste on site

Under normal operating conditions waste will arrive in a 'Just in Time' supply chain and will leave site in the same manner. However, where operational requirements dictate, there may be a requirement to store loose EoLT's or baled EoLT's for a maximum of 48 hours either before or after processing.

Under normal operating conditions EoLT's will flow through the site within 24 hours, from acceptance to dispatch, significantly less than the 3-month period identified in fire prevention plan guidance as requiring extra measures to prevent self-combustion.

11.2. Stock rotation policy

Waste will be managed on a First In, First Out (FIFO) principle, waste first accepted is the waste first removed from site, though in reality waste is constantly being added to, and removed from the input bay.

12. MONITOR AND CONTROL TEMPERATURE

12.1. Monitoring & controlling temperature

No formal temperature measurement will be undertaken.

Whilst unlikely to occur, site staff are trained to be vigilant for any signs of self-heating throughout the day and are trained in first response to any fire detected.

Waste accepted on site is not deemed as high risk for self-heating or combustion. The quick turnaround times prevent the build-up of latent heat. All materials stored are in limited quantities and stored within bays.

CCTV cameras monitor the operational area and are managed 24/7/365, by an external security company.

12.2. Dealing with hot weather and heating from sunlight

EoLT's, both baled and loose are stored outside and are done so on an impermeable surface. The quick turnaround times reduce the impact of direct heat from sunlight.

13. MANAGE WASTE PILES

13.1. Storing waste materials in their largest form

Waste is stored in its largest fraction size i.e. whole, within cages or baled and stacked.

13.2. Maximum pile sizes for the waste on your site

Storage locations are identified on K18.17~20~004 Site Layout.

Table 4: Pile Sizes

WASTE STREAM	LOCATION	HOW IT IS STORED	MAX. LENGTH (M)	MAX. WIDTH (M)	MAX. HEIGHT (M)	MAX. VOLUME (M ³)	MAX. TIME IT WILL BE STORED
EoL Tyres (loose tyres)	Input area	Whole, loose, in tyre bund	10.5	7.5	2.2	173	48 hours
EoLTyre (baled tyres)	Output bay	Baled in a stacked pile	9.8	4.5	2.4	106	48 hours

13.3. Waste stored in containers and types of containers

Containers are not utilised on site.

13.4. Accessibility of containers

N/A.

13.5. Moving Containers in a Fire

N/A

14. PREVENT FIRE SPREADING

14.1. Separation distances

The quarantine area (6 m x 6 m x 2.4 m), identified in Site Layout Plan K18.17~20~004, is capable of holding up to 50% (87 m³) of the largest waste pile (173 m³) at any one time. In the event of a fire, a minimum separation distance of 6 m will be provided in order to adequately isolate burning material and prevent the spread of fire.

The loose tyre bund is surrounded with legio blocks therefore negating the need for separation distances. Baled tyres are stored in limited quantities and in excess of 6 m from the boundary and other storage locations (see Site Layout Plan, K18.17~20~004).

A minimum separation distance of 6 m from all permanent structures is also provided, unless separation distance requirements are reduced by way of fire walls and bays designed to an appropriate level of fire resistance.

14.2. Fire walls construction standards

Loose tyres are stored in the tyre bund which is constructed from legio blocks (typical dimensions 1.6 x 0.8 x 0.8m), whilst baled tyres awaiting transport off site are stored 6 m from other storage areas, buildings or processing equipment. Legioblock holds A1 fire-resistant classification in accordance with REI 240 standards, which means they are fire-resistant for up to at least 4 hours.

15. STORING WASTE IN BAYS

Loose tyres are stored within the loose tyre bund. The bund is 3.2m high, and loose tyres will be stored to a maximum of 2.2m high, providing requisite freeboard.

Baled tyres are stacked a maximum of three high to a height of approximately 2.4 m; significantly below the 4 m maximum height of waste piles as specified within the fire prevention plan guidance.

16. QUARANTINE AREA

16.1. Quarantine area location and size

Quarantine area and the associated 6 m separation distance is shown on the Site Layout Plan (K18.17~20~004). In accordance with the guidelines set out by the Environment Agency, the quarantine area (6 m x 6 m x 2.4 m) can hold up to 50% (87 m³) of the largest waste pile (173 m³) and is provided with a 6 m separation distance from other structures and waste storage areas.

16.2. How to use the quarantine area if there is a fire

The quarantine area can be used for both burning and non-burning waste; may also be used as an area for temporary storage of non-conforming waste.

In the event of a fire, where safe to do so, burning or smouldering material will be isolated and transferred to the quarantine area for extinguishing. Use of this area will only be carried out where safe to do so, or under instruction of the Fire Service.

17. DETECTING FIRES

17.1. Detection systems in use

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

The site is remotely monitored 24/7 by CCTV.

All staff will remain vigilant to monitor for the outbreak of any fires and raise the alarm if there are any fires on site. They will notify the appropriately appointed out of hours contact and emergency services.

18. SUPPRESSING FIRES

18.1. Suppression systems in use

There are strategically placed fire extinguishers on site.

The primary suppression system in a larger scale event would be the fire hydrant positioned on Bradley Road.

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 which are placed at key locations. Site staff are aware of locations for fire extinguishers, and are trained in their use.

19.2. Transfer and storage area

Upon detection, only if safe to do so, 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. Fire and Rescue Service Strategies

In the event of a fire, the Fire Service has one access point to the site (see Site Layout Plan K18.17~20~004, and the FRS Access Route Plan K18.17~20~005) and may consider the following strategies.

Early Intervention

- Apply water 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.

20. WATER SUPPLIES

20.1. Available Water Supply

Site has access to a number of hydrants in the locality, the nearest fire hydrant (35m NE on Bradley Road) is shown in Site Layout Plan K18.17~20~004. This will be available for use in

The fire hydrant is maintained annually as is a standard that requires a regular once a year inspection and test. This ensures it will function effectively in an emergency.

20.2. Water supply calculation

Table 5: Water Supply Calculation

A	B	C	D	
MAXIMUM PILE VOLUME (m³)	WATER SUPPLY NEEDED (L/min)	WATER SUPPLY NEEDED OVER 3 HOURS (L)	TOTAL WATER AVAILABLE ON SITE (L)	SUFFICIENT SUPPLY?
See Table 4	Based on 1200l/m ³ - Pile volume (A) x 6.67L	(B x 180 minutes)	From hydrant (See Table 6 below)	Is D greater than C
173	1154	207,720	360,000	YES

REQUIRED	VOLUME OF WATER REQUIRED	208 m³
	MAXIMUM PILE SIZE 95 m ³	<p>FROM EA FPP GUIDANCE</p> <ul style="list-style-type: none"> 2000 litres x 180 minutes = 360,000 litres per 300m³ 360,000 litres/300m³ = 1,200 litres / m³ of waste 1200 litres / 180 minutes = 6.67 litres / m³ / minute <p>SITE SPECIFIC REQUIREMENT</p> <p>Based on largest pile size.</p> <p>173 m³ x 1200 litres = 207,600 litres / 1000 = 207.6 m³</p>
	Fire Hydrant	<p><i>Actual supply (100 mm pipe supply) from rating plate.</i></p> <ul style="list-style-type: none"> 2000 l/min x 180 minutes = 360,000 litres 360,000 litres / 1000 = 360 m³
	Fire Service Appliances	2 m ³ per appliance
TOTAL AVAILABLE		362 m³

21. MANAGING FIRE WATER

21.1. Containing the Run-Off from Fire Water

The site benefits from an impermeable surface and sealed drainage system which includes a shut off mechanism to isolate water discharge in the event of a fire, and prevent the discharge of contaminated firewater to wider drainage network. See Site Drainage Plan (K18.17~20~006).

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 207,600 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 capacity

FIRE WATER CONTAINMENT	
Maximum volume of fire water run-off (based on pile sizes)	208 m ³
Surface area available for fire water storage	3237 m ²
Total Catchment volume	3237 m ² X 0.2m = 647.4 m³

22. DURING AND AFTER AN INCIDENT

22.1. Dealing with issues during a fire

During a fire, operations shall cease, and all pre-booked incoming waste will be 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 operator will inform neighbouring residents and businesses, directly (where possible) and via through the local authority website and their social media channels.

The Environment Agency shall be contacted as per permit requirements on the Environment Agency Incident Hotline: 0800 80 70 60.

22.3. Clearing and decontamination after a fire

After an incident a third-party contractor will be instructed to clear any residue (liquid or solid), decontaminate areas on site impacted by a fire, and desilt the drainage network.

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.

The root cause of the fire will be established, and all site procedures and this document will be reviewed, and updated where necessary.

Staff training will be undertaken to embed lessons learnt, and ensure any changes in practices and operation are clearly understood.



Helping clients prosper through compliance

Suite 11 Manor Mews, Bridge Street, St Ives, PE27 5UW
01480 462 232 | www.wiserenvironment.co.uk | info@wisergroup.co.uk

